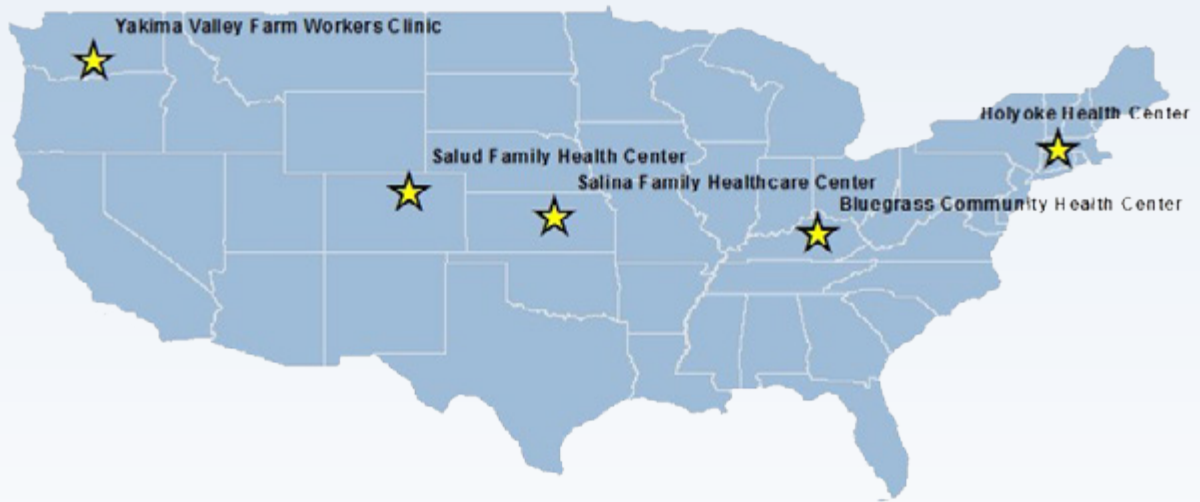




NATIONAL ASSOCIATION OF
Community Health Centers

INTEGRATION OF ORAL HEALTH WITH PRIMARY CARE IN HEALTH CENTERS: PROFILES OF FIVE INNOVATIVE MODELS



ABOUT THE AUTHOR

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ABOUT NACHC

To address the widespread lack of access to basic healthcare, Community Health Centers serve over 23 million people at more than 9,000 sites located throughout all 50 states and U.S. territories.

Health centers depend in large part on public financial help and need a unified voice and common source for research, information, training and advocacy.

To address these needs, the National Association of Community Health Centers (NACHC) organized in 1971. NACHC works with a network of state health center and primary care organizations to serve health centers in a variety of ways:

- Provide research-based advocacy for health centers and their clients.
- Educate the public about the mission and value of health centers.
- Train and provide technical assistance to health center staff and boards.
- Develop alliances with private partners and key stakeholders to foster the delivery of primary healthcare services to communities in need.

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INTRODUCTION

Background

Oral Health Disparities: An Important Health Issue

Oral health is integral to overall health and quality of life.^{1,2} The human mouth is the portal for life-sustaining air, water, and food. It is also a primary mechanism for human communication, contributing to psychological, social, and emotional health.

Access to care is among the factors contributing to oral health disparities. Health care services focused on promoting, maintaining, attaining and restoring oral health may be grouped into two types: oral healthcare and dental care. **Oral health** is an aspect of overall health and may be broadly defined as a state of being free from pain, diseases, and disorders affecting the oral cavity. **Oral healthcare** (or the “care” of oral health) is a part of the overall patient care and includes activities such as risk assessment, health promotion and education, and referral for dental care services. **Dental care** is a critical component of oral healthcare which includes health services specifically focused on maintaining, attaining or restoring oral health. Whereas oral healthcare is broadly focused on identifying need and activating and engaging patients, dental care is specifically focused on the delivery of intervention and restoration. Oral healthcare is within the domain of all healthcare team members. Dental care, on the other hand, requires specific knowledge, training, and, in some instances, licensure or certification. Dental care services are provided by healthcare team members who have completed the appropriate training and possess the required skills. The bottom-line: oral healthcare is everybody’s business, whereas dental care is the responsibility of specific team members.

Historically, oral healthcare, including dental care, has been separated, clinically and administratively, from the larger healthcare delivery system. This separation fostered a culture in which oral health is not seen or valued as a part of overall health and has contributed to the millions of Americans suffering from preventable dental diseases. The landmark report, *Oral Health in America*,³ published in 2000 by the U.S. Surgeon General, cast light on the ‘silent epidemic’ of poor oral health in America. While strides have been made to “turn the tide” in oral health, national statistics, more than a decade after the release of this historic report, demonstrate that oral health disparities continue to plague our country. In *Health, United States, 2012*, the Centers for Disease Control and Prevention (CDC) reports that 21.9% of Mexican children and 22.4% of Black or African American children suffer with untreated dental caries (the CDC refers to the “Mexican” population as a subgroup of the Hispanic or Latino population, while “Black

or African American” and “White” are subgroups of the non-Hispanic or Latino population).⁴ This is significantly higher than the national average of 15.6% and the reported burden among white children at 12.8%.⁴ Oral health disparities among American adults are just as disturbing. Nationally, 23.7% of adults between the ages of 20-64 suffer with untreated dental caries.⁴ This burden is reported to affect 35.2% of Mexican adults, 39.7% of Black or African American adults, and 19.3% of white adults.⁴ Most alarming is the fact that this burden is almost completely preventable.

Among disadvantaged populations, cost and availability have been cited as major barriers to oral healthcare access.⁵ The separation of oral healthcare from the larger healthcare delivery system has posed a major challenge to reform efforts focused on strengthening the oral healthcare system. A system-level solution is needed to effectively overcome barriers and improve oral health. In recent years, integration of oral health with primary care has been the subject of ongoing national discussions.

In 2003, *A National Call to Action to Promote Oral Health*, published by the Office of the Surgeon General, called for “changing the perception” of oral health as separate from overall health, and charged oral health and other health professionals to partner in research and policy efforts.⁶ In 2011, the Institute of Medicine (IOM) published a report, *Improving Access to Oral Health Care for Vulnerable and Underserved Populations*, which set forth a vision of transformation for America’s oral healthcare system.⁷ The report suggested that collaborative and multidisciplinary healthcare teams working across the healthcare system in various settings were needed to effectively address oral health in America. In 2014, the U.S. Department of Health and Human Services Health Resources and Services Administration (HRSA) published a report entitled *Integration of Oral Health and Primary Care Practice (IOHPCP)* in a response to the IOM. The IOHPCP initiative seeks to improve access to preventive oral health services and enhance the early detection of dental disease through expanding the oral health clinical competency of primary care clinicians.⁸ This innovative strategy is supported by literature demonstrating the success of physician-led oral health interventions.^{9,10} While integration of oral health with primary care has been included in the national agenda, the vision has yet to be realized across the U.S. healthcare system. While the larger health system continues to grapple with the integration of oral health with primary care, health centers have been developing and successfully implementing models for integration in underserved communities.

Health Centers: Leaders in Oral Health Access

Health centers play a crucial role in reducing oral health disparities and improving access to oral healthcare services.¹¹ As a major provider of primary care services for disadvantaged Americans, many health centers offer oral health services to their community. In fact, federally qualified health centers (FQHCs) are required through their federal funding agreement to “ensure” access to specified preventive dental services. The specific services are described in the side caption.

Patient-Centered Medical Home

The integration of oral health with primary care aligns with FQHCs adoption of the Patient-Centered Medical Home (PCMH) delivery model. A PCMH, as defined by the Agency for Healthcare Research and Quality, is a model for primary care delivery that incorporates the following functions and attributes:¹²

- Patient-centered Orientation—the patient’s needs are at the center of all healthcare efforts
- Comprehensive Care—all aspects of each patient’s care are managed, requiring a care team of various backgrounds and specialties
- Coordinated Care—hospital, home health agency, nursing home, and public/private community-based program care is monitored and results are tracked via disease registries, electronic health records (EHRs), and other forms of information exchange
- Accessible Services—medical homes offer increased office hours and alternative communication channels to enhance access for patients
- Systems-based approach—gathering and utilizing data to forge continuous quality improvement and population health management

The integration of oral health with primary care embodies the PCMH concept. By meeting the oral healthcare needs of primary care patients, FQHCs with PCMH recognition are using a systems-based approach to expand access to comprehensive health services. This is especially important among FQHCs as they strive to meet the healthcare needs of vulnerable Americans.

Healthy People 2020: National Agenda

Leveraging health centers to reduce disparities and improve population oral health is part of the national agenda. The *Healthy People 2020* goals focused on reducing oral health disparities include a number of objectives specific to federally qualified health centers, including:

- Oral Health Objective 10.1 - Increase the number of federally qualified healthcare centers with oral health components.
- Oral Health Objective 11 - Increase the number of patients who receive oral healthcare at federally qualified healthcare centers.

Building and expanding capacity for oral health service delivery among America’s health centers is critical to achieving Healthy People 2020 goals and improving population oral

FQHC Preventive Dental Service Requirement

Under current funding agreements, health center grantees are required to deliver “primary health services,” which are defined in the statute to include “preventive dental services.” (42 U.S.C. §254b (a) (1) and §254b (b)(1)(A)(i)(III) (bb)). “Preventive dental services” are further defined by regulation (42 C.F.R. §51c.102 (b) (6)) to include “services provided by a licensed dentist or other qualified personnel, including: (i) “oral hygiene instruction; (ii) oral prophylaxis, as necessary; and (iii) topical application of fluorides, and the prescription of fluorides for systemic use when not available in the community water supply.”

health. As previously described, the historical separation of oral health from the healthcare delivery system devalued oral health and is a major barrier to improving oral health in America. The co-location of primary care and dental care services within many health centers is a strategic strength of the health center network. Approximately 80% of FQHCs deliver dental services directly to their patients. The remaining 20% are required to have provisions for meeting the oral healthcare needs of their patients.¹⁴ In addition to delivering comprehensive services to patients, some FQHCs provide preventive oral health services, such as fluoride varnish, oral assessments, and oral health education in the primary care setting. It is important to note that in many states, medical providers can provide and bill for certain preventive oral healthcare services, including: fluoride varnish, occasionally oral evaluation and/or family oral health education. Additionally, there are 15 states in which medical providers are able to delegate these services to members of the primary care team, such as nurses and medical assistants. Health centers are well-positioned to reach disadvantaged populations with oral healthcare services. They have been leading the way in integrating and coordinating oral health with primary care.

OVERVIEW

Health centers are leading the way in integrating oral health with primary care. Much can be learned by exploring the models that health centers have developed and adopted to achieve integration. This monograph presents information on five health centers that have successfully integrated oral health with primary care. It has been developed for the purpose of organizing and presenting information on successful models which may be useful to health centers and other organizations considering the implementation of similar initiatives.

A Framework for Exploring Integration: IOHPCP

The Integration of Oral Health and Primary Care Practice (IOHPCP) initiative was first mentioned in the background section of this document. IOHPCP was developed by the Health Resources and Services Administration (HRSA) and outlines five domains which cut across a variety of clinical specialties and are required for successful integration of oral health with primary care, including:

- **Risk Assessment** – the identification of factors that impact oral health and overall health.
- **Oral Health Evaluation** – integrating subjective and objective findings based on completion of a focused oral health history, risk assessment and performance of a clinical oral screening.
- **Preventive Intervention** – recognition of options and strategies to address oral health needs identified by risk assessment and evaluation.
- **Communication and Education** – targets individuals and groups regarding the relationship between oral and systemic health, risk factors for oral health disorders, effect of nutrition on oral health, and preventive measures appropriate to mitigate risk on both individual and population levels.
- **Interprofessional Collaborative Practice** – Shares responsibility and collaboration among healthcare professionals in the care of patients and populations with, or at risk of, oral disorders to assure optimal health outcomes.

These domains provide a “framework” for exploring models which have been successfully implemented by the health centers featured in this monograph.

Health Centers Participants

Five health centers, identified as leaders in integrating oral health with primary care, were included in this project. The health centers featured in this monograph participated in a

series of structured key informant interviews which were designed to gather information about their model integration of oral health with primary care. The following organizations are included in this monograph:

- Bluegrass Community Health Center, Lexington, KY
- Holyoke Health Center, Holyoke, MA
- Salina Family Healthcare Center, Salina, KS
- Salud Family Health Center, Fort Lupton, CO
- Yakima Valley Farm Workers Clinic, Yakima, WA

The health center profiles subsequently presented in this document provide a ‘snapshot’ of each organization, describing the model for integration and how it aligns with IOHPCP domains. In addition, care team education and training, the financing and resources required for implementation, evaluation

strategies and corresponding outcome measures, and strategic factors influencing success are also explored. Finally, each profile concludes with the ‘Community Voice’ which provides the patient or community perspective on the integration of oral health with primary care. The final section of the mono-

graph includes a summary of findings and discussion of lessons learned.

Methods

The information presented in this monograph was gathered from each of the respective health centers through a series of structured key informant interviews with key personnel. Interviews took place during February and March, 2015. In addition to interviews, administrative data on the health centers were obtained from secondary data sources, including information reported to the Uniform Data System (UDS). A complete list of key informant questions may be found in the appendix.

Results

The table “Integration of Oral Health and Primary Care Practice Domains” presents a summary of the model each health center has used to integrate oral health with primary care. Information in the table is organized by the IOHPCP domains, described earlier in the document, and provides quick information on how each domain has been integrated and which care team member is involved. Full information on each of the models, such as the role of all care team members, is found within the profile for each health center.

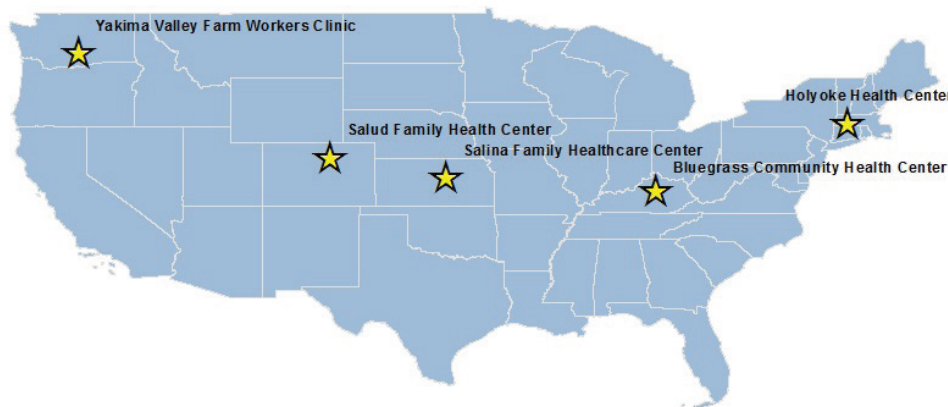


Table: Integration of Oral Health and Primary Care Practice Domains

Health Center	Model Type	Risk Assessment	Oral Health Evaluation	Preventive Intervention	Communication and Education	Interprofessional Collaborative Practice
Bluegrass Community Health Center	Physician-led	How: review of medical/social history, direct inquiry	How: clinical oral screening	How: fluoride varnish	How: during primary care visit	How: EHR* to identify need and produce referrals/vouchers
		Who: clinical assistant (registered nurse or certified nurse assistant)	Who: clinical assistant then primary care provider	Who: primary care providers and clinical assistant	Who: clinical assistants then primary care provider	Who: EHR*, out-of-network dentists
Holyoke Health Center	Administration-driven	How: review of medical/social history, direct inquiry, Epidemiologic data to evaluate risk	How: clinical oral screening	How: fluoride varnish	How: during primary care visit	How: integrated EHR* to facilitate comprehensive medical/dental delivery
		Who: clinical assistant	Who: clinical assistant then primary care provider	Who: clinical assistant	Who: clinical assistants then by dental care team	Who: EHR*, on-site dental care team
Salina Family Health Center	Interprofessional Integration	How: “flags” patients needing dental care in EHR*	How: clinical oral screening	How: fluoride varnish	How: during primary care visit	How: dental hygienists on primary care team serves as liaison between primary care and dental
		Who: inreach team	Who: Inreach team then primary care provider	Who: dental hygienist	Who: inreach team	Who: entire primary care team
Salud Family Health Center	Culture of Integration	How: review of patient chart and direct inquiry	How: clinical oral screening	How: fluoride varnish	How: during primary care visit	How: dental hygienists on primary care team and a “culture” of open communication among all care team members
		Who: dental hygienist working in the primary care office	Who: clinical assistant then primary care provider (on mobile units, performed by a dental assistant)	Who: dental hygienist	Who: dental hygienists	Who: entire primary care team
Yakima Valley Farm Worker Clinic	Dental Outreach Coordination	How: review of medical/social history, direct inquiry, length of time from last visit	How: clinical oral screening	How: Varies, fluoride varnish in some cases	How: in WIC**, Primary Care, and Mobile Clinics	How: Dental Outreach Coordinator serves as a “hub” for interprofessional collaboration
		Who: WIC** Certifiers, clinical assistants	Who: clinical assistant then primary care provider (on mobile units, performed by a dental assistant)	Who: clinical assistant in medical clinic, dental assistant on mobile units	Who: WIC** Certifiers, clinical assistants and dental care team	Who: Dental Outreach Coordinator, on-site dental care team

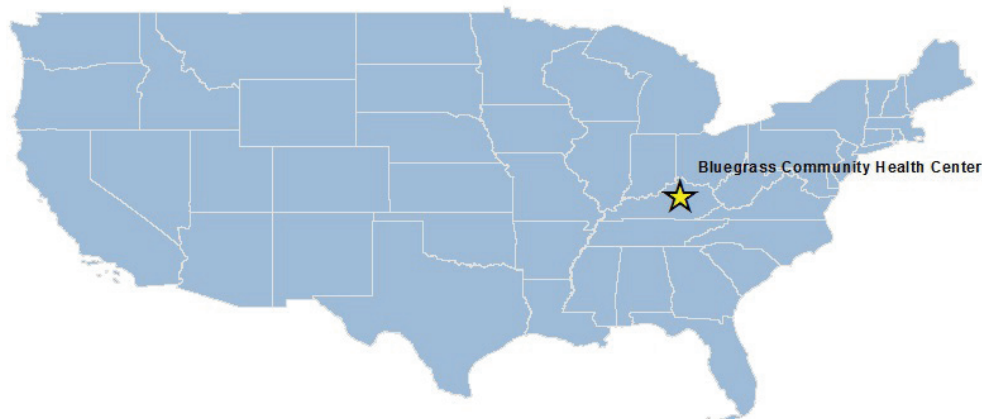
* Electronic Health Record

**Women Infant and Children



HEALTH CENTER PROFILE:

Bluegrass Community Health Center, Lexington, KY



Name:	Bluegrass Community Health Center
Location:	Lexington, KY
Website:	http://bchc.eku.edu
Model Type	Physician-led
Organization Type	Federally-Qualified Community Health Center (FQCHC); Patient-Centered Medical Home (PCMH)
Number of Clinical Sites	2
Dental Clinic(s)	No
Primary Geography	Urban, Lexington-Fayette metropolitan statistical area
Average number of patients (2011-13)	7,115
2011 – 2013 Trend Change	1.60%
Average cost per patient (2011-13)	\$508.82
2011 – 2013 Trend Change	11.40%

The Organization

Bluegrass Community Health Center (BCHC), affiliated with Eastern Kentucky University, has been providing health services in eastern Kentucky communities since 2001. It was originally established to serve the healthcare needs of migrant and seasonal farm workers. In 2007, BCHC began to provide comprehensive services to an expanded community, including low-income families, uninsured, homeless, and Medicaid recipients.

BCHC operates two clinical sites in Lexington, Kentucky. Both clinics are located within the Lexington-Fayette metropolitan statistical area, which is considered urban. BCHC does not currently operate a dental clinic at either clinical location. The average annual number of patients served at BCHC from 2011 to 2013 was 7,115, and the average annual cost per patient was \$508.82.

The Model

The *Integration of Oral Health and Primary Care Practice* (IOHPCP) key domains, described in the overview section of this document, are used as a framework for exploring the model BCHC has adopted. These domains include 1) risk assessment, 2) oral health evaluation, 3) preventive intervention, 4) communication and education, and 5) interprofessional collaborative

practice. Brief descriptions for each domain are provided in the preceding text.

Domain: Risk Assessment

BCHC has taken a comprehensive approach to identifying risk factors that impact oral health within their community. At the population level, risk assessments are used to target integration of oral health with primary care initiatives at BCHC. Population level risk assessments are performed at the administrative level. For example, BCHC recognizes oral health in childhood as critical for lifelong oral health. They identified disparities in oral health and access to dental care among low-income children and migrant farm worker families in their community that would present for primary care appointments. In addition to targeting the pediatric population, BCHC recognizes the role of comorbidities, such as diabetes, in increasing a patient’s risk of developing dental disease. As a result, they have also targeted diabetic patients for their initiatives.

At the patient level, BCHC care team members perform risk assessments for all patients through review of medical and social history, and through direct inquiry. This is commonly completed as a part of primary care appointment triage by a clinical assistant, either a registered nurses or certified nurse assistant. All BCHC patients from the target populations, mentioned above, are considered to be “at-risk” for dental disease.

Domain: Oral Health Evaluation

Oral health evaluation encompasses the risk assessment findings, at both the population and patient level, with patient-specific oral health history and clinical screening findings. As mentioned previously, risk assessments are performed at the administrative and clinical level, through risk factor identification. Patients are asked about their oral health history as a part of the comprehensive primary care visit. During this interaction with the BCHC care team, the patient is also asked if he/she has any oral health or dental concerns. Patients from the target populations then receive a clinical oral screening which is performed by the clinical assistant and the primary care provider. An oral healthcare plan is developed by the primary care provider, based on findings from the oral screening and risk assessment.



Domain: Preventive Intervention

BCHC offers preventive oral healthcare in conjunction with primary care visits as a part of their integration of oral health with primary care. BCHC has standing orders for the application of fluoride varnish for all patients from the target populations. Fluoride varnish is applied by the clinical assistant, a registered nurse or certified nurse assistant prior to the primary care provider examination.

Domain: Communication and Education

In addition to risk assessment, evaluation, and preventive intervention, the BCHC care team also provides oral health education to all patients to highlight the role of oral health in systemic health, discuss risk factors for dental disease, highlight preventive measures to mitigate risk, and discuss the effect of nutrition on oral health. In addition, the BCHC care team emphasizes the need for dental care in their routine communication with patients. This is especially important because BCHC does not directly provide comprehensive dental care services. This oral health education is provided to patients by the clinical assistants, prior to physician examination, as a part of routine primary care visit discussion. The physician then performs the examination and reinforces the education to the patient in their communications.

Domain: Interprofessional Collaborative Practice

Interprofessional collaborative practice is essential among healthcare staff to ensure comprehensive and definitive care to the community. This is especially true at BCHC, where only limited preventive oral health services are provided. Within BCHC, the care team uses their EHR to identify patients requiring dental services and to initiate dental referrals and dental vouchers. At BCHC, primary care providers collaborate with community dentists to provide comprehensive dental care to patients within the community.

BCHC monitors community collaborations for dental care by tracking the number of referrals and comparing that to the number of dental vouchers which were paid. In addition, BCHC also engages in follow-up discussion with the patients to ensure delivery of dental services and compliance with referrals. This shared responsibility between healthcare professionals, in both the integration of oral health with primary care and the collaboration between primary care providers and community dentists, allows for comprehensive healthcare delivery to the BCHC community.

Care Team Education and Training

In order to prepare their care teams for integrating oral health with primary care, BCHC has incorporated oral health curriculum into clinical team members' training. This training is provided initially at orientation and annually to update and maintain knowledge. BCHC uses the *Smiles for Life* (SFL) curriculum for this training. SFL is a free, publically available oral health curriculum which provides educational resources to support the integration of oral health and primary care. Training modules, which are accessible online, are available for specific oral health topics and continuing education credits are offered for

physicians, nurses, and physician assistants. This curriculum informs the care team of dental diseases but also highlights concepts to be included in patient education. Additional information on this valuable resource may be found at: <http://www.smilesforlifeoralhealth.org>.

Resources and Financing

Relatively few resources are required for the oral health interventions provided by BCHC: disposable dental mirrors, fluo-



ride varnish, and oral hygiene products (toothbrushes, toothpaste, and floss). Currently, BCHC considers the delivery of oral health services/interventions to be a part of the primary care visit. They estimate a cost of \$1 per patient for these services. This cost estimate includes human and non-human resources. The funding for their oral health integration program is included in their overall budget. The BCHC team is committed to providing preventive oral health services as a part of their primary care services. They believe it is especially important because they do not operate a dental clinic.

Evaluation

A number of strategies are used to evaluate the reach and effectiveness of the oral health integration model at BCHC. Ongoing internal evaluation is performed through the development of monthly reports on the following: 1) number of patients reached with fluoride varnish, 2) number of abnormal oral screenings, and 3) number of dental referrals. This information is captured in the EHR through the use of special codes created for these procedures. Reports are generated for each provider/care team and are reviewed by BCHC administration on a monthly basis. Report findings are used to evaluate care team participation and inform targeted training and initiatives to support the reach of the program. For example, providers/care teams reported to be delivering preventive oral health services to fewer patients may be identified as “not fully engaged” in integration. In this instance, team meetings and targeted training may be offered to the provider/care team to identify barriers to adoption and to “get them onboard” with integrating these preventive services for all targeted patients.

External evaluation, or determining impact of the models



outside of the organization/primary care setting, is also a priority for BCHC. Because BHCH does not currently operate a dental clinic, they have developed strategies to evaluate the effectiveness of their dental referral program. As previously described, evaluation of dental referral program is accomplished by examining the number of dental vouchers which were paid and through follow-up discussion with patients at subsequent primary care appointments. This evaluation helps BCHC identify an important gap in follow-up dental care among their patients. Many dental vouchers go unpaid and many patients report not receiving the dental care to which they were referred when they present for subsequent visits. This is an issue that BCHC is actively working to address. In addition to developing dental referral and follow-up strategies, BCHC is also considering expanding their on-site operations to include comprehensive dental care in the near future to better meet the needs of their community.

Strategic Factors

Understanding those strategic factors which have helped BCHC successfully integrate oral health into primary care services is important. Oral health is recognized and valued as a part of overall health across the BCHC team. This is evident in the organizational commitment to provide ongoing oral health training to all clinical staff. A number of BCHC team members were identified as champions for integration. Among these are BCHC Medical Director and Clinic Operations Manager, who were identified as having the greatest impact on success.

Dr. A. Steve Wrightson, BCHC Medical Director, is a family medicine physician who is nationally recognized for his work in developing the SFL curriculum, which was described previously. Dr. Wrightson's expertise has been crucial to integrating oral health into primary care at BCHC. Under his leadership, the SFL curriculum was implemented across the organization for oral health training of all clinical staff that work at BCHC. He was the driving force behind integrating oral health with primary care, and his commitment to oral health has greatly benefitted the community BCHC serves.

Donna Agee, BCHC Clinic Operations Manager, was also identified as being a major contributor to the success of the oral health integration program at BCHC. In addition to keeping the clinical team up-to-date on oral health training, she is continuously working to keep oral health on the "forefront" of everyone's mind at BCHC, including both team members

and patients. Most recently, Donna developed bulletin boards with oral health information and placed them in strategic areas around the clinics where patients and care team members can view them. Donna's commitment to educating and encouraging the healthcare team toward integrating oral health services is key to the ongoing success of the model at BCHC.

The Community Voice

BCHC's commitment to integrating oral health into their primary care services has had an enormous impact on the lives of the patients they serve. Take Brian for example. Brian is a 39 year old male and the father of a 4 year old little girl. Brian also has complex health needs. Over the last decade he has had multiple surgeries, including an organ transplant. He is also diabetic and permanently disabled. As a child and teen, Brian had a number of bad experiences with dental care that made him fearful and anxious to visit the dentist. When he became ill, he had no dental insurance and had not been receiving routine dental care for some time.

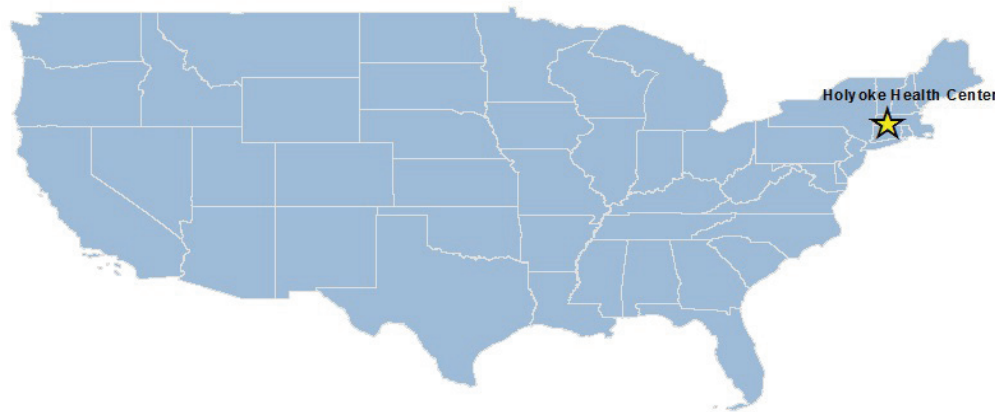
Brian became a patient of BCHC and Dr. Wrightson in 1998. Dr. Wrightson educated him about the importance of "having healthy teeth and gums" and encouraged him to care for his teeth and visit the dentist. Throughout the time Brian was receiving healthcare services for his acute conditions, Dr. Wrightson performed clinical oral screenings and placed fluoride varnish on his teeth at each primary care appointment. Brian stated, *"I don't know what state my teeth would be in if it weren't for Dr. Wrightson."*

In addition to impacting Brian's oral health, BCHC has also been influential in the oral health of his 4 year old daughter. She receives an oral assessment and fluoride varnish at each well-child visit with BCHC, and the care team takes time to discuss her oral health and oral hygiene with Brian and her mother at each visit. Fortunately, his daughter has health insurance that includes coverage for dental services. She is able to visit a dentist and has never had a cavity.

The oral healthcare services provided to Brian and his daughter at BCHC during their primary care visits have made a profound impact on their overall health, and their quality of life. Their story exemplifies the human value of integrating basic preventive oral health services with primary care at a health center.

HEALTH CENTER PROFILE:

Holyoke Health Center, Holyoke, MA



Name:	Holyoke Health Center
Location:	Holyoke, MA
Website:	http://www.hhcinc.org/en/
Model Type	Administration-driven
Organization Type	Federally-Qualified Community Health Center (FQCHC); Patient-Centered Medical Home (PCMH)
Number of Clinical Sites	2 comprehensive sites offering both medical and dental services; 1 dental center; 3 dental clinics.
Dental Clinic(s)	Yes
Primary Geography	All locations part of Springfield, MA metropolitan statistical area
Average number of patients (2011-13)	24,015
2011 – 2013 Trend Change	0.90%
Average cost per patient (2011-13)	\$1,167.15
2011 – 2013 Trend Change	0.10%

The Model

The *Integration of Oral Health and Primary Care Practice* (IOHP-CP) key domains, described in the overview section of this document, are used as a framework for exploring the model HHC has adopted. These domains include 1) risk assessment, 2) oral health evaluation, 3) preventive intervention, 4) communication and education, and 5) interprofessional collaborative practice. Brief descriptions for each domain provided in the preceding text.

Domain: Risk Assessment

HHC works to identify risk factors that impact oral health within their community. At the population level, risk assessments have been used to target integration of oral health with primary care initiatives at HHC. As a part of their population level risk assessment, HHC has identified a number of populations that are experiencing barriers to oral health and oral healthcare access, including low-income children, HIV patients, veterans, and people with intellectual/developmental disabilities. Their numerous community partnerships demonstrate their commitment to serving these “at-risk” populations.

HHC has a number of strategies for reaching these target populations. HHC hosts a pediatric dental residency. As part of their training, residents act as consultants for the emergency department. Historically, emergency physicians have limited training in dental care. Dental residents are a valuable resource to the emergency department by providing information on “up-to-date treatment options” for pediatric patients. In addition, HHC provides services to HIV patients through partnership with the Ryan White Foundation. The HIV-affected population is susceptible to more serious infections because of their immunocompromised state, making oral health critical to their well-being, as it could more easily be a source for systemic infection. The local veteran and inmate populations within the community are also served through dental clinics that HHC operates at these locations. HHC also runs a dental clinic in the state hospital, serving many patients with cognitive disabilities. Through focusing service on these disadvantaged populations,

The Organization

Holyoke Health Center (HHC) provides health services for communities around Holyoke, MA. It currently operates two comprehensive health centers sites, one freestanding dental center, and three community-based dental clinics. Medical and dental services are co-located at both comprehensive health center sites. HHC serves communities that fall within metropolitan statistical areas. Between 2011 and 2013, HHC reported serving an average of 24,015 patients annually at an annual cost of \$1,167.15 per patient.

HHC provides care to a diverse community. A large proportion of the patient population at HHC is Puerto Rican and/or living at or below the poverty line. A large proportion of the population is also Spanish-speaking; HHC offers all services in both English and Spanish to eliminate language as a barrier to healthcare delivery.



HHC has helped to promote oral health in an otherwise un-reached community.

In addition to population level risk assessment, oral health risk assessment is also performed at the patient level as a part of routine healthcare services. HHC has an interoperable electronic health record (EHR) system with medical and dental components. The EHR system at HHC auto-generates dental referrals for all patients who are due for a dental appointment. In addition to determining whether patients are due for routine dental care, HHC care teams use the EHR to determine patient-specific risk factors including: comorbidities that may put patients at a higher risk for dental disease (ex: diabetes), social activities that may contribute to poor oral health (ex: methamphetamine use), or an extended amount of time since the patient's last dental visit. This information is supplemented by information collected by care team members through direct inquiry to provide comprehensive risk assessment at the patient level.

It is important to note that HHC also uses epidemiologic data from the community to enhance their ability to assess risk within their population. HHC's dental residents perform epidemiologic evaluations on patient records to identify prevalence and incidence of dental disease in their patients. This allows for continuous improvement in patient outreach and improves identification of risk in populations that may be more vulnerable to certain diseases.

Domain: Oral Health Evaluation

In addition to risk assessment, clinical oral health screenings are performed as a part of the primary care appointment. This is generally performed by a clinical assistant, either a nurse or medical assistant, prior to the primary care provider's examination of the patient. The primary care provider, based on findings from the oral screening and risk assessment, then develops a patient-specific oral healthcare plan. If the provider indicates that the patient needs dental services, a message is sent via their EHR to an administrative staff member who schedules a dental appointment.

Domain: Preventive Interventions

Even though HHC has on-site dental care at both medical centers, this health center still works to integrate preventive interventions within the primary care setting. A care team member, usually a medical assistant, is tasked with applying fluoride varnish during the primary care visit. HHC has standing orders for the application of fluoride varnish. This is done prior to primary care provider's examination of the patient. This service is billed as a part of the primary care visit. This preventive measure aids to mitigate risk of dental disease on a patient-specific basis.

Domain: Communication and Education

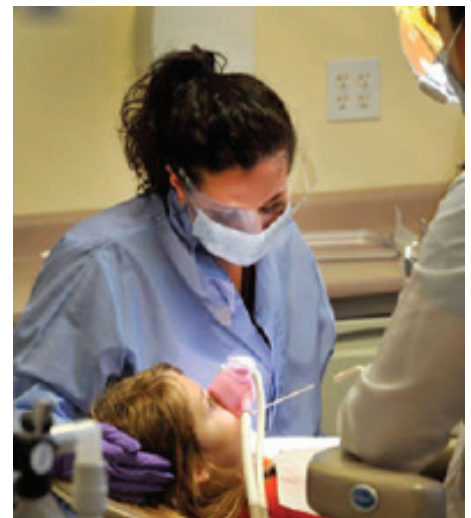
The primary care team works to inform patients of the relationship between oral health and systemic health. At the individual level, care team members involved in risk assessments, oral screenings, and preventive interventions are continuously communicating with and educating the patient on the importance of maintaining good oral health. In addition to basic

education, care team members reinforce the need for dental follow-up for definitive management in their communication with patients.

Domain: Interprofessional Collaborative Practice

HHC has a unique model for interprofessional collaborative practice between primary care and dental services. The interoperable medical and dental EHR system facilitates communication between care teams in primary care and dental. For example, the primary care team is able to access a patient's dental record and can incorporate dental diagnoses and past treatments into the overall patient examination. This provides them with a more complete picture of the patient and also supports continuity in patient care.

In addition to leveraging their EHR, primary care team members also assist with navigating the patient to a dental clinic by facilitating referral. HHC's dental clinics offer comprehensive dental services, including orthodontics, prosthodontics, endodontics, and oral surgery. With these specialty dental services, the HHC community receives state-of-the-art dental care through collaboration with primary care initiatives.



Care Team Education and Training

In order to prepare their care teams for integrating oral health with primary care, HHC has incorporated oral health curriculum into various clinical team members' training. As mentioned previously, nurses and medical assistants receive training on dental diagnoses from the department of public health. The HHC primary care staff also receives training on pediatric oral health from quarterly presentations of diseases and interventions. These presentations are given by HHC's pediatric dental residents and aid to keep both the primary care staff as well as dental staff informed of the latest findings and treatments within the pediatric dental community.

In addition to internal training of HHC's staff, HHC also serves as a center of education and training to the external dental community. Dental hygiene students from the local community college are placed at HHC for rotations in their clinical training. As previously mentioned, HHC also hosts a pediatric dental residency in which residents rotate throughout the local hospital. These pediatric dental residents not only host presentations on pediatric oral health, but also promote continuous improvement in dental service and oral health through updates to primary care staff on epidemiology of dental diseases within the Holyoke community.

Resources and Financing

Relatively few resources are required for the integration model employed by HHC. These include: disposable dental mirrors, fluoride varnish, and oral hygiene products (toothbrushes, toothpaste, and floss). Currently, HHC considers the provision of oral healthcare preventive interventions to be a part of the primary care visit. The cost of oral healthcare preventive services is “built-in” to primary care delivery cost and is not billed separately.

In addition to the materials which support the delivery of oral healthcare with primary care, the EHR system is an important resource that supports integration of oral health with primary care and interprofessional collaboration. The investment in this interoperable EHR is assumedly costly to adopt and operate, though is invaluable in its contribution to HHC’s successful integration of oral health with primary care.

Evaluation

Because referrals are generated through HHC’s EHR, internal evaluation for appointment compliance is relatively simple. HHC reports that they typically generate between 25-40 dental referrals per month. Specifically in November 2014, 41 appointments were scheduled following dental referrals; 35 of these appointments were kept. HHC leadership is continually evaluating these data and report that the number of kept appointments is climbing. They attribute improvements in the number of kept appointments to the fact that dental care appointments are readily available for their patients.

Strategic Factors

HHC’s dedication to oral health is system-wide and a part of their organizational culture. This commitment is inspired by Jay Breines, Chief Executive Officer (CEO) at HHC. When asked for the keys to success in HHC’s integration of oral health with primary care, Lindsey Grossman, Chief Operating Officer (COO) at HHC, states that “85% of their success is due to Jay’s promotion and support, another 5% is state support and funding, and the last 10% percent is our EHR system.” Mr. Breines has been a champion for oral health integration and continues to promote the value of oral health within medical and dental settings at HHC and to the broader community.

The commitment to reach an expanded community with delivery of oral healthcare services is evident in the multiple outreach programs that HHC promotes. They currently operate or partner with dental clinics in a veteran’s home, at the local jail, and at the state hospital. HHC has targeted these populations and seeks to improve oral health and provide dental services to eliminate historical barriers to access for these community members.

HHC is also a center for education in oral healthcare delivery within their community. In hosting dental residencies and dental hygiene student rotations, HHC proves that they truly value education of healthcare team members, as well as sup-

port the integration of care provider training into primary care and dental practice. Medical and dental clinics are co-located and there is strong communication between the two clinics via their interoperable EHR. HHC offers specialized dental services, making it unique in its ability to provide comprehensive dental management services. HHC’s commitment to oral health, particularly for vulnerable populations, championed by their CEO and supported by their interoperable EHR systems, has made HHC a leading model for the integration of oral health with primary care.

Community Voice

Patients who received dental services at HHC are not only pleased with the expert care they received, but also with the compassionate and friendly demeanor of staff throughout the interprofessional collaborative practice at HCC. Patients routinely write to staff in appreciation of their help with dental issues that had plagued them for years, or simply thanking them for putting their fears about treatment at ease.

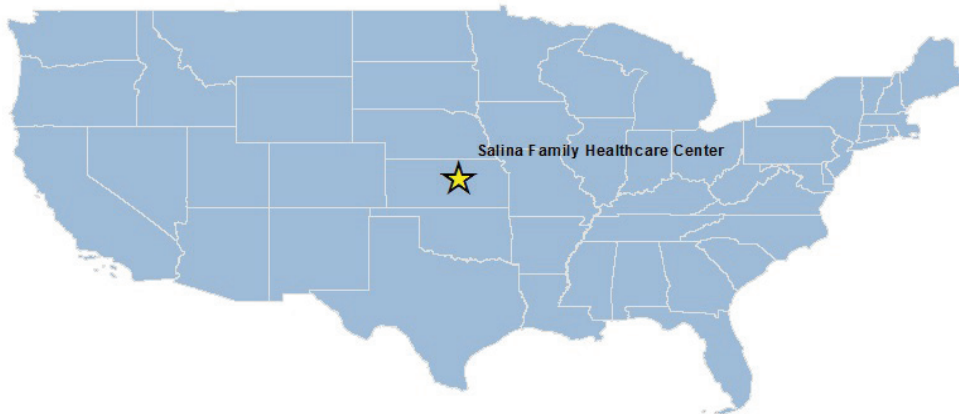
Many patients mentioned the friendly nature of the dentists and dental hygienists that work at the clinic. After being treated by a dentist at the clinic, a patient’s thank you letter read, “We introduced ourselves to each other, laughed a minute and talked. Then he examined my teeth...[h]e told me things about my teeth I never knew...Dr. Devi is a keeper.”

In addition to treating patients’ oral health concerns, the staff at HHC also take the time to assist patients with the, often labyrinthine, process of managing the paperwork and bureaucracy of the healthcare system, including assisting patients in coordination between medical and dental services at Holyoke. One patient wrote, “Thanks for all your help navigating me through the system.” HHC employees understand that navigating the health system can be an overwhelming experience for patients and are willing to help them both within the clinic and beyond.

HHC staff are also incredibly competent providers of dental care. A patient who had a severely chipped tooth and had previously, and unsuccessfully, sought care came in to the clinic. Due to previous negative experiences with dental treatment, the patient was nervous about seeing yet another dentist. However, after being treated by Dr. Devi she wrote, “I can’t tell that it was ever chipped. The last dentist that tried to fix [it] could not. I’m so glad I came here; I will keep coming back... Dr. Devi has a great personality which helps me with my anxiety. I’m very pleased.” The care team at HHC is well-liked by their patients and the treatment they provide through interprofessional collaboration between medical and dental clinics has improved the lives of the people in their community. One patient summed up the outcomes of their treatment at HHC succinctly and accurately, reporting how the dental care provided at HHC affected his overall quality of life, “Thank you, Dr. Devi, I feel like a new man and I love my new smile. There are no words to say how great I feel. Thank you.”

HEALTH CENTER PROFILE:

Salina Family Healthcare Center, Salina, KS



Name:	Salina Family Healthcare Center
Location:	Salina, KS
Website:	http://www.salinahealth.org/about.cfm
Model Type	Interprofessional Integration
Organization Type	Federally-Qualified Community Health Center (FQCHC); Patient-Centered Medical Home (PCMH)
Number of Clinical Sites	1 - medical and dental co-located
Dental Clinic(s)	Yes
Primary Geography	Salina is a metropolitan statistical area (however, health center mission is training physicians for rural practice)
Average number of patients (2011-13)	9,621
2011 – 2013 Trend Change	0.40%
Average cost per patient (2011-13)	\$703.50
2011 – 2013 Trend Change	21.00%

The Organization

Salina Family Healthcare Center (SFHC) has been a Federally Qualified Health Center (FQHC) since late 2004. It was developed as a result of a merger between Salina Health Education Foundation, Inc., a not-for-profit family medicine residency, and Salina Cares, a free clinic which served low income uninsured families. It currently operates one clinical location in Salina, Kansas which is located in a metropolitan statistical area, based on population density. Although SFHC is located in a metropolitan area, it serves the surrounding rural communities. The average annual number of patients served at SFHC from 2011 and 2013 was 9,621, and the average annual cost per patient during that same time period was \$703.50.

SFHC has provided dental services to the community since 2005. From 2005 to 2010, these services were offered at an offsite dental clinic. In 2010, SFHC renovations occurred, and, as a result, the dental clinic was moved onsite.

Training family medicine physicians is a priority for SFHC. They currently host the Smoky Hills Family Medicine Residency which prepares many family medicine physicians who have chosen to practice in rural Kansas communities.

The Model

The Integration of Oral Health and Primary Care Practice (IOHPCP) key domains, described in the overview section of this document, are used as a framework for exploring the model SFHC has adopted. These domains include 1) risk assessment, 2) oral health evaluations, 3) preventive intervention, 4) communication and education, and 5) interprofessional collaborative practice. Brief descriptions for each domain are provided in the preceding text.

Domain: Risk Assessment

SFHC has undertaken efforts to identify patients at both the individual and population level who face increased risks to oral health. At the population level, oral health services have been integrated into SFHC primary care delivery through a program called “Inreach.” The SFHC Inreach program is an initiative inside the health center focused on reaching primary care patients with oral health services and connecting them to the dental clinic for follow-up care. Inreach typically includes services provided outside of the health center as a means of reaching community members that may not otherwise access or be aware of healthcare service. SFHC has recognized pediatric patients between the ages of 3 months to 18 years as being particularly in need of oral healthcare. As such, Inreach preventive oral health services are provided for all pediatric patients at every visit, including well-child appointments, physical examinations, or acute care visits.

At the patient level, the Inreach team reviews the primary care schedule each morning and “flags” patients that they will visit during the day. These daily risk assessments allow the team to be able to identify patients who may be in need of oral healthcare or dental care services using electronic health record (EHR) and Electronic Dental Record (EDR) data. The Inreach team is comprised of two dental hygienists who work



within the primary care clinic to deliver preventive oral health services and coordinate dental referrals for pediatric patients. The specific oral health services provided by the Inreach team include 1) oral screenings, 2) oral health education, 3) fluoride varnish, and 4) dental referrals.

Domain: Oral Health Evaluation

Oral health evaluation encompasses the risk assessment findings, at both the population and patient level, with patient-specific oral health history obtained from EHR and EDR data and clinical exam findings. The services provided by the Inreach team are tailored to each patient based on their personal risk assessment, age, comorbidities, and clinical presentation. The risk assessment of patients occurs first at the administrative level and then at the clinical level by Inreach team members as well as other members of the care team. The specific services provided to each patient are based on their age and unique needs. For example, it is likely that the Inreach team would only provide oral health education services for an infant patient who has not had their primary teeth erupt yet, whereas a 15 year old patient with a full adult dentition would likely be offered the full range of services (screening, education, fluoride varnish, and referral). The exception to this is when oral health services might interfere with a patient's comfort, such as a child being seen for a vomiting illness. Patients are first screened by Inreach team members about any oral health or dental concerns. An oral healthcare plan is developed by the Inreach team and primary care provider based on the findings from the oral screening and risk assessment.

Domain: Preventive Intervention

SFHC provides preventive oral healthcare to patients through the Inreach team. Inreach preventive oral health services are provided for all pediatric patients at every visit, including well-child appointments, physical examinations, or general check-up appointments and includes a clinical oral screening and preventive oral healthcare in the form of a fluoride varnish. Fluoride varnish is applied by a dental hygienist during each patient's visit.

Domain: Communication and Education

Oral health education is provided to all patients at SFHC in addition to the risk assessment, oral screening, and preventive intervention performed by the Inreach team. The oral health education provided to each patient is personalized to take into account the patient's risk factors, comorbidities, and clinical presentation.

Domain: Interprofessional Collaborative Practice

Interprofessional collaboration is a key component of effective, patient-centered care. At SFHC, interprofessional collaboration is accomplished at the administrative level through partnerships with dental care teams in the SFHC dental clinic. At the clinical level, the care team shares information through EHR and EDR data to identify patients in need of dental

services. The Inreach team (consisting of two dental hygienists) works closely with primary care physicians and dentists at SFHC to integrate oral healthcare into all primary care patient visits. Additionally, physicians, family medicine residents, and other care team members are given training in oral health through the Smiles for Life (SFL) curriculum, discussed further below.

Care Team Education and Training

In order to prepare for the Inreach program, SFHC physicians, family medicine residents, and other selected clinical team members complete the SFL curriculum. SFL is a free, publically available oral health curriculum which provides educational resources to support the integration of oral health and primary care. Training modules accessible online are available for specific oral health topics and continuing education credits are offered for physicians, nurses, and physician assistants. Additional information on this valuable resource may be found at: <http://www.smilesforlifeoralhealth.org>. SFL training modules are completed as a part of training in the family medicine residency, and are completed at orientation for all other team members.

In addition to the SFL training that selected clinical staff receives, the remaining clinical team receives training provided directly by clinical leadership at SFHC. This training is focused on enhancing understanding of oral health across all care team members. This training is also used to share the purpose and function of the Inreach initiative.

During the development of the Inreach program, the project team received "unofficial" training from the healthcare team at the Salud Family Health Clinic located in Colorado. Salud, featured in a separate profile, has been a leader in developing strategies for integrating oral health into primary care at health centers. They were among the first to place dental hygienists in the primary care clinic to serve as liaisons for preventive oral health services. The Inreach program at SFHC was built upon the model at Salud Family Health Clinic.

Resources and Financing

The two dental hygienists who serve as the Inreach team were identified as the key "human" resources enabling integration of oral health services into primary care delivery at SFHC. In addition, dental hygiene supplies including fluoride varnish, disposable dental mirrors, and oral hygiene products are required resources for this integration. SFHC also utilizes a portable dental hygiene cart, where all these supplies are kept. Currently, the salaries for the Inreach dental hygienists are covered largely through Medicaid reimbursements for fluoride varnish. This is billed as a dental encounter.

Evaluation

SFHC administration employs several strategies to evaluate the effectiveness of oral healthcare services delivered to patients at the clinic. Patient and population oral healthcare is monitored internally through EHR and EDR data collected from patients.

An “Inreach” code has been generated and is used to track the number of patients reached through the Inreach program. They are able to generate reports using this code and monitor the number of patients and types of services that were provided. Particular attention is paid to the number of patients receiving preventive intervention (fluoride varnish) and the health outcomes for patients who were provided dental care at the clinic. These data are used to identify populations that may be at a greater risk of oral health complications and to track health outcomes for patients.

Strategic Factors

The goal at SFHC is to “reach as many patients with oral health services as possible.” To meet this goal, clinical staff have received considerable training through the SFL curriculum, additional training from leadership at SFHC, and outside guidance from staff at Salud Family Health Center. Beyond training staff, SFHC employs four full-time dentists and four dental hygienists to meet the oral health needs of its patients.

The Inreach program is a crucial strength of SFHC in its ability to deliver oral health services to primary care patients. This program improves the care team’s ability to deliver oral healthcare to patients by pairing primary care physicians with the expertise of care providers trained in oral healthcare, the dental hygienist. Part of the Inreach team members’ ability to reach a large proportion of SFHC patients is their mobility. During patient care hours the Inreach team has a mobile dental hygiene cart (see image) which serves as its “base for operations.” This portable cart contains and organizes all of the dental hygiene materials and supplies used for the Inreach program. In addition, the cart mounts the laptop used by the Inreach team to access the EHR and EDR systems, and for co-

ordinating and scheduling dental appointments. The Inreach carts were custom made and designed to specifically meet the needs of the program at SFHC.

The Community Voice

SFHC commitment to providing oral healthcare to as many patients as possible has not only helped to address gaps in access to care in the community and improve health outcomes, but has also improved the lives of the residents of Salina and surrounding areas. For instance, Tyrell, a 30 year old automotive mechanic from nearby Aveline, KS has four children under 10 years old who have received medical and dental care at SFHC. Because he and his children receive their medical insurance through Medicaid, he had difficulty finding access to dental care services. There was only one dentist in Salina that accepted Medicaid insurance and the experience he and his family had there was awful. Furthermore, he was unable to find any dentist who would see his daughter who had very severe tooth decay and an undescended tooth. He was unaware that SFHC offered dental care. When he brought his children for primary care visits, they received oral healthcare, including fluoride varnish, and were giving appointments within the dental clinic. His daughter was subsequently seen by a pediatric dental specialist at SFHC



who removed two of her teeth, returning her to excellent oral health. Tyrell is extremely happy with the healthcare he and his family received at SFHC from Dr. Myra C. Long. Not only are they able to receive primary care and oral healthcare they needed during the same appointment, but Tyrell was impressed with the helpful attitude of staff at SFHC and remarked that they did not “make you feel less than because you have Medicaid.” He said, “I go to other doctors and feel like a burden, but at SFHC I feel like a priority.”

HEALTH CENTER PROFILE:

Salud Family Health Center, Fort Lupton, CO



Name: Salud Family Health Center	
Location: Fort Lupton, CO	
Website: http://www.saludclinic.org/	
Model Type	Culture of Integration
Organization Type	Federally-Qualified Community Health Center (FQCHC); Patient-Centered Medical Home (PCMH)
Number of Clinical Sites	10 - dental and medical are co-located; 1 mobile unit
Dental Clinic(s)	Yes
Primary Geography	Communities throughout northern Colorado; all are located in metropolitan statistical areas or are designated micropolitan statistical areas
Average number of patients (2011-13)	71,898
2011 – 2013 Trend Change	-4.40%
Average cost per patient (2011-13)	\$636.22
2011 – 2013 Trend Change	11.60%

The Organization

Salud Family Health Center (SFHC) has been providing healthcare services for northern Colorado communities since 1970. Currently, SFHC operates 10 clinical locations, each offering comprehensive healthcare services. Primary care and dental care are co-located at each facility. The average annual number of patients served at SFHC from 2011 to 2013 was 71,898, and the average cost per patient was \$636.22.

The Model

The *Integration of Oral Health and Primary Care Practice* (IOHPCP) key domains, described in the overview section of this document, are used as a framework for exploring the model SFHC has adopted. These domains include 1) risk assessment, 2) oral health evaluation, 3) preventive intervention, 4) communication and education, and 5) interprofessional collaborative practice. Brief descriptions for each domain provided in the preceding text.

Domain: Risk Assessment

SFHC performs risk assessments at the population level and individual levels. At the population level, the SFHC team recognizes that certain populations, such as low-income children, prenatal women, and patient with chronic health conditions, such as diabetes, experience barriers to oral health or are at increased risk for dental disease and related complications. They also recognize that, as a safety-net healthcare provider located in a medically underserved area, they serve an entire community for which “access to healthcare” is a challenge. All patients are included in the target population for their “medical/dental integration project”; however, they offer comprehensive dental care for all of patients at their dental clinics.

At the patient level, SFHC has an interprofessional care team which performs risk assessments for all patients as a part of primary care. This care team includes a primary care provider, nurse, and other medical staff, as well as a dental hygienist at some locations. Care team members review the medical and social history to identify risk factors, such as chronic conditions and behaviors. In addition, care team members use direct inquiry or questions during the patient visit to identify oral health history and concerns. This is commonly completed as a part of the primary care appointment by a dental hygienist. In addition, the dental hygienists review patient records in advance of each clinic to identify the primary care patients that likely require oral healthcare services.

Domain: Oral Health Evaluation

In addition to risk assessment, SFHC care teams perform clinical oral screenings as a part of the overall oral health evaluation for pediatric patients. This screening is performed by a dental hygienist working as part of the primary care team. The screening is used to identify conditions requiring dental care. Findings from the risk assessment and clinical screening are compiled and used to develop oral healthcare strategies. In addition to oral health screenings provided to pediatric patients, it is important to note that care team members in the primary care and dental clinics work together closely at all SFHC locations. An unwritten “open door” policy between primary care and dental providers is a part of the culture at SFHC. It is



not uncommon for a primary care provider to “go across the hall” and ask a dental provider to perform a dental consult for a patient during the primary care appointment. The alternate also occurs, as primary care providers are available for medical consults during dental appointments. This culture of interprofessional collaboration is embedded in SFHC.

Domain: Preventive Intervention

Fluoride varnish is provided to pediatric patients as part of the primary care appointment. This is generally performed by the dental hygienist care team member. Oral healthcare provided by the dental hygienist is considered a dental patient encounter at SFHC. Additional preventive interventions are delivered in the dental clinic. When appropriate, referral to the dental clinic is included in the oral healthcare provided during the primary care appointment.

Domain: Communication and Education

SFHC employs a number of communication strategies for oral health education. Care team members communicate the importance of oral health and its role in overall health, in addition to discussing factors that increase risk for dental disease to all patients as a part of standard messaging to primary care patients. Patients who are seen by the dental hygienist during the primary care appointment receive more extensive oral health education: including, oral hygiene instruction, targeted nutrition education, etc.

As previously mentioned, there are open channels of communication between the care teams in the primary care and dental clinics. This enhances SFHC ability to provide timely oral health education for patients. For example, if a patient presents for a primary care appointment and is identified as having dental care needs, a dental care team may be asked to “step over” to the primary care clinic to provide a consult and explain dental care needs to the patient. The “open” communication culture between primary care and dental care at SFHC directly benefits patient health.

Domain: Interprofessional Collaborative Practice

Interprofessional collaborative practice is woven into the fabric of SFHC. The responsibility of oral healthcare for patients is shared across the collective (primary care and dental) care team. As previously mentioned, information is continually exchanged across the care team through direct communication. This is a direct result of the culture at SFHC which values interprofessional collaborative practice and integration of oral health with primary care. In addition, SFHC has an interoperable electronic health record (EHR) system which is used to generate dental referrals. Dental appointments are also coordinated by the dental hygienist as part of the oral healthcare provided for pediatric patients in the primary care clinic. Having a dental hygienist on the interdisciplinary primary care team is valuable.

Education

Having interdisciplinary care teams that value oral health are a priority for SFHC, as is training the next generation of health professionals. No formal educational strategies were identified as being used to prepare care team members for integrating oral health with primary care at SFHC; however, the culture at SFHC and the open communication between care team members, especially primary care and dental care providers, has fostered an environment of experiential and collaborative learning.

In addition to the training of care team members, SFHC is committed to preparing the next generation of health professionals to work in collaborative practice environments. SFHC hosts an Advanced Education in General Dentistry (AEGD) residency program and public health rotations for 4th year dental students from multiple universities. Residents and students are immersed in the interprofessional collaborative practice environment at SFHC.

Resources and Financing

While the entire care team is critical, the dental hygienists that have been embedded into the primary care team were identified as the key “human” resources enabling integration of oral health services into primary care delivery at SFHC. Funding to support these dental hygiene positions is obtained through Medicaid reimbursements associated with fluoride varnish. A number of resources

(equipment, technology) are needed to support integration of oral health with primary care. Besides basic equipment used for clinical oral screenings and fluoride varnish, the dental hygienists have tablets that are connected to the EHR system which they use to review clinic schedules and patient charts to identify patients requiring oral healthcare services during patient care appointments. These have been valuable tools for the dental hygienists and facilitate integration.

Evaluation

SFHC evaluates the “reach” of their program by tracking the number of patients that were reported to have had an encounter with dental hygienists as part of the primary care visit. This information is generated through reports run on the EHR system. As of March 2015, SFHC reported more than 10,000 patient encounters were attributed to their “medical/dental integration” project. In addition, they also evaluate reach and outcomes using the following measures: 1) how many patients received screening in the last 30 days, 2) how many children were seen, 3) how many adults were edentulous, and 4) how many patients were too sick to be seen. Finally, they evaluate processes to identify issues and inform process improvement. Examples of process measures include, how many patients were released prior to seeing the dental hygienist and how many patients refused to see the dental hygienist.



Strategic Factors

The culture at SFHC is by far the biggest factor contributing to the successful integration of oral health with primary care. As described throughout the profile, SFHC has a culture which promotes open communication and collegiality between health professionals on their care team. This culture breeds mutual respect and sense of shared responsibility in patient care which has led to true interprofessional collaborative practice.

Leadership is driving force behind this culture and the organizational commitment to oral health. Dr. John McFarland, dental director at SFHC, has worked with underserved communities for over 40 years. Dr. McFarland is credited with being a champion for oral health and its integration with primary care. His vision and leadership have had a significant impact on the delivery of oral health and dental care within SFHC. Dr. McFarland was also a founder of the National Network for Oral Health Access, an organization that was developed to support Dental Directors from Federally Qualified Community Health Centers.

In discussions with Dr. McFarland regarding his perspective on integrating oral health with primary care, he states, “co-location (of medical and dental services) does NOT mean integration, but it does facilitate integration.” Dr. McFarland and the entire team at SFHC are committed to “wrapping” oral healthcare around all SFHC patients by moving from co-location to integration through interprofessional collaborative practice. His commitment to oral health integration with primary care has had an impact on the dental students that he has interacted with over his years at SFHC. For example, Dr. Cecilia Edwards recalls the summer of 1995 when, as a 4th year dental student at Northwestern University in Chicago, she participated in a public health rotation at SFHC. This was her first “real” experience in public health, and it had a profound impact on her career. Shortly after completing dental training, Dr. Edwards joined SFHC as a dentist and she has now been a part of the SFHC team for 20 years. She states that Dr. McFarland and Mr. Brasher, Chief Executive Officer (CEO) at SFHC have created a “culture of openness between medical and dental,” that she is proud to be a part of. Of her experience rotating through SFHC as a dental student, Dr. Edwards states, “it’s really important for dental students to spend time at Community Health Centers to realize the human side of dentistry.”

The Community Voice

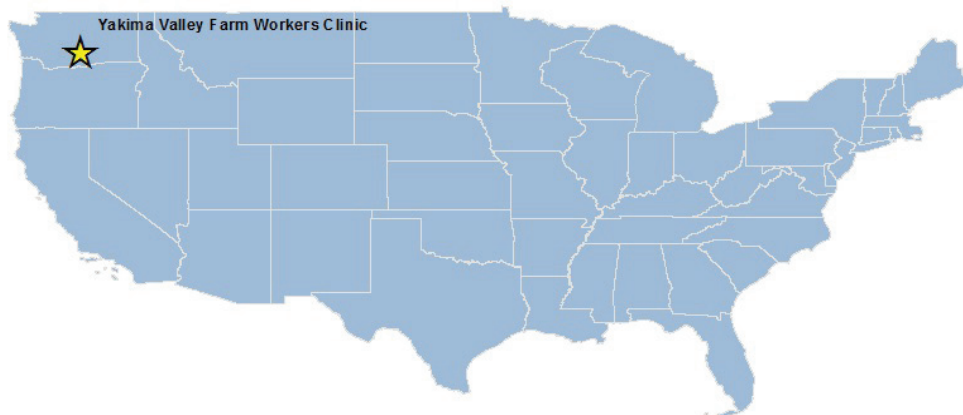
At SFHC, the provision of oral healthcare is not only about the technical expertise required to deliver quality care, but also includes the ability to inform patients about the importance of oral health to their overall health, as well as how they can make small changes to their habits that will reap large improvements in their health outcomes. Dr. Cecilia Edwards believes the integration of medical and dental care provision at SFHC supports the integration of oral health to systemic health for their patients, providing total patient care at each primary care visit. Staff at SFHC strive to reassure patients who may be uncertain about how to best care for themselves and their families and put nervous patients at ease with dental treatments.

For example, a mother of a 15 month old child was hesitant to brush his teeth because “...he always cries. I think I’m hurting him.” After speaking with hygienist Jessi Stoll at SFHC, the mother remarked, “Thank you for demonstrating brushing and how much toothpaste to use. Now I know what to do. I know I’m not hurting him and it’s important, even if he cries a little, we have to brush every day.” SFHC care providers are willing to educate parents about how to best care for their children’s oral health. Another parent, whose child saw a dentist outside of SFHC, did not realize that their child drinking from a “sippy cup” every night could contribute to their frequent cavities, and, upon being informed by SFHC staff, thanked them saying, “I thought it was only the bottle that could cause cavities. Thank you for helping us figure this out.”

In addition to working with the parents of children who receive dental care at SFHC, the compassionate attitudes of staff help to put younger patients at ease with dental services. A mother of a 10 year old child told staff, “He won’t go to the dentist because his cousin told him scary stories. I’m so glad you came today and proved to him that it is not so scary. Thank you for being so nice and making a follow-up appointment for him.” Staff also communicate directly with young patients to educate them about the importance of oral health. An eight year old patient said, “Now that I know that the bacteria will eat my teeth and cause ugly cavities I’m going to brush every day.” Treating patients of all ages with respect and including them in conversations about their health is a critical factor in fostering healthy behaviors. A mother of teenage girls thanked SFHC staff for reminding her daughters about the effects of soda pop on their oral health and the importance of brushing. “I tell them all the time, but I don’t think they listen. It’s so great for them to be reminded between check-ups.”

HEALTH CENTER PROFILE:

Yakima Valley Farm Workers Clinic, located in the Pacific Northwest (multiple sites throughout Washington and Oregon)



Name: Yakima Valley Farm Workers Clinic	
Location: Multiple sites throughout Oregon and Washington state	
Website: http://www.yvfwc.com/	
Model Type	Dental Outreach Coordination
Organization Type	Federally-Qualified Community Health Center (FQCHC); Patient-Centered Medical Home (PCMH)
Number of Clinical Sites	18 Medical, 8 of which have dental, one separate dental clinic, 3 mobile units (1 mobile medical, 1 mobile immunization, 1 mobile dental)
Dental Clinic(s)	Yes
Primary Geography	Various sites throughout Washington and Oregon; all are located within metropolitan statistical areas
Average number of patients (2011-13)	120,527
2011 – 2013 Trend Change	-0.50%
Average cost per patient (2011-13)	\$959.23
2011 – 2013 Trend Change	27.90%

YVFWC provides healthcare services at 19 locations in metropolitan statistical areas throughout Oregon and Washington State. Dental and medical services are co-located 10 of their clinical sites. In addition to freestanding clinics, YVFWC operates three mobile health clinic units: one medical, one dental, and one that provides both services.

Coordinating health services for participants of the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) is a priority at YVFWC. WIC is a federally funded program to aid in the health and nutrition of low-income pregnant women, breast feeding women, infants, and children under the age of five. YVFWC has served 128,967 clients in WIC Nutrition Programs since its founding.

The Model

The *Integration of Oral Health and Primary Care Practice* (IOHPCP) key domains, described in the overview section of this document, are used as a framework for exploring the model YVFWC has adopted. These domains include 1) risk assessment, 2) oral health evaluation, 3) preventive intervention, 4) communication and education, and 5) interprofessional collaborative practice. Brief descriptions for each domain provided in the preceding text.

Domain: Risk Assessment

YVFWC has taken a comprehensive approach to identifying risk factors that impact oral health within their community. At the population level, risk assessments are used to target integration of oral health with primary care and outreach initiatives at YVFWC. Population level risk assessments are performed at the administrative level. YVFWC has identified disparities in oral health and access to care among low-income infants, children, and breastfeeding or expecting mothers in their community. Armed with this information, they have strategically integrated oral health with primary care, outreach, and WIC services as means of extending oral healthcare to these vulnerable populations which are at increased risk for dental disease.

The Organization

The Yakima Valley Farm Workers Clinic (YVFWC) provides comprehensive health services at clinical sites located throughout the Pacific Northwest. Established in 1978, YVFWC originally focused on the provision of healthcare services to migrant and seasonal farm workers, thus its name. The organization has since grown to include 19 clinical sites and has expanded its services to low-income families, although migrant and seasonal workers continue to comprise a large portion of the patient population. Currently, a quarter of YVFWC patients (25.4%) are migrant or seasonal workers, and nearly half (49.4%) report Spanish as their primary language.



At the patient level, YVFWC care team members, including WIC, primary care, and outreach, perform risk assessments for all patients as a part of comprehensive services. In the WIC clinic, WIC Certifiers, service level staff trained in health education and evaluation, perform risk assessments as part of routine services. This risk assessment involves direct inquiry into oral health history and nutritional habits. Patients reporting that they have not had received dental care for more than 6 months and those with dental concerns are flagged as “high risk” and are referred for same day dental care services.

In YVFWC’s primary care and outreach settings, risk assessments are performed through review of medical and social history, and through direct inquiry. A care team member commonly completes this as a part of primary care appointment triage. Risk assessment is also done at the patient level via chart review. YVFWC utilizes an electronic health record (EHR) that auto-generates referrals to any patient who has not received dental services in greater than six months. In addition to those identified in need at the patient-level, all YVFWC patients from the target populations are considered to be “at-risk” for dental disease.

Domain: Oral Health Evaluation

Oral health evaluation encompasses the risk assessment findings, at both the population and patient level, with patient-specific oral health history and clinical screening findings. As mentioned previously, risk assessments are performed at the administrative and clinical level, through risk factor identification. These targeted patients are then asked about their oral health history, as a part of comprehensive primary care visit, outreach services, and WIC appointments. During interactions with an YVFWC care team, patients are asked if there are any dental or oral health concerns. Patients seen in the primary care clinic receive a clinical oral screening which is performed by a clinic assistant and primary care provider. On mobile health clinic units which are a part of outreach services, a dental assistant performs a limited dental screening. Based on the risk assessment and oral evaluation, an oral healthcare plan is determined by the primary care provider.

Domain: Preventive Intervention

Medical and dental services are co-located at many of YVFWC clinical locations. Because of this, YVFWC has the capacity to provide comprehensive oral healthcare for its community. Limited dental screenings are the only dental care services performed in the primary care office. Patients are referred to the dental clinics for the remainder of their dental care needs. Referrals are generated through their integrated EHR system and coordinated by a Dental Outreach Coordinator. This Dental Outreach Coordinator communicates directly with patients and dental clinics to arrange same-day appointments, especially for WIC patients, for dental care following primary care appointments. At the dental clinic, dentists and dental assistants perform preventive interventions. This includes a comprehensive dental examination, dental prophylaxis or cleaning, and fluoride varnish.

Domain: Communication and Education

YVFWC care teams provide oral health education to their patients to highlight the role of oral health in systemic health, discuss risk factors for dental disease, highlight preventive measures to mitigate risk, and discuss the effect of nutrition on oral health. YVFWC embedded oral health education across their services. In the WIC clinic, Certifiers, previously described as service level staff trained to provide health education and perform health evaluation, promote and communicate basic nutrition and health (including oral health) education with their patients.

The coordination of same day dental appointments is a priority at YVFWC. Care team members emphasize the need for follow-up dental care in their routine communications with all patients in addition to oral health education.

Domain: Interprofessional Collaborative Practice

Interprofessional collaborative practice is essential to ensure comprehensive and definitive oral healthcare to the community. This is integral to the model design at YVFWC. With co-located dental and medical clinics, interprofessional communication is critical to provide comprehensive oral healthcare, including dental care services. The Dental Outreach Coordinator and the interoperable EHR system serve as an intermediary between dental and primary care clinics and a liaison to the patient. As mentioned previously, dental care referrals are generated automatically for any patient who has not received dental care within the last six months. They may also be manually generated by care team members for patients determined to be “in need” through risk assessment and clinical oral screening. The role of the Dental Outreach Coordinator is essential to YVFWC’s team, as the Coordinator facilitates these referrals and arranges follow-ups.

While the primary care office initiates oral healthcare, this is completed definitively through collaboration with the dental clinic. YVFWC monitors collaboration by examining 1) the number of dental referrals that resulted in a scheduled appointment and 2) the number of scheduled appointments that were kept on a monthly basis.

Care Team Education and Training

This clinic focuses on the importance of oral health in all aspects of healthcare delivery. All levels of healthcare staff aid in highlighting its importance for the patients, from patient registration support staff to clinical providers. The Dental Outreach Coordinator has a crucial position within this team. As it is appointed internally, training for this role includes previous experience with dental patients at the clinic and learned scheduling management skills to promote oral health within the community.

WIC Certifiers play a large role in the integration of oral health and WIC services at YVFWC. Certifiers complete routine training with the Washington Department of Health (WDH). The WDH training provided to certifiers includes diet and nutrition, the effects of sugar on the teeth, and oral hygiene. Certifiers are required to complete training updates



annually as a part of their position. In addition to the training provided by WDH, YVFWC WIC Certifiers also participate in organizational training to ensure that they are up-to-date with policies and procedures surrounding oral health evaluations and referrals.

YVFWC also participates in the Northwest Dental Residency, training dental residents to practice services on the high proportion of disadvantaged population at this clinic. Participating in this residency program encourages the training and retaining of dental professionals within these communities, allowing for not only the provision, but also the sustainment of oral health providers in this region.

Resources and Financing

Although a number of resources are important to the success of integrating oral health across YVFWC primary care and outreach programs, the Dental Outreach Coordinator serves as the “hub” for linking patients to dental and enabling services. The individual in this role has an office at one of the YVFWC locations but is able, through EHR, to access patient records and schedule appointments at all of the 10 dental clinic locations. The coordinator is familiar with the dental care team at each of the 10 dental clinics operated by YVFWC. This relationship is especially important as the Dental Outreach Coordinator is continuously scheduling patient appointments at each of the dental clinics.

The Dental Outreach Coordinator is critical to the oral health integration program at YVFWC. The position is filled internally by a highly motivated member of the dental care team who demonstrates compassion and genuine concern for the oral health of the community. Funding for this position comes from the outreach budget at YVFWC. In addition to having a dedicated person serve as the Dental Outreach Coordinator, office space, technological equipment (computer, telephone, etc.), and EHR access are also required for the position.

The EHR system is essential to the oral health integration strategies employed by YVFWC. YVFWC has an integrated EHR which includes both medical and dental information in one record. This structure provides the primary care and dental care teams with immediate access to critical information. Primary care team members use EHR to 1) evaluate for a need for dental referral and 2) to initiate the dental referral itself.

Evaluation

Reports containing this information are generated using reporting tools in the EHR system. Monthly evaluation reports are reviewed by the YVFWC administration, including the Outreach Director. This information is used as a performance indicator for the Dental Outreach Coordinator and to inform the development process improvement strategies. The dental referral program at YVFWC has been successful. The goal for the Dental Outreach Coordinator is to have at least 44 scheduled appointments kept each month. Between April 1st, 2014 and January 31st, 2015, there were 1,200 scheduled appointments and 675 of those appointments were kept (roughly 56% attendance rate). This is an average of 67 appointments

per month, which is well over the target. Surpassing the target number of kept appointments is important for sustainability of the Dental Outreach Coordinator in the YVFWC model. In addition to evaluating the referrals facilitated by the Dental Outreach Coordinator, YVFWC also engages in follow-up discussion with the patients to ensure delivery of dental services and compliance with referrals. This shared responsibility between healthcare professionals, in both the integration of oral health with primary care and the collaboration between the primary care team and the dental care team, allows for comprehensive healthcare delivery to the YVFWC community.

Strategic Factors

Oral health is valued across the programs at YVFWC. This is evident in the way in which oral health has been embedded in primary care, outreach, and WIC services. Mobile clinic services expand the reach of YVFWC’s focus on oral health into the community. As previously mentioned, they operate three mobile clinics (one medical, one dental, and one providing both medical and dental services). One of these mobile clinics is sponsored by the Ronald McDonald charity. The Ronald McDonald charity is an organization created to improve the health and wellbeing of children. This charity donated a mobile clinic to YVFWC for the purpose of providing the healthcare services to children in the community. In addition to donating the mobile clinic to YVFWC, the charity provides funding to cover the cost of healthcare services provided to uninsured children. This exemplifies YVFWC’s commitment to integrating oral health services with primary care delivery to their community.

The commitment to integrating and coordinating oral health services is also evident in the investment YVFWC has made in the Dental



Outreach Coordinator position. This position has been critical to “connect the dots” from primary care, outreach, and WIC services to oral health services. Having the right person in this role is just as critical as having the position. YVFWC has intentionally sought out team members for this position who are “compassionate and committed to improving oral health in the community” and have excellent communication skills. Having one point person to follow-up with patients and coordinate dental referrals is a strategic strength.

Of course, no man is an island. The Dental Outreach Coordinator is only one on a team of highly committed healthcare professionals at YVFWC. Maria Benavides, Director of Outreach, believes the key to successful oral health integration and promotion begins and ends with a well-prepared, driven healthcare delivery team. In reference to her staff’s commitment to the community, she states, “the solution is having compassionate and passionate people,” citing community health improve-

ment as YVFWC's staff's main objective.

Dr. Mark Koday, Chief Dental Officer at YVFWC, echoed Maria's perspective that a motivated, passionate healthcare "team" is essential to the success of oral health integration. He also believes that commitment from administration is needed in order to successfully integrate oral health into primary care and other health center services. Juan Carlos Olivares, YVFWC Chief Executive Officer, has been a champion for oral health integration. His vision for improving community oral health and his support has been crucial to the integration program at YVFWC. Dr. Koday states, "When the CEO is behind it, it makes it easier for the leadership to get there!" A supportive leadership team inspires the rest of the staff and is essential to the ongoing success of the integration of oral health within primary care occurring at YVFWC.

The Community Voice

YVFWC's commitment to timely delivery of oral healthcare and interprofessional collaborative practice has had a great impact on patients and their families. Brittany and her 9 month old son, who access primary care and WIC services at the YVFWC clinic, are just one example of this impact.

Brittany recently brought her son to the clinic for routine well-child appointments with the primary care team. During that the well-child visit, care team members asked about her son's oral health and whether she had any concerns. She was surprised to learn from the care team that her 9 month son could, and even should, see the dentist. The primary care provider that saw her son performed a limited oral screening during the visit. While her son was still being seen in the primary care clinic, a dental appointment was coordinated. Immedi-

ately after the primary care visit, Brittany then says she and her son were walked upstairs to the dental clinic where her son received a comprehensive dental examination by a pediatric dentist. Throughout the primary care and dental visits, Brittany was provided with educational resources to help her care for her son's oral health.

Brittany was surprised at the level of collaboration between the primary care and dental teams. The capacity to schedule same-day dental appointments for primary care patients is an area of great pride for YVFWC. As a busy mom, Brittany reports this coordination was especially convenient. Her son was able to receive comprehensive healthcare all in one visit.

When they arrived at the dental clinic, Brittany shares that she was "nervous that her son wouldn't tolerate dental services well, because he is 9 months old." However, she was pleasantly surprised by level of warmth and compassion the dental care team displayed. They calmed her and her son, and eased her anxiety about the visit. Her son received a dental examination by the dentist and had teeth cleaned and fluoride varnish applied by a dental assistant.

Brittany reports being very satisfied with the care her son has received at YVFWC. She was most impressed by "the level of efficiency and warmth of the healthcare teams." Perhaps more important than the oral healthcare services provided to her son by the YVFWC healthcare teams, is the fact that this experience significantly impacted Brittany's perception of oral health. She now realizes that, even at 9 months, oral health is an important part of overall health. This enhanced awareness of oral health will directly impact her own oral health and place her son on a trajectory for lifelong oral health.

DISCUSSION/CONCLUSIONS

This monograph presented information from five health centers that have successfully integrated oral health with primary care. The models employed by each organization varied in their structure, but they all share the common goal of improving the oral health and overall health of their patients and communities.

In general, there are three models for the integration of oral health with primary care which emerged through the development of this project. Salud Family Health Center (Salud) and Salina Family Health Center (Salina) have taken similar approaches. Both organizations have embedded a dental hygienist in the primary care team to provide oral healthcare and act as a liaison between the primary care and dental clinics. Salina leverages their interprofessional integration approach to provide oral health preventive interventions and dental care coordination to their primary care patients. Salud, on the other hand, has fostered a culture of integration which maximizes interprofessional collaboration among co-located medical and dental providers, also utilizing the role of a dental hygienist to provide preventive oral health interventions and serve as a dental care coordinator for primary care patients.

Bluegrass Community Health Center (BCHC) and Holyoke Health Center (HHC) have taken a different approach than Salud and Salina. Whereas Salud and Salina have embedded an oral health professional into the primary care team, HHC and BCHC have trained an existing primary care team member to provide oral healthcare and preventive interventions during the primary care appointment. The BCHC model may be thought of as physician-led integration. This model was first championed by the Medical Director Dr. Steve Wrightson, under whose leadership, oral health has become a priority in primary care at BCHC. The HHC model is administration-driven integration in which the executive leadership's vision and commitment has fostered an oral health centric organizational environment. Furthermore, HHC leverages administrative system, such as their interoperable Electronic Health Records (for both medical and dental), as a means of facilitating integration.

Different from all aforementioned models, Yakima Valley Farm Workers Clinic (YVFWC) has invested in a dental outreach coordinator role to facilitate definitive oral and dental health management through close collaboration with medical and dental clinics. This dental outreach coordinator leverages YVFWC's integrated EHR to facilitate administration-driven referrals to their targeted community.

While these models differ, they are similar in the fact that each identifies a care team member that provides the majority of oral healthcare services in the primary care setting. Each of these organizations also report providing some type of preventive interventions, such as fluoride varnish or oral health education, for patients as part of the primary care visit. Dental referral, either internal or external, is coordinated for patients, served by the integration program at each of these organizations.

Financial sustainability is a vital component of any model that integrates oral health with primary care. A number of financing mechanisms were reported by the health centers

featured in this monograph. At Salina and Salud, Medicaid reimbursement for dental encounters associated with the application of fluoride varnish is the primary source of funding. This funding primarily supports the dental hygienists who have been integrated into the primary care team within both of these organizations. Whereas Salud and Salina have added a care team member with oral health expertise, BCHC and HHC have trained existing care team members to provide oral healthcare services. Both BCHC and HHC report the costs associated with integrating oral health with primary care are absorbed into the overall cost of the primary care visit. Finally, the role of the Dental Outreach Coordinator is funded as a part of the YVFWC outreach budget. These three distinct financing mechanisms meet the unique needs of the respective organizations and sustainably support their models for the integration of oral health with primary care.

Each of the models has its own unique strengths contributing to the success of their model. Each of the organizations profiled in this document identified "champions" within their organization whose effort and support were critical to integrating oral health with primary care. In most cases these champions were leaders within the organization that either had a vision for oral health or were supportive of advancing oral health within the community. Of course, it goes without saying that the care teams involved in integrating oral health with primary care at each health center are perhaps the most critical factors in success. The care teams at each of these organizations recognize a shared responsibility and commitment to improving the oral health of their community. This is evident in the various "community voices" that are represented in this monograph. The voices of the people touched by these organizations and their innovative programs are a testament to the value of health centers and their commitment to health improvement.

"They (the care team at Salina Family Health Center) did not make me feel 'less than' because my family has Medicaid. I go to other doctors and feel like a burden, but at the health center I feel like a priority."

-30 year old male and father of 4 small children

"I don't know what state my teeth would be in if it weren't for Dr. Wrightson (physician at Bluegrass Community Health Center)."

-39 year old male

"It's so important for dental students to spend time at Community Health Centers to realize the human side of dentistry."

-Dr. Cecilia Edwards,

describing how rotating through Salud Family Health Center as a dental student impacted her career

APPENDIX

Table: Key Informant Questions and Target Informants by Topic Area

Topic Area	Draft Questions	Target Informants
Administrative	Please tell me about your organization (organizational type, number of clinical sites, primary geography, average number of patients, etc).	Administrator
Education/Training	Please describe the education/training program(s) that are used by your organization. Why was this education/training program selected? How well do you think the training program prepared you/your team for implementation? Please describe any strengths or weaknesses in the education/training program.	Administrator, Clinical Director, Care Team Members
Resource Requirements	From the administrative perspective, please describe the resources (human and non-human) required to implement your current program. Where these resources already available with your organization or where they acquired specifically for the purpose of integrating the model?	Administrator, Clinical Director
Financial mechanism	What mechanism(s) are used to finance the integration of oral health services into primary care delivery at your organization?	Administrator, Clinical Director
Target population	What population does your model focus on reaching? Why was this population selected?	Administrator, Clinical Director
Clinical services	Please describe the specific oral health services that are delivered as a part of the model.	Administrator, Clinical Director, Care Team Members, Patients/Families
Care Team Members	Which care team members are directly involved in the delivery of oral health services and what are their specific roles?	Administrator, Clinical Director, Care Team Members
Patient Selection	What protocols/strategies are used to identify patients?	Administrator, Clinical Director, Care Team Members
Clinical Processes	Please describe the process(es) for delivery of oral health services in the primary care setting.	Administrator, Clinical Director, Care Team Members, Patients/Families
Evaluation	What measures are you using (or plan to use) to evaluate the success with your model? What tools (clinical data, patient surveys, etc.) are you using to gather information to evaluate your program?	Administrator, Clinical Director, Care Team Members
Interaction	Please describe your interaction (who was the patient, what services were provided, and by whom) with the oral health integration program.	Patient/Family
Impact	How did this program impact your families ability to access to dental services?	Patient/Family
Satisfaction	How pleased are you with the oral health services you received?	Patient/Family
Facilitators	Please describe the people, processes, or other resources within your organization or the health center which supported integration. Please describe the people, processes, or other resources outside of your organization or the health center which supported integration.	Administrator Clinical Director, Care Team Members, Patients/Families
Barriers	Please describe the people, processes, or other resources within your organization or the health center which were a barrier to integration. Please describe the people, processes, or other resources outside of your organization or the health center which were a barrier to integration. Please describe how these barriers where overcome or addressed.	Administrator Clinical Director, Care Team Members
Sustainability	Please describe the plans, if any exist, for long term sustainability of the model within your organization. What factors, if any, will be required for or influence longterm sustainability of the model within your organization?	Administrator Clinical Director, Care Team Members



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