March 10, 2014

Greater Kansas City Oral Health System Assessment

Submitted to:

Health Resources in Action

Advancing Public Health and Medical Research

Table of Contents

EXECUTIVE SUMMARY i
INTRODUCTION 1
Background 1
Purpose and Goals of Greater Kansas City Oral Health Assessment 1
METHODOLOGY 2
Review of Secondary Data 2
Interviews and Focus Groups 2
Environmental Scan: Current Oral Health Services and Programming in the Area 2
Provider and Stakeholder Survey 3
Literature Review 4
Limitations 4
GREATER KANSAS CITY SOCIAL AND ECONOMIC ENVIRONMENT 5
Population Composition of Greater Kansas City 5
Unemployment, Income, and Poverty 8
Educational Attainment 10
ORAL HEALTH: THE MAGNITUDE AND SEVERITY OF THE PROBLEM 11
Oral Health Status 11
Perceptions of Oral Health as a Priority 14
Utilization of Oral Health Services 15
CURRENT ORAL HEALTH SYSTEM LANDSCAPE IN GREATER KANSAS CITY 17
The Federal and State Policy Environment 17
Insurance 17
Workforce 17
Implications of the Affordable Care Act 19
Greater Kansas City Oral Health System and Services 20
Prevention 21
Treatment 24
Acute/Emergency Care 24
Provider and Patient Perceptions of the Oral Health System 24
Number and Distribution of Providers 25
Fragmentation 26
Uncoordinated Referral System 27
Quality of Care 28
BARRIERS TO ORAL HEALTH CARE SERVICES IN GREATER KANSAS CITY 29
Patient Barriers to Care 29
Cost of Services 30
Insurance Coverage 31
Transportation 32
Language/Cultural Differences 33
Convenient Hours of Care 34
Provider Challenges to Care 34
Insurance Reimbursements and a Cumbersome Process 35
Patient Compliance/Attendance at Appointments 36
System Level Challenges 36
Integration and Coordination of Care 36
Appropriate Workforce and Settings for Low-Income Patient Care 37
STRENGTHS OF THE ORAL HEALTH SYSTEM 39
Number of and Quality of Dental Providers 39

Strong Safety Net System 40
Collaboration 40
PARTICIPANTS' VISION OF THE FUTURE AND RECOMMENDATIONS FOR THE ORAL HEALTH SYSTEM 41
Integration and Coordination of Oral Health and Primary Care 42
Medicaid Dental Coverage for Adults 43
Lower Cost Oral Health Services for Patients and Providers 43
Additional Oral Health Care Providers: Specialists, Hygienists, and Others 44
Increased Provision of Community-based Services 45
A Greater Priority on Prevention and Integration into Overall Community Health 45
OVERARCHING THEMES AND RECOMENDATIONS 46
Overarching Themes 46
Recommendations 47
Recommendations on Education and Convening 48
Recommendations on Enhancing the Workforce 51
Recommendations on Improving Integrated Care and Enhancement of Existing Oral Health Care 54
Recommendations on Financing 57
APPENDIX A: List of Organizations Engaged 60
APPENDIX B: Interview and Focus Group Guides 61
APPENDIX C: Provider and Stakeholder Survey 69
APPENDIX D: List of Oral Health Treatment Safety Net Services 75
REFERENCES 77

EXECUTIVE SUMMARY

INTRODUCTION

Oral health—the health of the mouth, teeth, and gums—is a critical issue in the U.S. and is a challenge for both adults and children. Problems related to oral health have been linked to chronic conditions such as heart complications, stroke, diabetes complications, and respiratory issues. For decades, oral health has not received the same attention and understanding as other areas of health and is often not covered by insurance, further challenging prevention and treatment of oral health conditions. However, more models of effective oral health systems are being identified in the literature and demonstrating positive ways to treat the patient in a holistic way.

The Health Care Foundation of Greater Kansas City (HCF), located in Kansas City, MO, provides leadership, advocacy, and resources to eliminate barriers and promote quality health for uninsured and underserved residents. With oral health being identified as an issue in the Greater Kansas City area, HCF has been supporting oral health-related initiatives under its safety net priority area for several years. In order to understand the challenges and successes related to oral health in Greater Kansas City and identify how the entire health and health care community can more effectively address local oral health needs, HCF undertook a comprehensive assessment of the oral health system in Greater Kansas City and hired Health Resources in Action (HRiA), a non-profit public health organization, to lead the assessment study. This report provides an overview of the key findings of the assessment, which explores a range of social and economic issues, health behaviors and outcomes, oral health access issues, and available resources related to oral health prevention and treatment services and concludes with evidence-informed recommendations tailored to the context and needs of Greater Kansas City.

METHODS

The assessment utilized a participatory, collaborative approach to look broadly at oral health in the study area, which included Johnson and Wyandotte Counties in Kansas, and Cass, Jackson, and Lafayette Counties in Missouri. The process included synthesizing existing data on social, economic, and health indicators from the region, a scan of existing oral health services and programs, as well as information from a survey of oral health stakeholders and providers (n=86), four focus groups with over 60 medically underserved adults, most of whom were parents of school-age children, and 22 interviews with oral health and medical providers, advocates, educators, community services providers, dental school administrators, public health leaders, and insurers.

KEY FINDINGS

The following provides a brief overview of key findings that emerged from this assessment:

Oral Health: The Magnitude and Severity of the Problem in Greater Kansas City

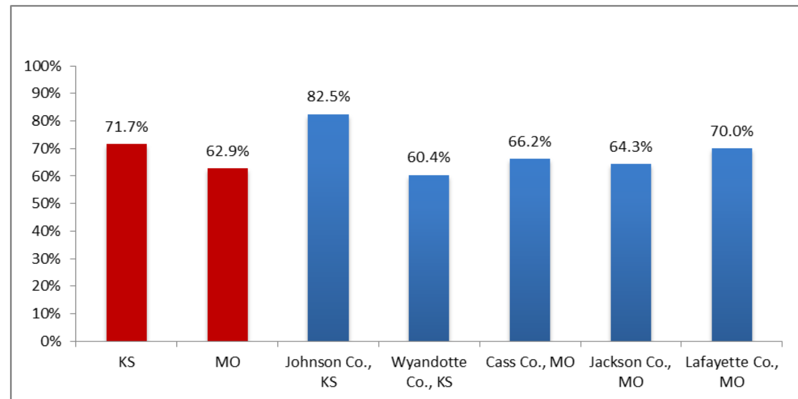
Oral Health Status: When noting their concerns about oral health, focus group and interview participants identified the prevalence of dental caries in children, untreated dental decay in adults, and dental-related pain. Poor oral health was also discussed as affecting academic success for youth and job success for adults. Self-reported poor oral health status varied in the region, from 7.6% of adults in Johnson County, KS to 29.8% of adults in Lafayette, County, MO reporting poor oral health status.

> *"If I have no pain, I'll never go to the dentist."* – Community resident focus group participant

Perceptions of Oral Health as a Priority: Low-income residents face many challenges in meeting basic needs, and consequently oral health is often not a top priority. While it is challenging for adults to seek oral health care, many parents noted that they try to overcome challenges to ensure their children's oral health needs are met. Oral health

stakeholders also noted that oral health does not seem to be a priority in larger public health discussions.

Figure 1: Adults Who Have Visited a Dentist or Dental Clinic within the Past Year by State and County, 2006-2010



DATA SOURCE: Behavioral Risk Factor Surveillance Survey, 2006-2010

Utilization of Oral Health Services: As seen in Figure 1, across the region approximately two-thirds of adults reported visiting a dentist in the past year, with a notably higher percentage of adults in Johnson County, KS. However, only 4 out of every 10 eligible Medicaid children in Kansas and 3 in 10 in Missouri received any dental or oral health care service in 2012.

<u>Current Oral Health System Landscape in Greater Kansas City</u>

The Federal and State Policy Environment: A challenge of having a regional oral health system is that many of the parameters of how it functions are defined by federal and state laws. Greater Kansas City has the added issue of straddling two states with differing insurance and workforce laws, among other challenges.

- Neither Kansas nor Missouri's Medicaid programs cover comprehensive dental benefits for adults, although all children are provided these benefits through the Early and Periodic Screening, Diagnosis, and Treatment program.
- Medicaid reimbursement rates vary by state. In 2010, only 46.7% of Missouri dentists' median retail fees were reimbursed by Medicaid, compared to 55.0% in Kansas and 60.5% nationally.
- The two states also vary in the type of practitioners in the oral health workforce. Missouri has expanded function dental assistants, while Kansas has higher skilled extended care permit hygienists. The Kansas legislature is currently considering licensing registered dental practitioners (hygienists with advanced education and training) who would provide routine and preventive care, allowing dentists to focus on more complicated procedures.

Greater Kansas City Oral Health System and Services: The region has several preventive services, including health departments providing education and dental clinics providing cleanings and sealants, as well as some communities with fluoridated water. Interview and focus group participants generally agreed that the Greater Kansas City region has a sufficient number of dental providers overall. However, most also concurred that there are not enough providers who accept Medicaid or treat patients within the safety net system. There were also concerns about the number and availability of dental specialists in the area.

> *"I had better dental care when I was in prison. When you come in, they give you an examination and they say that the tooth might need to be pulled."* – Community resident focus group participant

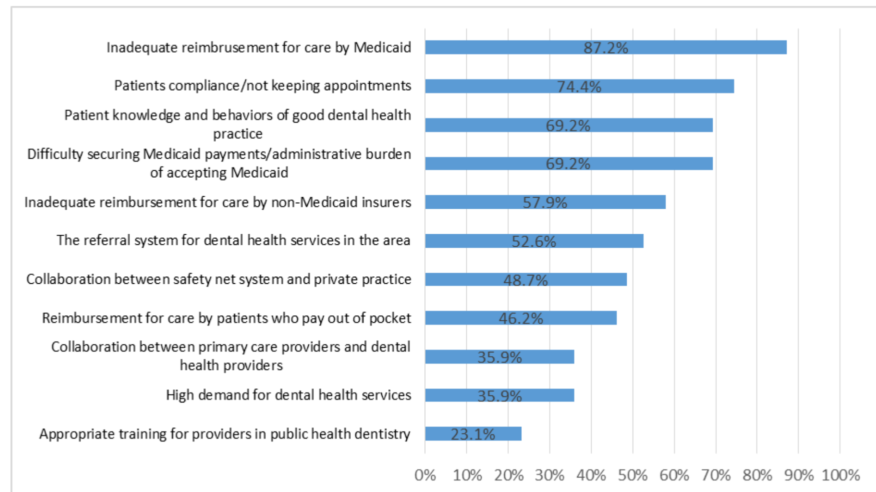
Provider and Patient Perceptions of the Oral Health System: While a variety of prevention services exist for children, they are viewed as underfunded and in high demand, while safety net provider dental services for adults were noted as not meeting the large demand. Additionally, the perception was that the oral health system lacks coordination and integration within the system as well as with the larger medical and primary care system.

Barriers to Oral Health Care Services in Greater Kansas City

Patient Barriers to Care: According to assessment participants, oral health care is more accessible to children, especially due to Medicaid coverage, but poorly accessible for adults. Lack of insurance coverage for adults, workforce issues, cost of care, transportation, and language issues were the main challenges cited as patient-related barriers to oral health care.

Provider Challenges to Care: While there are numerous individual patient barriers to accessing care, patients are seeking care within a system that presents many challenges for providers as well. Limited Medicaid reimbursement for oral health services, patient compliance, cost of services, hours of operation, integration/coordination of care, and workforce issues were most commonly cited among providers. As seen in Figure 2, inadequate reimbursement by Medicaid and patient compliance/not keeping appointments were seen as the greatest challenges among provider survey respondents.

Figure 2: Provider Challenges for Treating Low-Income Patients in Community Perceived by Direct Service Provider Survey Respondents, 2013 (n=49)



DATA SOURCE: Greater Kansas City Oral Health Assessment survey, 2013

System Level Challenges: In addition to issues of insurance coverage and reimbursement, other challenges that were identified as issues affecting the oral health system were the lack of integration and coordination of care and the appropriate match of workforce and settings to the patients' needs. Respondents had mixed reactions on the roles and settings of alternative providers to meet patient needs.

Strengths of the Oral Health System

Most respondents spoke positively about the quality of the regional oral health system that currently exists, which includes federally qualified health centers (FQHCs), community-based services, active statewide organizations, and local collaborations, but that it needed to expand to meet patient needs. As one interviewee summed up, "*the structure is in place, but it needs beefing up. We don't have enough, but we have a foundation*."

Participants' Vision of the Future and Recommendations for the Oral Health System

Integration and Coordination of Oral Health and Primary Care: Assessment participants noted that higher education institutions and community health centers can play leadership roles in better linking oral health and primary care to improve referral systems and increase collaboration across disciplines.

Medicaid Dental Coverage for Adults: The most frequently cited aspiration among participants was the inclusion of dental coverage under Medicaid for adults.

Lower Cost Oral Health Services for Patients and Providers: Given the limited insurance coverage for adults and lack of providers who accept Medicaid, lower cost oral health services were the vision of many community residents and some providers.

Additional Oral Health Care Providers: Specialists, Hygienists, and Others: Key to improving access, according to many respondents, is enhancing the number and types of providers able to provide oral health care. Additional specialists and enhanced scope of practice for mid-level providers were seen as promising strategies to help meet current demand.

Increased Provision of Community-based Services: Participants noted a disconnect between where oral health services exist and where community residents live and work. Competing priorities of life make it difficult for residents to access services where and how they are currently provided. Thus, community residents envisioned services provided in schools, churches, and other community settings.

A Greater Priority on Prevention and Integration into Overall Community Health: Community residents and oral health providers agree that the system needs to focus more on prevention of oral health issues, including various means of education about prevention and consequences of oral health issues, and integrate these into overall community health initiatives.

OVERARCHING THEMES AND RECOMMENDATIONS

Several overarching themes emerge from the data that have been particularly challenging to Greater Kansas City in addressing oral health issues and provide important context for the discussion of future directions and the implementation of evidence-based strategies.

- High cost of oral health service and lack of Medicaid coverage for adult oral health services
- Limited number of providers in Greater Kansas City who accept Medicaid
- Coordination and integration of providers within the oral health care system of prevention, treatment, and acute care, and across the broader health care system
- Mismatch of types and locations of providers with patient needs
- Importance of focusing on prevention activities and services related to oral health
- Stress the importance of oral health and its connection to overall health

Below are evidence-based and evidence-informed programmatic, systems, and policy-level strategies and initiatives for addressing the oral health issues described in this assessment.

Recommendations on Education and Convening

Programmatic Approaches

- Engage schools in preventive dental education by utilizing existing, evidence-based curricula
- Utilize staff at dental offices (safety net clinics and private providers) to provide preventive education, especially among patients with missed appointments
- Work with public health partners to conduct a multi-faceted public campaign to emphasize importance of oral health

System Level Approaches

- Reinvigorate existing stakeholder groups and/or develop community or regional coalition(s)
- Create a cadre of early childhood practitioners who are equipped to promote oral health education
- Integrate oral health providers and leaders in larger public health dialogue and decision-making bodies
- Develop a more comprehensive data surveillance system in Greater Kansas City on oral health behaviors and awareness to help track changes across time

Policy Approaches

- Support initiatives aimed at creating community water fluoridation policies

Recommendations on Enhancing the Workforce

Programmatic Approaches

- Encourage private dental providers to begin accepting Medicaid and/or accept a greater percentage of Medicaid patients via a peer mentoring or training program
- Update content of and increase utilization of searchable online databases that highlight local providers who accept Medicaid and/or other specific populations like Head Start children

System Level Approaches

- Work to reduce actual administrative barriers to enrolling in and billing for dental services through KanCare and MO HealthNet
- Support, and/or expand dental school rotational programs and curricula that encourage public health dental work among dental school graduates
- Integrate training on providing oral health care to children with special health care needs into dental school curricula and existing professional development programs
- Promote initiatives like the National Health Service Corps (NHSC) and loan forgiveness programs among dental students in order to encourage practice with underserved communities
- Create a Community Dental Health Coordinator (CDHC) program at the UMKC School of Dentistry

Policy Approaches

- Support and advocate for the authorization of alternative models of oral health providers

Recommendations on Improving Integrated Care and Enhancement of Existing Oral Health Care

Programmatic Approaches

- Provide increased training for primary care practitioners to administer oral health services to increase access points for underserved patients
- Enhance the experience of patients and their families seeking care at existing dental facilities by addressing transportation barriers and other challenges

System Level Approaches

- Support health care settings in becoming better integrated and meeting specific needs of underserved populations
- Encourage the incorporation of dental health educators, such as hygienists, as part of the larger medical team for specific at-risk population such as diabetics
- Increase collaboration and cooperation with non-traditional, community care settings

Policy Approaches

- Support regional and/or national advocacy work to integrate medical and dental billing codes

Recommendations on Financing

Policy Approaches

- Advocate to increase Medicaid reimbursement rates
- Encourage Medicaid to reimburse a wide range of providers
- Support instituting comprehensive oral health coverage for adult Medicaid population by developing a business case to be used for advocacy efforts

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Numerous services, agencies, and organizations are currently working in Greater Kansas City to address oral health issues. From discussions with stakeholders from a range of different sectors, it is clear that there are various challenges to both individual patients and providers as well as the oral health system as a whole. While these challenges are great, there are existing individuals and groups working on these

issues locally and statewide. However, efforts are fragmented, uncoordinated, and insufficient to meet the needs of the uninsured and medically underserved. There was strong interest for oral health to be addressed via a more strategic, coordinated way across the oral health system—from advocacy for comprehensive Medicaid dental coverage for adults and increasing the number of providers accepting Medicaid patients to establishing a Community Dental Health Coordinator program and supporting community/place-based oral health services. Overall, participants in this assessment recognize the solid foundation of Greater Kansas City's oral health system and look forward to the entire system moving forward in an innovative, collaborative, and comprehensive approach toward addressing the oral health issues of the region.

GREATER KANSAS CITY ORAL HEALTH SYSTEM ASSESSMENT

INTRODUCTION

Background

Oral health—the health of the mouth, teeth, and gums—is a critical issue in the U.S. and is a challenge for both adults and children. According to the Centers for Disease Control and Prevention (CDC), 96% of Americans aged 50–64 years have had dental caries (tooth decay, cavities), while tooth decay affects more than one-fourth of U.S. children ages 2–5 years and half of children aged 12–15 years. Problems related to oral health have been linked to chronic conditions such as heart complications, stroke, diabetes complications, and respiratory issues. Additionally, dental pain and poor oral health have been connected to lower academic achievement and job productivity.

For decades, oral health has not received the same attention and understanding as other areas of health and is often not covered by private employer insurance, further challenging prevention and treatment of oral health conditions. However, more models of effective oral health systems are being identified in the literature and demonstrating positive ways to treat the patient in a holistic way.

The Health Care Foundation of Greater Kansas City (HCF), located in Kansas City, MO, provides leadership, advocacy and resources to eliminate barriers and promote quality health for uninsured and underserved residents in Allen, Johnson, and Wyandotte Counties in Kansas as well as Cass, Jackson, and Lafayette Counties in Missouri. With oral health being identified as an issue in the Greater Kansas City area, HCF has been supporting oral health-related initiatives under its safety net priority area for several years.

In order to understand the challenges and successes related to oral health in Greater Kansas City and identify how the entire health and health care community can more effectively address local oral health needs, HCF has undertaken this comprehensive assessment study of the oral health system in Greater Kansas City. This report provides the findings from this study.

Purpose and Goals of Greater Kansas City Oral Health Assessment

In July 2013, the Health Care Foundation of Greater Kansas City (HCF) hired Health Resources in Action (HRiA), a non-profit public health organization, to conduct a comprehensive oral health assessment of the service area, including Johnson and Wyandotte Counties in Kansas and Cass, Jackson, and Lafayette Counties in Missouri.[i] The assessment aimed to cover several goals:

- Provide a portrait of Greater Kansas City's oral health needs and sub-populations most at risk
- Identify the community's current oral health services and programs as well as gaps in services
- Understand community residents' challenges to accessing oral health services and providers' concerns in offering services
- Identify areas of strength and opportunities for improvement within the oral health system
- Recommend potential strategies, approaches and next steps for improving the Greater Kansas City oral health system, informed by resident and provider input and the larger oral health literature

[i] While Allen County, KS is part of HCF's service area, it was not included in this assessment due to its distance from Kansas City and thus not as much part of the Greater Kansas City regional oral health system.

HRiA utilized a mixed-methods approach to provide a comprehensive assessment of oral health in Greater Kansas City and an analysis of best practices in oral health from the literature. Details of these methods are described in the next section.

METHODOLOGY

A mixed-methods approach was used for the comprehensive oral health assessment for HCF.

Review of Secondary Data

Existing data on oral health were synthesized to understand the magnitude and severity of the problem within Greater Kansas City. In addition, data on social and economic factors such as employment, income, and educational opportunities—the "social determinants of health"—were reviewed to provide context and help identify how these broader social and economic issues affect the community's oral health issues.

To profile the population's needs, data were compiled from multiple sources including data from the Kansas Department of Health and Environment, Missouri Department of Health and Senior Services, Centers for Disease Control and Prevention, U.S. Census, and County Health Rankings. Greater Kansas City indicators were compared to statewide data for Kansas and Missouri.

Interviews and Focus Groups

HRiA conducted interviews with leaders and providers involved in public health, education, and oral health service delivery and focus groups with low-income residents in the Greater Kansas City area. Focus group and interview discussions explored perceptions of the oral health situation in Greater Kansas City and the surrounding counties, the community's needs and strengths, challenges and successes of addressing these issues, and perceived opportunities to address these needs in the future.

Specifically, interviews were conducted with 22 individuals involved in different aspects of oral health or work with vulnerable populations. Interviewees included oral health and medical providers, advocates, educators, community services providers, dental school administrators, public health leaders, and insurers. In addition, four focus groups, consisting of over 60 medically underserved adults across the region, mostly parents of school-age children, were held to understand their perspectives on oral health issues, including challenges with accessing and utilizing existing oral health services and suggested solutions to these issues. In total, over 80 individuals participated in the focus groups and interviews. A full list of the different sectors/organizations engaged during the focus group and interview process can be found in Appendix A.

A semi-structured guide was used across all discussions to ensure consistency in the topics covered. Each focus group and interview was facilitated by a trained moderator, and detailed notes were taken during conversations. The interview and focus group guides can be found in Appendix B.

Environmental Scan: Current Oral Health Services and Programming in the Area

As part of this assessment, HRiA conducted a comprehensive scan to identify what oral health programs and services for low-income residents are currently being provided in the Greater Kansas City area. Information for the programmatic and service scan was gathered through a review of organizational reports and websites, published articles, and the interviews conducted with key stakeholders. This scan aims to provide a comprehensive listing of the area's oral health services and programs as well as identify which areas and populations are being served, where there are gaps, and where there may be opportunities for future partnerships and program expansion.

Provider and Stakeholder Survey

To understand the perceived strengths and challenges of the oral health system from the perspective of oral health providers and stakeholders, HRiA developed an online survey, which was disseminated through HCF and various oral health stakeholder groups, including the KS and MO oral health coalitions. The survey probed on the difficulties for providers in providing care, their perceptions of adult and pediatric patients' challenges in accessing care, as well as perceived strengths of the oral health system. Additionally, survey respondents were asked to note their oral health system priorities for future initiatives and to suggest models that have been successful in other parts of the country (see Appendix C for survey). A total of 86 respondents completed the survey. Table 1 describes their characteristics.

Table 1: Characteristics of Survey Respondents, 2013 (n=86)

	N	%
Role/Position		
General dentist	30	34.9%
Instructor of health care students	12	14.0%
Dental hygienist	9	10.5%
Dental specialist	8	9.3%
Administrator/Executive	7	8.1%
Public health program planner	6	7.0%
School nurse	3	3.5%
Other health care provider	2	2.3%
Other	27	13.4%
Geographic Location of Work		
Kansas City, MO	39	45.3%
Jackson County, MO (non-KCMO)	19	22.1%
Johnson County, KS	10	11.6%
Wyandotte County, KS	6	7.0%
Lafayette County, MO	5	5.8%
Cass County, MO	3	3.5%
Other	18	21.6%
Provide Direct Services to Patients	49	57.0%
Practice Setting (among those who provide direct service)		
Private practice	32	65.3%
Federally qualified health center or other community health center	6	12.2%
Other private dental clinic	2	4.1%
School nurse	5	10.2%
Non-profit/public hospital	4	8.2%
Private Hospital	0	0.0%
Other	1	2.0%
Length of Practice (among those who provide direct service)		
20 or more years	25	54.9%
10 years to less than 20 years	11	23.9%
5 years to less than 10 years	6	13.0%
Less than 1 year	2	4.3%
1 year to less than 5 years	2	4.3%
Residence of Majority of Patients (among those who provide direct service)		
Jackson County, MO (non-Kansas City, MO)	18	39.1%
Kansas City, MO	14	30.4%
Other	8	17.4%
Cass County, MO	2	4.3%
Lafayette County, MO	2	4.3%
Johnson County, KS	1	2.2%
Wyandotte County, KS	1	2.2%

DATA SOURCE: Greater Kansas City Oral Health Assessment survey, 2013
Note: Number includes only those who answered the specific question.

Literature Review

In order to inform recommendations for future oral health initiatives in the region, HRiA conducted a literature review on current models and findings from other programs across the United States. The literature review process was initially broad—to understand the larger, national context of oral public health, but also targeted specific local issues that emerged during the assessment process. Literature included scholarly articles, white papers, and web content published by highly respected foundations, research and professional organizations, and government entities. HRiA reviewed scholarly articles via academic databases, including PubMed, and utilized search terms including, but not limited to: "oral health education," "dental workforce," and "Medicaid and oral health." Several reports from national organizations such as Pew Charitable Trusts, the Centers for Medicare and Medicaid Services, American Dental Association, and the American Academy of Pediatrics informed this process. Grantmakers in Health's, *Returning the Mouth to the Body: Integrating Oral Health and Primary Care,* was particularly instructive in formulating recommendations for this report as it included its own review of literature and best practices and highlighted opportunities to improve oral health specifically for the philanthropic community. Overall, the literature was reviewed to assess whether best practice or new and innovative approaches and models might be appropriate within the context of HCF and its service area.

Limitations

As with all data collection efforts, there are limitations related to the assessment's methods that should be acknowledged. It should be noted that for the secondary data analyses, in numerous instances, data were only available at the state level for Kansas and Missouri, and not specifically for each of the 5 counties or Kansas City (MO) in the service area. In several cases, no data on a specific topic were available at all, providing a significant challenge for understanding the situation and providing a baseline measurement for future work.

Additionally, there is a time lag for many large data surveillance systems such as the Behavioral Risk Factor Surveillance System (BRFSS), a telephone survey on health behaviors, so data are not necessarily current for many indicators. Further, there are many batteries of questions on particular health topics that cities and towns must elect (and fund) to be asked of a sample of their residents. Some optional oral health questions were not included in the region's BRFSS survey.

Data based on self-reports should be interpreted with particular caution. In some instances, respondents may over- or underreport behaviors and illnesses based on fear of social stigma or misunderstanding the question being asked. In addition, respondents may be prone to recall bias—that is, they may attempt to answer accurately but remember incorrectly. Despite these limitations, most of the state or local self-report behavioral surveys (such as the BRFSS) benefit from large sample sizes and repeated administrations, enabling comparison over time.

While the focus groups and interviews conducted for this study provide valuable insights, results are not statistically representative of a larger population due to non-random recruiting techniques and a small sample size. Strong efforts were made to engage a cross-section of individuals with diverse perspectives on oral health; however, it is possible that not all perspectives were represented. Additionally, the small sample size and non-random sampling method of the stakeholder and provider survey are also limitations of this specific data collection method. Lastly, it is important to note that data were collected at one point in time, so findings, while directional and descriptive, should not be interpreted as definitive.

GREATER KANSAS CITY SOCIAL AND ECONOMIC ENVIRONMENT

The health of a population is associated with numerous factors. While what services and resources are available in an area are important, who lives in an area certainly affects the overall community's health. The section below provides an overview of the population and social and economic environment of the Greater Kansas City area. While age, income, and education are important characteristics that affect individual health, the *distribution* of these characteristics in a place may also have an impact on overall community health and the resources and services available. Understanding the demographic characteristics of the Greater Kansas City population is important in determining how and where oral health services could be provided and the challenges that many patients are facing in their daily lives.

Population Composition of Greater Kansas City

Greater Kansas City spans two states and numerous counties, five of which are included in this assessment. Young people comprise approximately one quarter of the population. Kansas City, MO and Wyandotte County, KS are racially and ethnically diverse, while the other counties in Greater Kansas City are primarily white.

The Greater Kansas City area consists of the urban areas of Kansas City, MO, Kansas City, KS, as well as several more suburban counties in each state that encompass and border Kansas City. As noted, the geography for this assessment includes Johnson and Wyandotte Counties in KS, Cass, Jackson, and Lafayette Counties in MO, as well as the city of Kansas City, MO. As seen in Table 2, there has been an increase in population from 2000 to 2010 in all geographies except Wyandotte County, KS. Notably, Johnson County, KS and Cass County, Mohave seen the largest increase in population, 20.6% and 21.2% respectively, a population growth which certainly has implications for the demand on services.

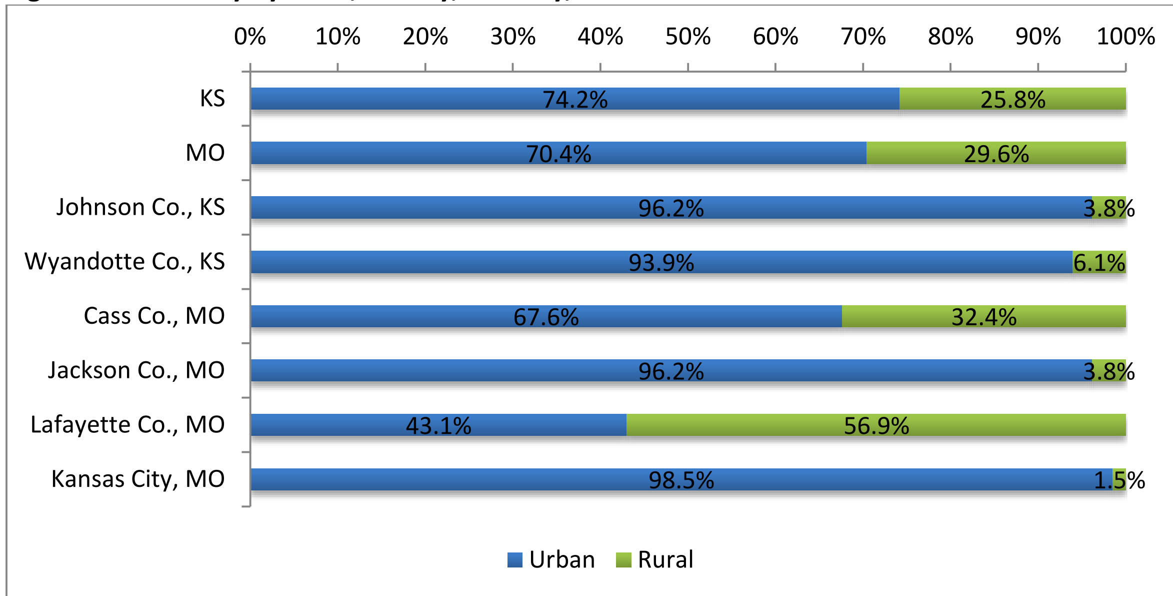
Table 2: Population Count and Percent Change by State, County, and City, 2000 and 2010

	KS	MO	Johnson Co., KS	Wyandotte Co., KS	Cass Co., MO	Jackson Co., MO	Lafayette Co., MO	Kansas City, MO
2000	2,688,418	5,595,213	451,086	157,882	82,092	654,880	32,960	441,545
2010	2,853,118	5,988,927	544,179	157,505	99,478	674,158	33,381	459,787
% change	6.1%	7.0%	20.6%	-0.24%	21.2%	2.9%	1.3%	4.1%

DATA SOURCE: US Census Bureau, Decennial Census 2000 and 2010

The region is varied in relation to how urban and rural it is. Kansas City, MO is an urban environment while outlying counties such as Lafayette County, MO are more rural. Figure 1 shows the percent of people who live in urban versus rural areas in Greater Kansas City. In less urban areas, focus group participants mentioned limited public transportation as problematic, especially as they seek services across an expansive region. Further discussion on the issue of transportation is highlighted in the barriers section of this report.

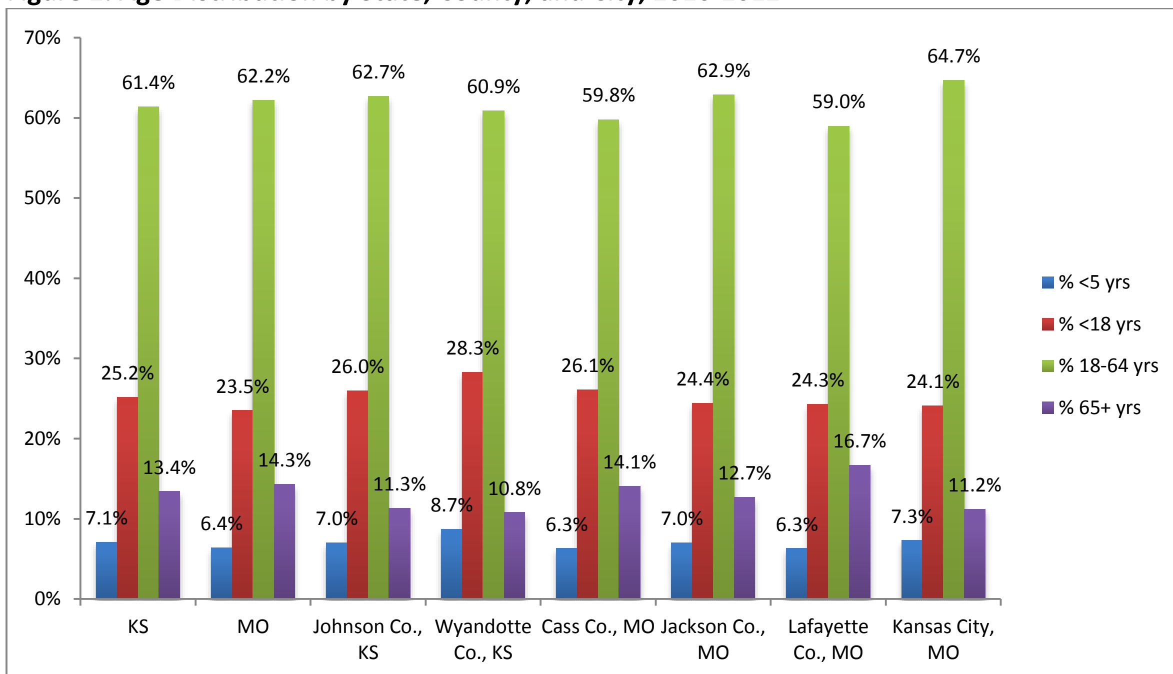
Figure 1: Urbanicity by State, County, and City, 2010



DATA SOURCE: US Census Bureau, 2010 Census
NOTE: The US Census defines urban areas as consisting of urbanized areas (An area consisting of a densely developed territory that contains a minimum residential population of at least 50,000 people) and urban clusters (A densely settled territory that has at least 2,500 people but fewer than 50,000).

Figure 2 shows the age distribution among the population in Greater Kansas City. Approximately 1 in 4 residents is under the age of 18 and 6 in 10 are adults between the ages of 18 and 64.

Figure 2: Age Distribution by State, County, and City, 2010-2012



DATA SOURCE: US Census Bureau, 2010-2012 American Community Survey 3-year estimate

U.S. Census data show that the majority of Greater Kansas City residents identifies as White, non-Hispanic. Wyandotte County reported the most racial/ethnic diversity with 56.9% of the population identifying as non-White (Table 3). In Wyandotte County, about one-quarter of the population identifies themselves as Black, non-Hispanic and an additional one-quarter identifies themselves as Hispanic. Kansas City, MO is also a diverse city, with nearly 3 in 10 residents identifying themselves as Black, non-Hispanic and 1 in 10 identifying as Hispanic.

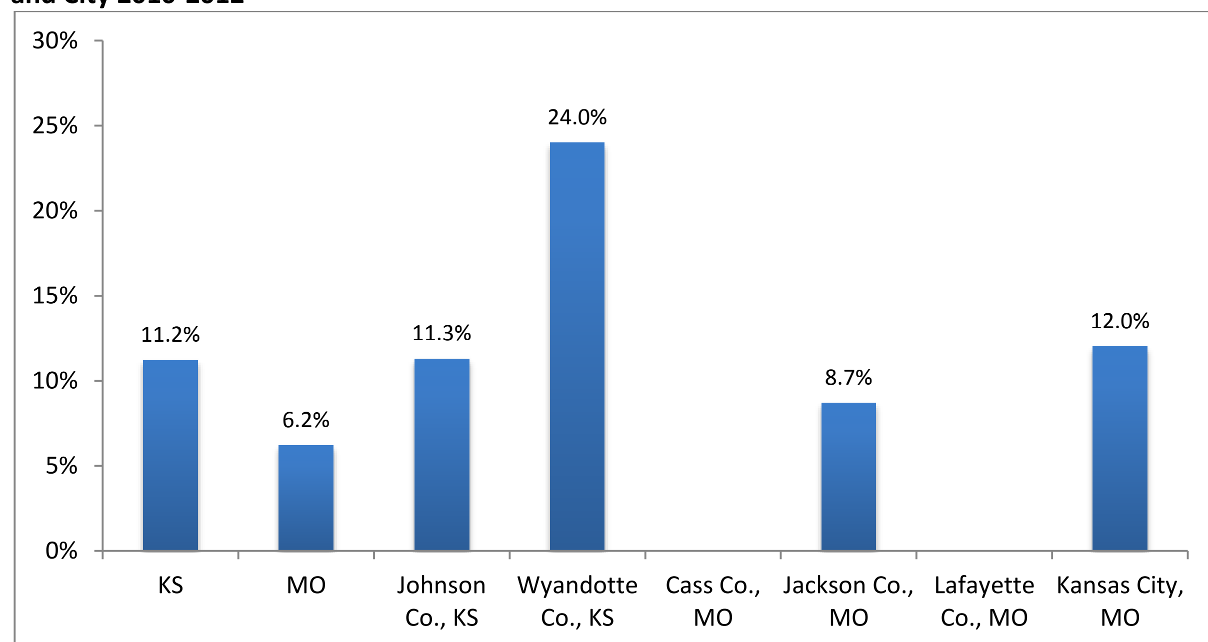
Table 3: Racial/Ethnic Distribution by State, County, and City, 2010-2012

	KS	MO	Johnson Co., KS	Wyandotte Co., KS	Cass Co., MO	Jackson Co., MO	Lafayette Co., MO*	Kansas City, MO
White Non-Hispanic	77.8%	80.7%	81.5%	43.1%	89.3%	63.0%	92.6%	54.9%
Black Non-Hispanic	5.6%	11.4%	4.2%	25.0%	3.6%	23.7%	2.3%	29.1%
Hispanic/Latino	10.8%	3.6%	7.3%	26.7%	4.0%	8.4%	2.4%	10.0%
Asian	2.4%	1.6%	0.2%	2.7%	0.6%	1.7%	0.4%	2.6%
Other	3.4%	2.7%	6.8%	2.5%	2.5%	3.2%	1.9%	3.4%

DATA SOURCE: US Census Bureau, 2010-2012 American Community Survey 3-year estimate
NOTE: White, Black, Asian, and Other race designations are all non-Hispanic; Hispanic ethnicity designation includes all races

The majority of Greater Kansas City residents speak English as their primary language at home (Figure 3). Wyandotte County, KS (24.0%) reported the highest percent of residents who speak a language other than English at home, which was double that of Johnson County, KS and the state overall. As will be discussed further, focus group participants mentioned language and culture as barriers to accessing oral health services for non-English speaking individuals.

Figure 3: Percent of Population that Speaks a Language other than English at Home by State, County, and City 2010-2012



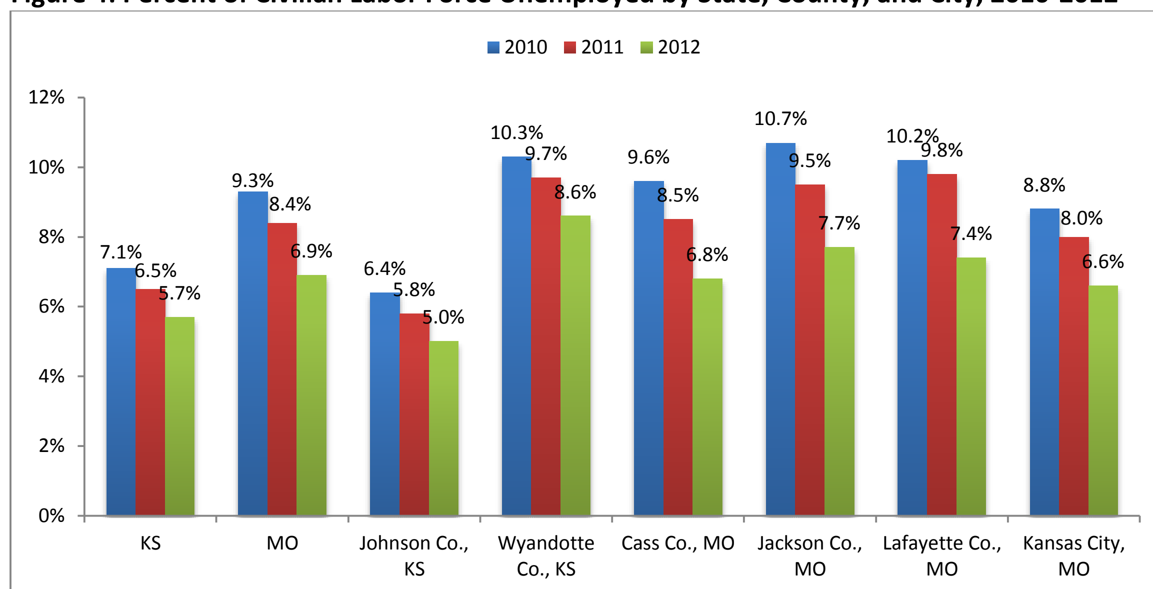
DATA SOURCE: US Census Bureau, 2010-2012 American Community Survey 3-year estimate
NOTE: No data are available for Cass and Lafayette Counties due to small sample sizes.

Unemployment, Income, and Poverty

The region as a whole has been hit hard by the economic downturn. Unemployment, limited economic opportunities, and the hardship of being low-income were factors that some focus group participants indicated exacerbated the oral health problems in the area.

Unemployment has decreased in the past three years, although rates vary across the region (Figure 4). Unemployment was highest in Wyandotte County, KS and Jackson County, MO, where respectively 8.6% and 7.7% of the civilian labor force reported being unemployed in 2012. In Kansas City, MO, 6.6% of residents were considered unemployed in 2012. In focus groups, which were largely comprised of lower income individuals, the need to work multiple jobs to make ends meet and the high cost of health and dental care were dominant themes. As one focus group member shared, *"with the economy and everything downsizing, we are starting over. I'm 60 and I am starting over. There are a lot of people working two or three part-time jobs because the companies don't want to pay for insurance."*

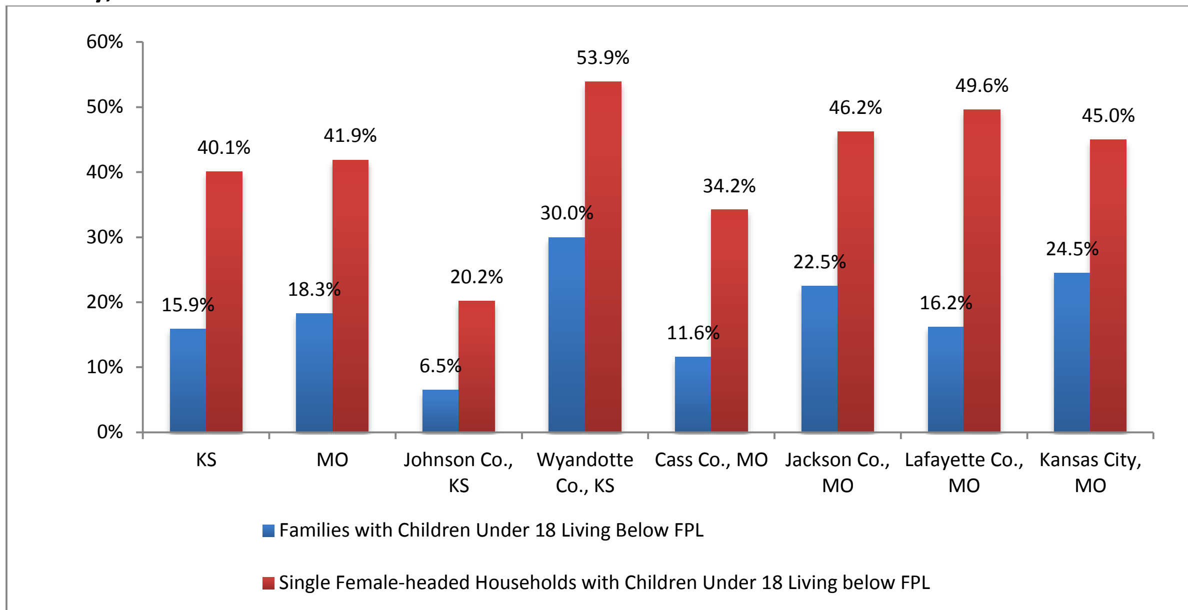
Figure 4: Percent of Civilian Labor Force Unemployed by State, County, and City, 2010-2012



DATA SOURCE: US Bureau of Labor Statistics, Local Area Unemployment 2010-2012

Focus group participants discussed that in addition to limited employment opportunities, financial concerns overall permeated their daily lives. Being able to pay rent and utility bills was a hardship that was challenging month to month. Several focus group participants mentioned that if a large medical bill came in one month, they then needed to make a decision on what other bill they would delay paying. Poverty was a constant concern for many focus group participants. Quantitative data show the rates of family poverty in the region. According to Figure 5, 30.0% of Wyandotte County, KS and 24.5% of Kansas City, MO families with children under 18 are below the federal poverty level. Rates increase dramatically among single female-headed households.

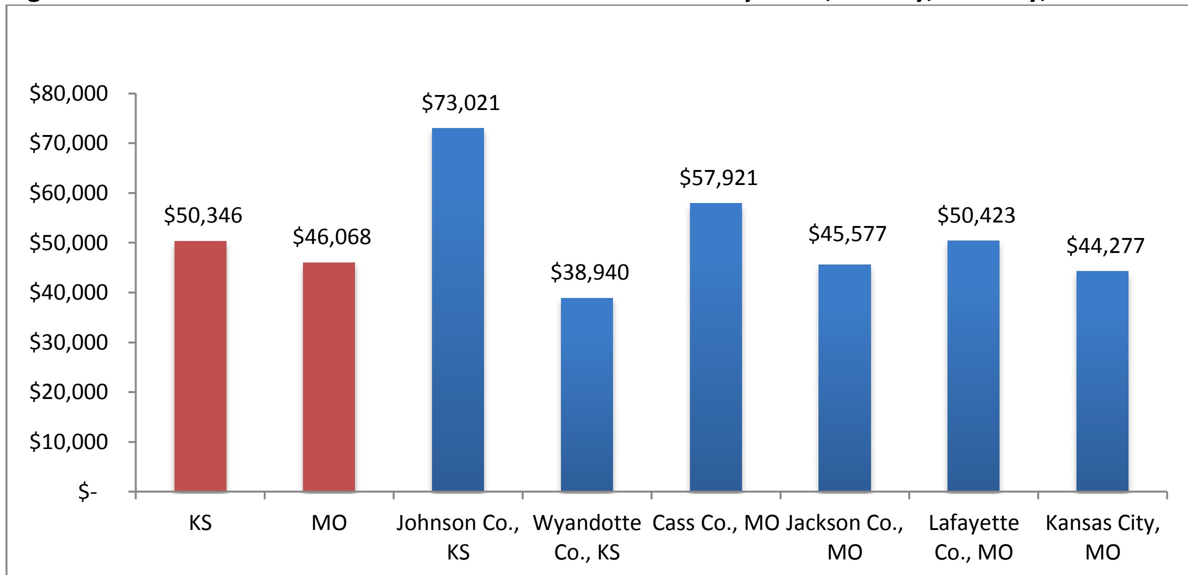
Figure 5: Percent of Families and Households below Poverty in the Past 12 Months by State, County, and City, 2010-2012



DATA SOURCE: US Census Bureau, 2010-2012 American Community Survey 3 year estimate

Even with unemployment and financial hardship being a concern among many residents, median income in the Greater Kansas City area is similar to Kansas and Missouri statewide (Figure 6). One notable exception is Johnson County, KS, which had the highest median household income among the Greater Kansas City area at $73,021,substantially higher than that reported statewide in Kansas ($50,346).

Figure 6: Median Household Income in the Past 12 Months by State, County, and City, 2010-2012



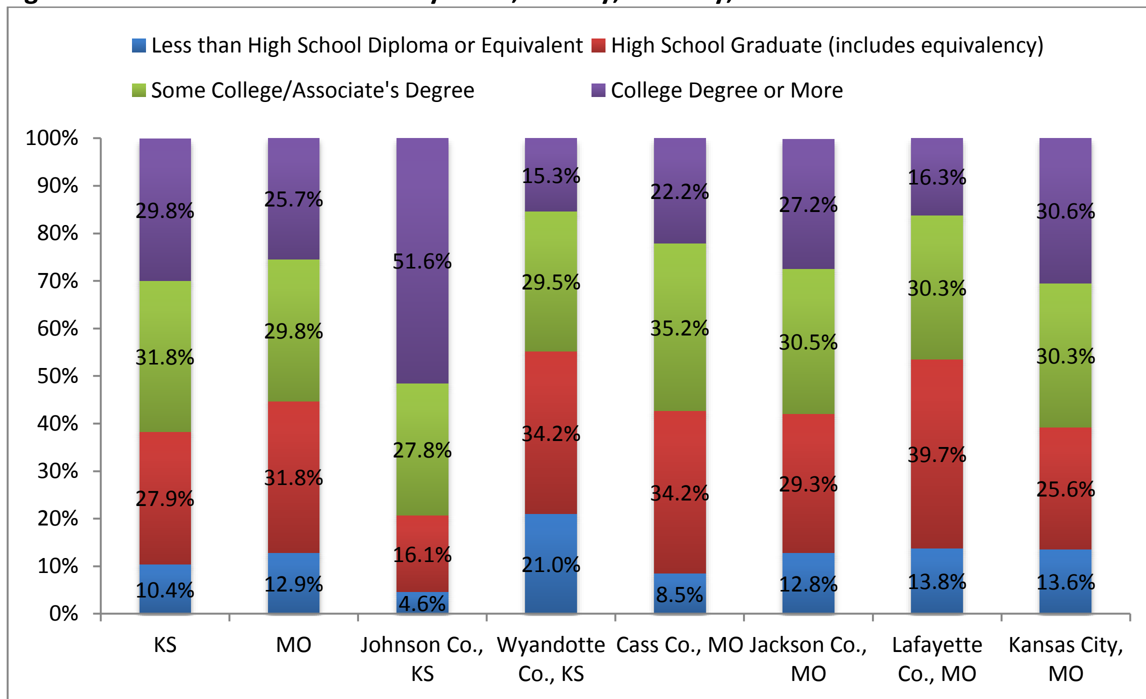
DATA SOURCE: US Census Bureau, 2010-2012 American Community Survey 3-year estimate
NOTE: Income is in 2012 inflation-adjusted dollars

Educational Attainment

Levels of educational attainment vary across the Greater Kansas City area and have important implications for health literacy.

Education is an important social determinant of health and also is significantly associated with health literacy. According to U.S. Census data (Figure 7), Johnson County, KS had the largest proportion of residents with a bachelor's degree or more (51.6%), followed by Kansas City, MO (30.6%). In contrast, 21% of Wyandotte County, KS residents had not received a high school diploma, double the percentage for Kansas overall (10.4%).

Figure 7: Educational Attainment by State, County, and City, 2010-2012



DATA SOURCE: US Census Bureau, 2010-2012 American Community Survey 3-year estimate

ORAL HEALTH: THE MAGNITUDE AND SEVERITY OF THE PROBLEM

The following section provides an overview of the current oral health status of the region, highlights at-risk populations, and discusses how residents perceive oral health.

Oral Health Status

"Dental caries is really alive and doing well." –Oral health care provider interviewee

"Many children need a lot of tooth work." –Health care provider interviewee

"I'm so sick of this pain. I can't wait to get them [my teeth] all pulled so I don't have to deal with this pain and teeth crumbling." –Community resident focus group participant

When discussing their concerns about oral health, focus group and interview participants identified the prevalence of dental caries in children, untreated dental decay in adults, and dental-related pain among many of the issues with which medically underserved populations are dealing. Poor oral health was discussed as affecting academic success for youth and job success for adults.

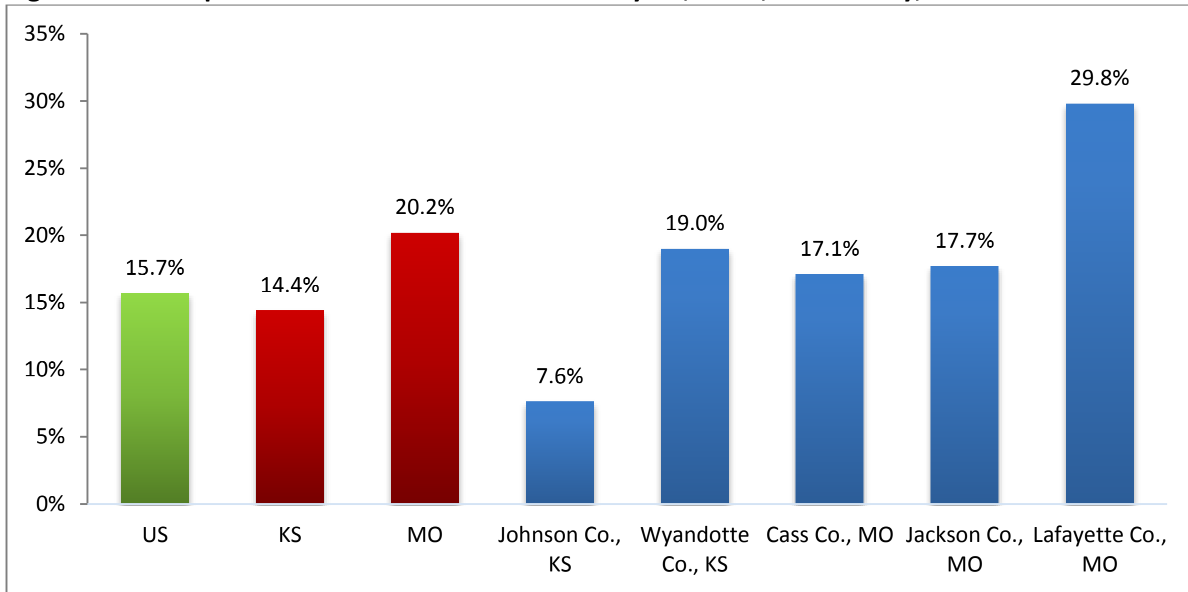
Focus group and interview participants were asked about the biggest oral health issues they see among the population, and many shared concerns about the prevalence of extensive decay, especially in low-income children. One interviewee reported, *"for a lot of students, it's not just one or two teeth. It's a mouthful."* Another provider shared a similar observation stating, *"[kids] are generally coming for routine care, but they find problems. Most kids need some restorative work."* Providers expressed concern that increasingly younger children require extensive dental work, a phenomena they attributed to diet, including "baby bottle rot,"[ii] and lack of preventive care. Assessment participants almost universally mentioned dental caries among both children and adults and periodontal disease among adults as concerns. Additionally, a few respondents mentioned broken and crooked teeth as oral health problems.

Timely and geographically-specific oral health data can be difficult to obtain, and thus it is a challenge to determine the oral health status of a population. Limited quantitative data confirm that adults in Greater Kansas City have oral health challenges. Figure 8 shows self-reported dental health status among adults, as measured by the Behavioral Risk Factor Surveillance Survey (BRFSS) question of whether adults have had six or more permanent teeth extracted due to tooth decay, gum disease, or infection. Compared to the statewide rate in Kansas (14.4%), more adults in Wyandotte County, KS reported poor dental health (19.0%). The biggest difference in poor oral health status is seen in Lafayette County, MO, where 29.8% of adults report poor dental health status, compared to 20.2% for Missouri overall.

Newer BRFSS surveys from 2012 available for Jackson and Wyandotte Counties ask respondents if they have had any permanent teeth extracted. In both of these areas, approximately half (47%) of respondents from these counties noted that they have had at least one permanent tooth extracted.

[ii] Tooth decay in infants and young children is often referred to as "baby bottle rot" or baby bottle tooth decay, which happens as a result of sweetened liquids clinging to an infant's teeth while drinking from a bottle.

Figure 8: Self-Reported Poor Dental Health Status by US, State, and County, 2006-2010



DATA SOURCE: Behavioral Risk Factor Surveillance Survey, 2006-2010
Note: Poor dental status is measured by having had six or more permanent teeth extracted due to tooth decay, gum disease, or infection.

Adult focus group members shared their personal experiences with poor oral health which included unattended cavities, tooth loss, and pain. Respondents expressed concern about the prevalence of severe untreated decay among adults as well as periodontal disease, which they noted can exacerbate other health concerns. Focus group members also reported that poor oral health negatively affects job prospects. As one focus group member shared, *"some people are not getting very good jobs because of their appearance; they are embarrassed to talk or smile."* Both provider and parent respondents drew a connection between poor oral health and academic success. As one provider interviewee stated, *"with tooth aches, kids don't go to school and then they are further behind."*

Several respondents noted that the elderly and those with developmental disabilities face particular challenges with respect to oral health, especially loss of teeth. As one provider stated about individuals at nursing homes, *"[I] heard folks say they haven't had teeth for so long they can't remember what teeth are like."* Additionally, children with special needs were mentioned as a higher risk population. Several parent focus group members shared their challenges finding dental providers willing and able to provide care to special needs children.

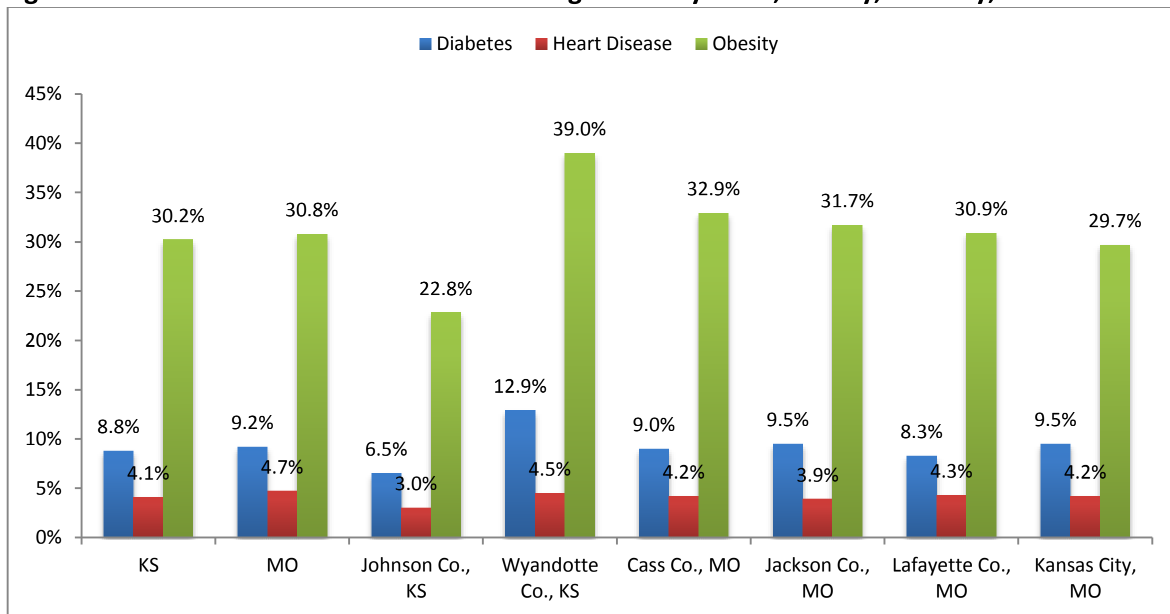
Assessment participants were asked what they thought contributed to poor oral health status among themselves and their families. Among both patients and providers, the most commonly perceived reason for the prevalence of tooth decay and oral disease was lack of access to oral health care. As one respondent described, *"it starts out as a cavity, and because no care is received, it gets worse."* One provider reported that a high proportion of children screened at schools needed to see a dentist because they have not had cleanings. Finally, many respondents mentioned poor diet and sugary drinks as factors contributing to poor oral health. Focus group members from low-income communities reported that healthier foods were hard to find in their neighborhoods: fresh fruits and vegetables were either not available in local stores or too expensive.

Oral health conditions, such as dental caries and periodontal disease, are serious health concerns on their own. Further, poor oral health has been linked to chronic diseases, including cardiovascular

disease, diabetes, and other chronic conditions. Thus, populations with poor oral health status are at increased risk for chronic diseases. Provider interviewees stressed the connection between oral health and overall health, reinforcing that poor oral health can have a negative effect on heart issues and diabetes, and is linked to poorer birth outcomes. Focus group members also recognized the connection between oral health and other diseases. As one reported, *"my grandpa's friend died because of a toothache that turned into an infection."* Someone in the same focus group stated, to the agreement of the other group members, *"your mouth is probably one of the most important things you need to keep clean."*

When asked about their biggest health concerns for their community, residents in focus groups noted chronic diseases, including diabetes and obesity. Figure 9 shows the prevalence of several chronic diseases among adults. Rates of diabetes in Greater Kansas City are similar to those of Kansas and Missouri at approximately 9% of the population. Wyandotte County, KS has a somewhat higher rate with 12.9% of the population having diabetes, while Johnson County, KS has a somewhat lower rate with 6.5% of the population having diabetes. Levels of obesity are consistent across all the geographies at approximately 30%, with the exception of Wyandotte County, KS at nearly 40%. It should be noted that these rates of chronic disease are similarly pervasive as the rates of poor oral health status and teeth extractions seen in Figure 8 and noted above. Additionally, patients with diabetes and heart disease are more at-risk for the negative impact of periodontal disease and other oral health problems.

Figure 9: Prevalence of Chronic Diseases among Adults by State, County, and City, 2006-2010



DATA SOURCE: Centers for Disease Control and Prevention Diabetes Atlas, 2010; Behavioral Risk Factor Surveillance Survey, 2006-2010

NOTE: Kansas City data is for the Kansas City, MO-KS Metropolitan Statistical Area

Perceptions of Oral Health as a Priority

"If I have no pain, I'll never go to the dentist." –Community resident focus group participant

"Preventative health care is not an option or interest of the general population." –Health care provider interviewee

"Oral health is always an afterthought for everyone." –Oral health advocate interviewee

"Even if there is a well-educated parent, they have so much else going on that oral health gets pushed to the back burner." –Insurer interviewee

"Children's dental health is a priority to parents, but parents' own dental health is not a priority." –Oral health care provider interviewee

Low-income residents face many challenges in meeting basic needs, and consequently oral health is often not a top priority. While it is challenging for adults to seek oral health care, many parents noted that they try to overcome challenges to ensure their children's oral health needs are met.

According to some focus group and interview participants, lack of appreciation for the importance of oral health contributes to poor oral health. As one interviewee put it, *"[some people] have gone without care for so long, they don't understand the value of it anymore."* A focus group member similarly reported: *"dental is at the bottom of what people think of their needs."* Some focus group members and interviewees reported that for many residents, oral health is a low priority and thus, they do not attend to good oral hygiene or they delay care.

However, not all respondents agreed that adults, particularly parents, were indifferent to oral health care. Several reported that while parents may not take care of their own teeth, they often do much to make sure their children get oral health care. Assessment focus group participants repeatedly expressed concern about their children's oral health even though they themselves faced difficulty taking care of their own oral health. As one focus group member explained, *"many people don't even think of dental care for themselves; only for their kids."* For some respondents, the fact that oral health is not a priority relates less to lack of awareness and more to the reality of people's lives. As one provider shared, *"many people have put oral health at the bottom of their to-do list, because everything else is just so important. By the time we see them, they have 15 cavities and need a crown and root canal."* Emphasizing this point, an interviewee stated that, among low-income people, *"the priority is food, not a toothbrush."* Community residents confirmed this saying, *"oral health is not a priority because it can't be. People don't have insurance, so they can't get the preventive or treatment services needed."* This theme is discussed extensively in the section on barriers to care.

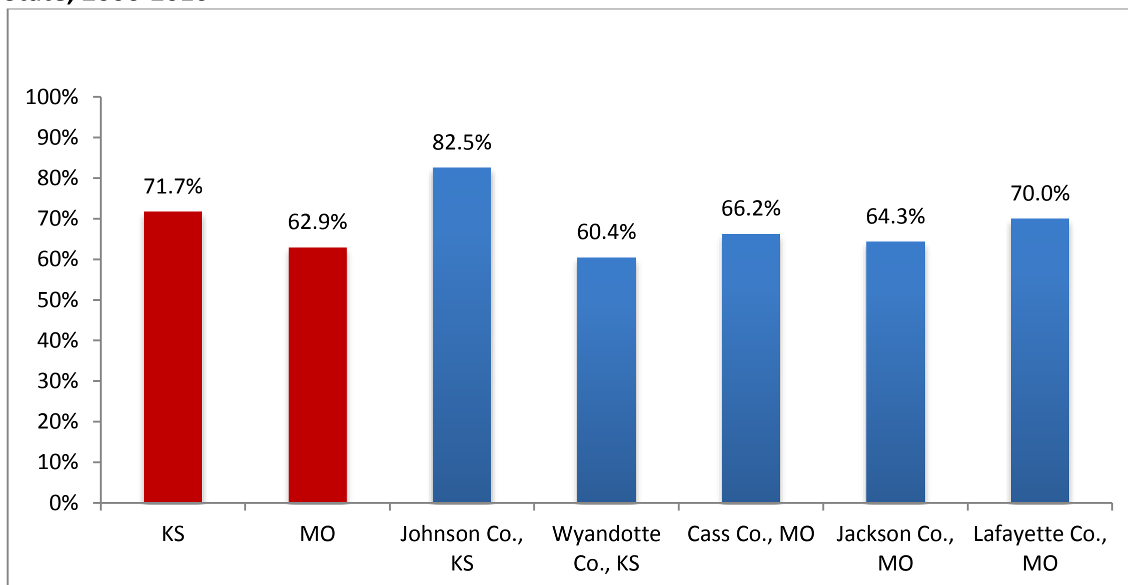
In addition to oral health not seen as a priority among community members, several interviewees in the oral health field commented that oral health does not appear to be a priority in larger public health discussions. Several interviewees noted that public health practitioners understand the burden of obesity and heart disease on a community, but that the impact of poor oral health is not as top-of-mind in public health conversations. The challenge is that oral health is not always perceived as an integral part of overall public health. Leaders in the oral health field were eager for oral health to be a bigger part of the larger public health dialogue in Greater Kansas City.

Utilization of Oral Health Services

Except for Wyandotte County, KS, reported adult rates in each county of visiting a dentist in the past year are higher than statewide rates, yet patients report important challenges to seeking care.

Focus group and interview participants noted that it was difficult for low-income patients to receive regular oral health care, but that patients with private insurance have many dental providers from which to choose. Surveillance data indicate that, other than for Johnson County, KS, 60-70% of adults in the counties in the area (Wyandotte, KS, Cass, MO, Jackson, MO, and Lafayette, MO) reported visiting a dentist or dental clinic in the past year (Figure 10). The lowest rate was in Wyandotte County, with 60.4% of adults reporting this. Johnson County had the highest percentage of adults reporting visiting a dentist or dental clinic in the past year at 82.5%. In 2010, 69.6% of adults nationwide reported that they had visited a dentist or dental clinic within the past year.

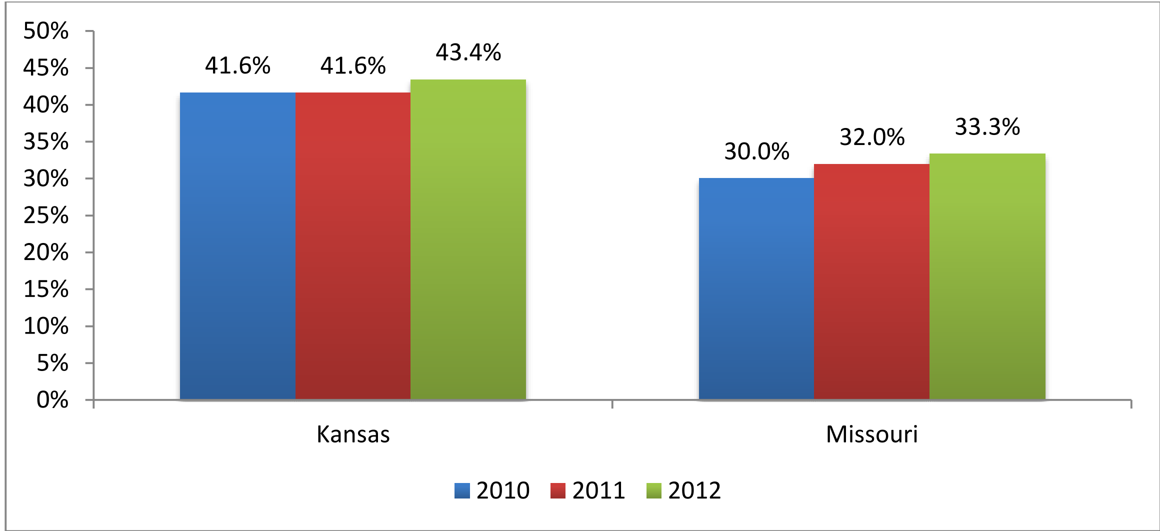
Figure 10: Adults Who Have Visited a Dentist or Dental Clinic within the Past Year by County and State, 2006-2010



DATA SOURCE: Behavioral Risk Factor Surveillance Survey, 2006-2010

Although children in Kansas and Missouri are eligible for comprehensive oral health care services through the states' Early and Periodic Screening, Diagnostic, and Treatment Medicaid program, fewer than half of eligible Medicaid children received any dental or oral health care services in 2012, 43.4% in Kansas and 33.3% in Missouri (Figure 11). County level data were not available.

Figure 11: Eligible Medicaid Children Receiving Any Dental or Oral Health Care Services by State, 2011-2012



DATA SOURCE: Medicaid Early and Periodic Screening, Diagnostic, and Treatment, 2011-2012

CURRENT ORAL HEALTH SYSTEM LANDSCAPE IN GREATER KANSAS CITY

The following section details the existing oral health landscape in Greater Kansas City, including the federal and state policies that provide the context within which the Greater Kansas City regional oral health system operates, as well as perceptions of the system.

The Federal and State Policy Environment

A challenge of having a regional oral health system is that federal and state laws define many of the parameters of how it functions. Greater Kansas City has the added issue of straddling two states with differing insurance and workforce laws, among other challenges.

Insurance

Missouri

Missouri HealthNet, Missouri's Medicaid program, eliminated comprehensive dental benefits for adults in 2005. Pregnant women, the blind, and nursing home residents continue to be covered with full benefits, and a variety of waivers provide comparable coverage to developmentally disabled adults. Adults who do not fall into one of the aforementioned categories receive only emergency services related to trauma to the mouth, jaw, or teeth as a result of injury or pre-existing medical condition that would otherwise be adversely affected. Dental benefits are offered to Missouri Medicaid-eligible beneficiaries through a traditional fee-for-service model, as well as in 53 counties and the city of St. Louis, through managed care plans. Children in Missouri are provided comprehensive oral health care services through the Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) program.

Kansas

Currently, the Kansas Medicaid program, KanCare, only covers emergency dental services for adults. Those emergency services include extractions in the event of acute or chronic infection or in cases of injury so severe the teeth cannot be salvaged. Kansas does offer dental coverage to adults who are eligible for Medicaid under home and community-based waivers due to physical and developmental disabilities, head injuries, and for frail elderly residents. Children are given comprehensive care through the EPSDT program.

Medicaid reimbursement rates vary by state. According to the Pew Charitable Trust Children's Dental Health Factsheets, in 2010 only 46.7% of Missouri dentists' median retail fees were reimbursed by Medicaid, compared to 55.0% in Kansas. Nationally, 60.5% of dentists' median retail fees are reimbursed by Medicaid.[1]

Workforce

Missouri

Dentists: In order to be licensed to practice dentistry in the state of Missouri, an individual must be a graduate of and hold a Doctor of Dental Surgery (DDS) degree or a Doctor of Dental Medicine (DMD) degree from an accredited dental school (which minimally requires four academic years), have passed the National Board Examination, have passed a state or regional entry level competency examination, and have passed a written examination given by the board on the Missouri dental laws and rules with a grade of at least 80%.[2]

Dental Hygienists: Dental hygiene is also a licensed practice in Missouri. The Missouri Dental Board's General Rules specify that a hygienist may be employed by any person or entity so long as the hygienist

is working under the supervision of a dentist and works within a defined scope of practice. Most of what a hygienist is trained to do is done under general supervision, and that scope includes:

- Scaling and polishing teeth (prophylaxis)
- Applying dental sealants
- Periodontal root planing, debridement, and curettage
- Nonsurgical periodontal procedures
- All procedures delegable to a dental assistant or certified dental assistant (except expanded functions such as carving amalgam, which require direct supervision)

Additionally, a hygienist may administer nitrous oxide analgesia and local anesthesia under indirect supervision. A dental hygienist who has been in practice at least three years and who is practicing in a public health setting may provide the following services: fluoride treatments, teeth cleaning and sealants to children who are eligible for Medicaid, without the supervision of a dentist. Public health settings are defined as those settings where services are sponsored by a governmental entity including the Department of Health and Senior Services (DHSS), county health departments, city health departments, and federally qualified health centers (FQHCs). Typically, a hygienist is contracted or employed by that entity, which receives the reimbursement for services. [3]

Dental Assistants and Expanded Function Dental Assistants: A dental assistant in the state of Missouri may perform basic supportive dental procedures specified by the state dental practice act under the direct supervision of a licensed dentist. There are no education or training requirements for this level of dental assisting. Training for dental assistants may be provided in the dental office by the employing dentist (chair-side) or in accredited dental assisting programs. Certified dental assistants (CDAs) who have graduated from accredited dental assisting programs in Missouri and completed a skills mastery examination approved by the Dental Board may perform expanded functions including:

- Carving amalgam
- Placing and condensing amalgam for Class I, V and VI restorations
- Placing composite for Class I, V and VI restorations
- Monitoring nitrous oxide/oxygen analgesia
- Polishing the coronal surfaces of teeth
- Making impressions for the fabrication of removable prosthesis[4]

Utilization of these expanded function dental assistants (EFDAs) is not universal across the state. According to the Missouri Dental Board, EFDAs currently only constitute approximately 25% to 30% of the state’s dental assistants.[5]

As of 2010, Missouri did not authorize new primary care dental providers.

Kansas

Dentists: To be licensed to practice dentistry in the state of Kansas, an individual must be at least 21 years of age, be a graduate of an accredited dental school or college, have passed the National Board and Clinical Board Examinations, and have passed the Kansas Jurisprudence Exam.[6]

Dental Hygienists and ECP Hygienists: Dental hygienists over the age of 18 are licensed in the state of Kansas and have the same requirements as dentists, with the addition of procuring local anesthesia and/or nitrous oxide certificates, if applicable. Licensed dental hygienists can also obtain extended care permits to become Extended Care Permit (ECP) hygienists, for which there are three levels—I, II, and III—which are defined by number of hours of performed of dental hygiene care, levels of training, having liability insurance, and being sponsored by a licensed dentist in the state.

Registered Dental Practitioners (currently under consideration by KS legislature): Registered dental practitioners (RDPs), a role currently being considered, would be dental hygienists who obtain advanced education and training, pass a comprehensive clinical exam, and work under a supervising dentist. They would provide routine and preventive care, such as cleanings, fillings, and some extractions, allowing dentists to focus on the more complicated procedures they are trained to do. RDPs would work in dental offices, safety-net clinics, and community settings, such as nursing homes and schools. RDPs would always work under the direction of a dentist.[7]

Dental Assistants: A dental assistant in the state of Kansas may perform basic supportive dental procedures specified by the state dental practice act under the direct supervision of a licensed dentist. There are no education or training requirements for this level of dental assisting. Expanded duty dental assistants also exist in Kansas and, with training and supervision, are able to perform coronal polishing and scaling, as well as assisting in the administration and monitoring of oxygen and/or nitrous oxide.[8] It should be noted that the scope of practice for dental assistants in Kansas is more limited than in Missouri.

Data from 2010 indicated that Kansas also did not authorize new primary care dental providers.

Nationally, the range of dental professions varies, including public health dental hygienists, extended care permit hygienists (licensed in Kansas but not Missouri), and dental therapists. As of 2012, 29 states permitted expanded function dental assistants, as do Kansas and Missouri. Minnesota, Alaska, and over 50 other countries outside the U.S. have licensed dental therapists who provide care under the general supervision of dentists.

Implications of the Affordable Care Act

It is also critical to understand the national context of the Affordable Care Act (ACA) and its implications for oral health in Greater Kansas City. The ACA has potential positive and negative implications for oral health, which can be enhanced or exacerbated by state governments. Under the ACA, pediatric dental services are an "essential health benefit" that must be offered by all plans in the individual and small-group markets. The American Dental Association's Health Policy Resources Center reports that approximately 8.7 million children are expected to gain some form of dental benefits by 2018, an increase of 15 percent relative to 2010, because of the ACA. This is expected to decrease the number of children who have no dental benefits by 55 percent.[9]

On the other hand, the ACA is expected to have only a modest impact on adult dental benefit coverage. Although 17.7 million adults are expected to gain some level of dental benefits because of the ACA, almost all of this increase will be through Medicaid, which—depending on an individual's state of residence—may offer emergency-only dental services, limited dental benefits, extensive dental benefits, or no dental benefits whatsoever. Only 4.5 million additional adults are expected to gain extensive dental benefits through Medicaid. An additional 800,000 will gain private dental benefits through health insurance exchanges. Combined, this will reduce the number of adults without dental benefits by only about 5 percent relative to 2010.[10]

While the ACA might bring an influx of new patients, predominantly children, to the system, there will likely be negative impacts on oral health providers as the ACA does not address the challenges of Medicaid administrative burden or low reimbursement rates. These systems barriers will be discussed further in the section on access to care.

Several interviewees brought up the ACA in discussions and noted that its implications for oral health are unknown. They were optimistic that ACA-related funding may help bolster the role of federally

qualified health centers as well as promote a medical home for patients, which they hoped might translate into a dental home and better patient navigation. As one interviewee noted, *"getting the word out and navigating the system is a challenge. Hopefully, the ACA will help with that. It will help direct people where they can get services."* However, it was not clear to many interviewees how the specifics of the ACA would alter the oral health environment in Greater Kansas City, especially since it does not boost dental coverage for adults. Similarly, as discussed later, 24.4% of survey respondents reported that they "did not know" whether the future implementation of the ACA will help better meet the dental health needs of low-income patients.

Greater Kansas City Oral Health System and Services

Interview and focus group participants generally agreed that the Greater Kansas City region has a sufficient number of dental providers overall. However, most also concurred that there are not enough providers who accept Medicaid or treat patients within the safety net system. There were also concerns regarding the number of dental specialists in the area.

There are numerous oral health providers in the region. According to the Health Resources and Services Administration (HRSA), the ratios of dentists to the population for all counties and both states are below the level designated as a dental health provider shortage (which is one provider to every 5,000 residents). As seen in Table 4, the population to dental provider ratios range in the region. On the low end (indicating more providers available), Johnson County, KS has 1,340 residents to every 1 dentist and 494 residents to every 1 dental hygienist, whereas the high end (fewer providers available) is Cass County, MO with 3,599 residents to every 1 dentist and Lafayette County, MO with 3,324 residents to every 1 dental hygienist.

Table 4: Provider to Population Ratios by State and County, 2011-2012

	Primary Care	Dentists	Dental Hygienist
Kansas	1:1,411	1:2,066	1:1,213
Missouri	1:1,495	1:2,168	1:1,633
Johnson Co., KS	1:992	1:1,340	1:494
Wyandotte Co., KS	1:1,610	1:2,792	1:1,979
Cass Co., MO	1:4,156	1:3,599	1:2,000
Jackson Co., MO	1:1,380	1:1,508	1:2,355
Lafayette Co., MO	1:3,341	1:3,413	1:3,324

DATA SOURCE: Primary Care and Dentist Data from HRSA Area Resource File, 2011-2012, via County Health Rankings, 2013; Dental Hygienist Data from Kansas Dental Board (2012) and Missouri Division of Professional Registration (2012).
NOTE: Primary Care HPSAs are based on a physician to population ratio of 1:3,500 and Dental HPSAs are based on a dentist to population ratio of 1:5,000

While there are many oral health providers in the Greater Kansas City region, there are few who accept patients on Medicaid. Table 5 provides state-level data which indicates that only approximately 1 out of every 5 licensed dentists in both Kansas and Missouri is enrolled in Medicaid.

Table 5: Dentists and Medicaid Enrollment, 2009

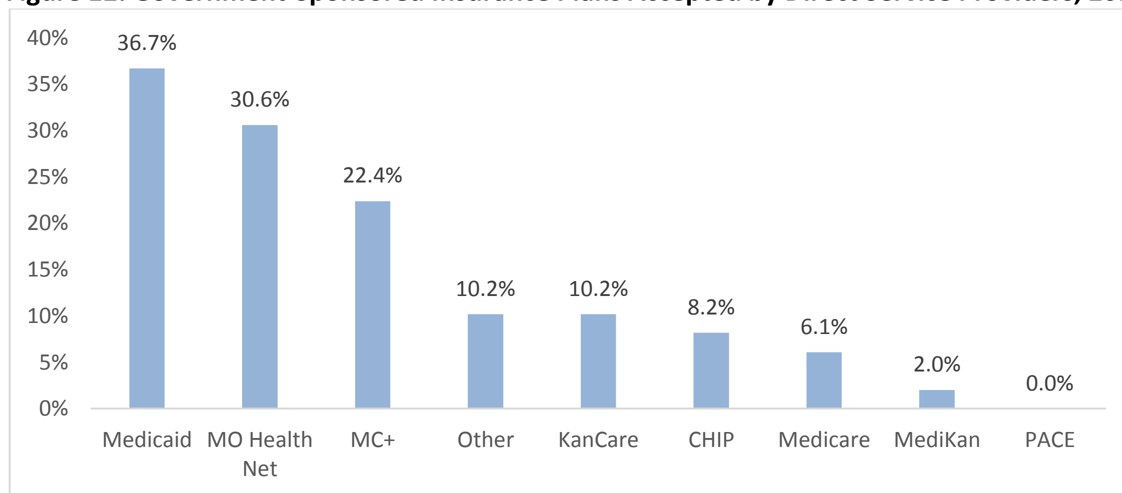
	Kansas	Missouri
Number of Licensed Dentists	2080	3043
% of Dentists with at Least One Medicaid Claim	19.8%	20.0%
% of Counties without an Enrolled Medicaid Dentist	20.0%	17.5%
% of Population in Counties without an Enrolled Medicaid Dentist	3.0%	6.2%

DATA SOURCE: Centers for Disease Control and Prevention National Center for Chronic Disease Prevention and Health Promotion Division of Oral Health State Oral Health Profiles, 2009

According to the Pew Charitable Trusts' research on expanding the dental workforce, in 2008 fewer than half of the dentists in 25 states treated any Medicaid patients.[11]

In this study's assessment, the survey asked direct service providers (n=49) to note any government-sponsored insurance plans that they accept. A total of 25, or more than half, of the provider survey respondents indicated that they accept at least one government-sponsored insurance plan. Medicaid, MO HealthNet, and MC+ were the most common forms of government-sponsored insurance accepted by provider respondents.

Figure 12: Government-Sponsored Insurance Plans Accepted by Direct Service Providers, 2013 (n=49)



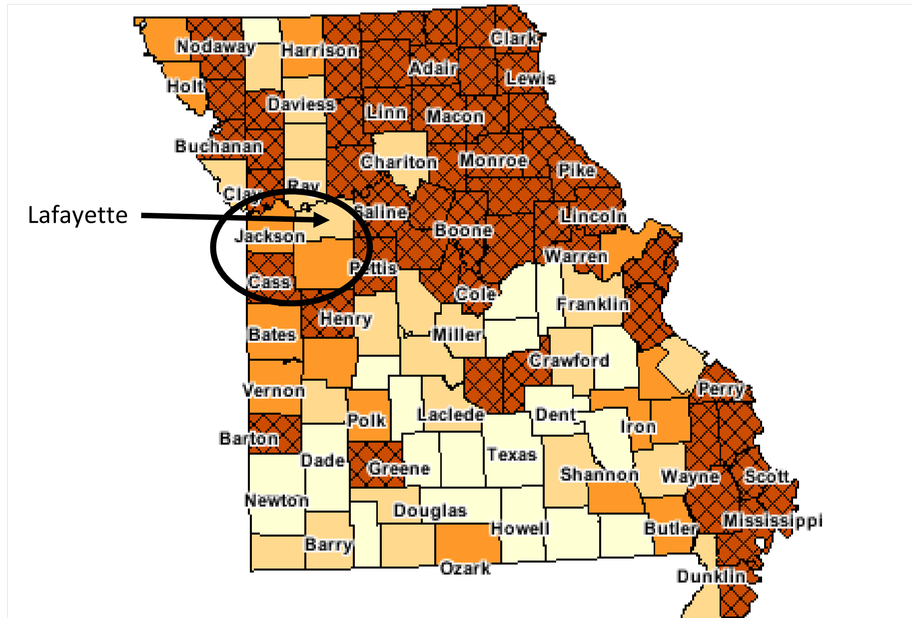
DATA SOURCE: Greater Kansas City Oral Health Assessment survey, 2013

In addition to examining the number, distribution, and Medicaid enrollment of providers in Greater Kansas City, a review of services and programs relating to oral health was conducted with the goal of developing an inventory of services and programs to assess the current landscape of activity in the Greater Kansas City area. Information for this scan was gathered through qualitative data collection from interview and focus group discussions as well as reviews of organizational websites and reports. As seen below, the environmental scan findings are divided into three subcategories. These include services and programs relating to: (1) prevention, (2) treatment, and (3) emergency/acute care.

Prevention

A critical component of preventing oral health issues is ensuring the appropriate amount of fluoride in a community's water supply (community water fluoridation). The Centers for Disease Control and Prevention has recognized community water fluoridation as one of the ten greatest public health achievements in the 20th century. According to the Water Fluoridation Reporting System, 83.7% of the population in Missouri and 59.1% of the population in Kansas is served by a fluoridated water system.

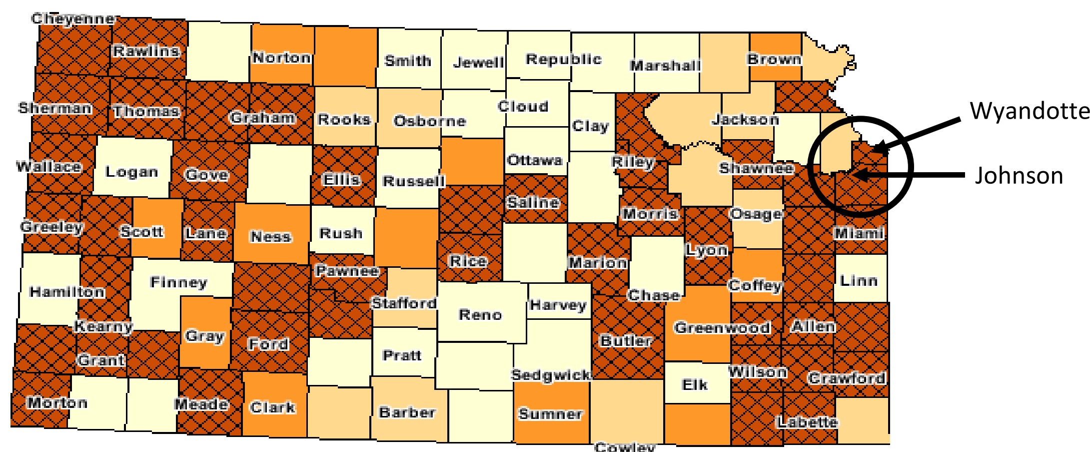
Figure 13: Water Fluoridation in Missouri, by County, 2014



DATA SOURCE: Centers for Disease Control and Prevention Water Fluoridation Reporting System, 2014

Lafayette County, MO has 25-50% of its population served by fluoridated water systems, while Jackson County, MO has 50-75%, and Cass County, MO has greater than 75% (Figure 13). Johnson and Wyandotte Counties in Kansas both have greater than 75% of the population served by fluoridated water systems (Figure 14). Yet, some communities such as Independence, MO—population 117,270—is not fluoridated at all.

Figure 14: Water Fluoridation in Kansas, by County, 2014



DATA SOURCE: Centers for Disease Control and Prevention Water Fluoridation Reporting System, 2014

In addition to fluoridated water, prevention services, such as oral health education, cleanings, fluoride varnish, and sealants are available for children and adults, through dental clinics, schools, mobile vans, and several additional venues. Below is a list of prevention programs and services that have been catalogued in Greater Kansas City.

- **Health Departments**: Cass, Jackson, and Lafayette Counties in Missouri, Johnson County and the Unified Government of Wyandotte County in Kansas as well as Kansas City, Kansas and Kansas City, Missouri all have local public health agencies as their health departments. In the area of prevention, these health departments provide health education materials that often include oral health topics. Some of the health departments are involved in school-based services, as discussed in that section.
- **Hospitals**: Although typically used for acute care through the emergency department, at least one hospital in Greater Kansas City is involved in oral health prevention. Truman Medical Center has a dental program at its Lakewood location that provides a wide variety of oral health services, including education, assessment, exams, cleanings, and referrals.
- **Dental and Hygiene Schools:** UMKC School of Dentistry provides oral hygiene services, which focus on maintaining healthy teeth and gums by removing plaque and tartar above and below the gum line. Other services include fluoride treatments, sealants, teeth whitening, oral hygiene instructions, diet counseling, and tobacco cessation assistance. Johnson County Community College has a dental hygiene clinic, which provides preventive services, including blood pressure screening, oral exams, x-rays, teeth scaling and polishing, fluoride treatment, nutritional counseling, oral hygiene instruction, and sealants. Students, faculty, staff, community members, and children are able to receive services.
- **School-Based Dental Services**: Kansas City University of Medicine and Biosciences conducts the Score 1 for Health program in Kansas City schools. Score 1 for Health is a preventive health program for elementary-age children. The program provides dental screenings that include education on oral hygiene. Additionally, Swope Health has a school screening program allows dentists and hygienists to go to public schools throughout the Greater Kansas City area to provide dental screenings. Lafayette County Health Department provides free on-site oral health screenings, fluoride varnish applications, oral health education and care coordination to low-income and medically underserved children in Lafayette County, MO, school districts. StandUp Blue Springs provides preventative, restorative and emergency oral health services to 265 low-income children in the Blue Springs School District, as well as placing them in a dental home. Additionally, the state Kansas Department of Health and Environment has a school sealant program with two sites in Johnson County.
- **Head Start**: Kansas Head Start Association has developed a variety of resources under its Cavity Free Kids Campaign. Teeth for Tots is an oral health resource guide for Head Start children and their parents and a workshop for Head Start staff. Federal legislation requires a determination to be made by Head Start programs if a child has an ongoing source of continuous, accessible health care; i.e., a medical home. This includes dental health care. The American Academy of Pediatric Dentistry (AAPD) defines a dental home as a source of continuous, accessible, comprehensive, family-centered, coordinated, compassionate, and culturally effective oral health care delivered or directed by a dentist.
- **Dental Clinics:** Safety net dental clinics provide preventive and treatment services for children and adults. A comprehensive listing of safety net dental clinics can be found below in the section on treatment. Additional prevention services are provided through Operation Breakthrough, a program of St. Vincent's Family Service Center in Missouri that has dentists and hygienists who provide free cleanings and preventive care for Operation Breakthrough children and parents at its on-site dental clinic.
- **Mobile Vans**: Johnson County Community College makes use of Oral Health on Wheels, a 40-foot mobile dental clinic. On Oral Health on Wheels, students work with special needs populations to offer professional dental cleaning and other maintenance services. Truman Medical Center Lakewood has a mobile van that travels throughout Missouri providing free oral health services to children and adults who have developmental disabilities or intellectual disabilities as identified by the Department of Mental Health, Division of Developmental Disabilities, and individuals in extreme financial distress who have found it impossible to receive dental care anywhere else. These individuals must be referred by a local Elk's Lodge.

- **Coalitions and Foundations**: It is also important to note that local and regional oral health coalitions and foundations play an important role in prevention through funding, education, and advocacy efforts. These efforts are being supported by the Health Care Foundation of Greater Kansas City and the REACH HealthCare Foundation, while leaders in the field are collaborating through the Mid-America Regional Council Regional Health Care Initiative's Oral Health Access Committee.

Treatment

Adults and children seek oral health care treatment in many of the same clinical settings that provide preventive services. Appendix D provides a listing of the oral health facilities that are part of the safety net system, treating low-income patients, those on government-sponsored insurance, or who have no insurance. Outside of the safety net arena, corporate dental clinic chains, such as Small Smiles and Gentle Dental, also provide oral health treatment services to children and adults in Greater Kansas City. There are also numerous private dental providers who provide treatment services, but do not accept Medicaid patients.

Acute/Emergency Care

For acute care, patients heavily rely on the UMKC School of Dentistry and the emergency departments of local hospitals, particularly Truman Medical Center and St. Luke's. Hospitals are required to treat those patients who seek oral health care services—typically antibiotics for pain and infections—in the Emergency Department, though Medicaid does not generally reimburse hospitals appropriately, if at all, for these visits. In addition to hospital emergency departments, patients in Greater Kansas City reported seeking acute care services for oral health issues at Cabot Westside Medical and Dental Center, which provides acute care and is open for walk-ins on weekday mornings.

Provider and Patient Perceptions of the Oral Health System

While a variety of prevention services exist for children, they are viewed as underfunded and in high demand, while safety net provider dental services for adults were noted as not meeting the large demand. Additionally, the perception was that the oral health system lacks coordination and integration within the system as well as with the larger medical and primary care system.

Table 6 provides an overview of how assessment survey respondents (oral health providers, administrators, etc.) (n=86) perceived the oral health system in the area. Many of these perceptions were confirmed in interview discussions with leaders in the field. Survey respondents were asked how much they agreed or disagreed with a number of statements.

There were several consistent responses in the survey related to insurance coverage, with respondents generally agreeing that Medicaid or other government-sponsored insurance do not reimburse services at a rate that covers their cost, that it was not cost-effective for providers to accept patients with Medicaid, and that private insurance plans do reimburse dental health services at high enough rates to cover dentists' costs.

Additionally, survey respondents agreed that it was hard for low-income patients to navigate the dental health system in the community and that there were not enough or appropriately located dental services near low-income patients. However, respondents strongly agreed that it was important to provide services in community-based settings such as schools or homeless shelters.

Survey respondents were generally mixed on the role and training of alternative providers to oral health treatment. Also, respondents generally were not positive about the coordination and communication between primary care and oral health and were not optimistic that the ACA could help meet patients'

oral health needs. However, nearly 1 in 4 respondents also indicated that they did not know if they agreed or disagreed with the statement about how the ACA could address oral health needs.

Table 6: Survey Respondents' Perceptions of the Oral Health System, 2013 (n=86)

	Strongly Agree/ Agree	Strongly Disagree/ Disagree	Not sure/ Not Applicable
Medicaid and similar government-sponsored insurance plans reimburse dental health services at a rate that covers their costs	2.4%	91.5%	6.1%
It is not cost-effective for dental health providers to accept patients with Medicaid	72.5%	17.5%	10.0%
Private insurance plans reimburse dental health services at a rate that covers their costs	54.9%	34.1%	11.0%
It is important that dental health services are provided in community settings such as schools or homeless shelters	79.0%	14.8%	6.2%
The dental health care system in my community is hard for low-income patients to navigate	74.1%	18.5%	7.4%
Where dental health providers are located in my community is where the most need is	34.1%	57.3%	8.5%
We have enough dental health providers in my community to meet low-income patients' need	32.9%	59.8%	7.3%
There is good coordination and communication between the primary care and dental health care communities in my community	19.5%	70.7%	9.8%
The dental health care system in my community emphasizes prevention	57.3%	28.0%	14.6%
There is high quality dental health care in my community for its low-income populations	46.3%	45.1%	8.5%
There is too much liability of having mid-level providers or other health professionals expand the dental health care services they provide	37.8%	43.9%	18.3%
It is appropriate for alternate providers such as mid-level providers or other health professionals to expand the dental health care service they provide	46.9%	38.3%	14.8%
Mid-level providers are adequately trained to meet the needs of the population in my community	26.8%	43.9%	29.3%
I think the future implementation of the Affordable Care Act will help us better meet the dental health needs of low-income patients	22.0%	53.7%	24.4%

DATA SOURCE: Greater Kansas City Oral Health Assessment survey, 2013

Number and Distribution of Providers

> *"It's a pretty fragmented oral health infrastructure and that makes it hard to provide population access to oral health care."* –Oral health care provider interviewee
>
> *"Dentists in our community are very good about offering services to the underserved, but there is a limited number of dentists."* –Oral health care provider interviewee
>
> *"If you are a patient with private dental insurance, you are ok – there is enough supply."* –Oral health care provider interviewee

Focus group members and interviewees generally agreed that the Greater Kansas City area has enough oral health providers for those who have insurance or who can pay out-of-pocket. However, respondents overwhelmingly concurred that current demand for low-cost or free oral health services in

the region far exceeds the supply, even for children who are covered through Medicaid. As one provider shared, *"it seems like many kids on Medicaid are receiving the dental care they have coverage for."*

As shown earlier, survey respondents generally agreed that their community does not have enough dental health providers to meet low-income patients' needs. Additionally, survey respondents recognized that dental health providers are not located where the most need is.

Similarly, interviewees also discussed that the region lacks a sufficient number of oral health providers to meet the demand for services, particularly of uninsured and medically underserved population. They noted that most dentists do not accept Medicaid and many are increasingly taking on more lucrative work in cosmetic dentistry, thereby reducing the number of preventive and restorative services they provide. A provider shared his perspective on the constraint in supply by saying, "*safety net clinics do exist in many areas but don't have the resources to expand their supply to meet the needs in their community."* Respondents also shared that the existing dental workforce is aging. As one provider stated, *"[there is an]* a*ging dentist population over the decades and lots of retirements to come."* Additionally, several providers indicated that many dental students are legacies, meaning that they will take over a parent's practice rather than add to an existing provider pool. Several respondents commented that as the dental workforce shrinks, dentists are able to succeed financially by meeting the needs of those individuals who have insurance or can pay for services out of pocket.

It was noted as particularly challenging financially for providers to offer care in rural settings. Although loan repayment programs exist to entice dentists to serve in rural areas, recruitment of dentists to rural areas is difficult, several respondents noted. As one provider stated, *"it takes a special person to do rural oral health work."*

Lack of dental specialists was another theme in focus groups and interviews. As one focus group participant stated, *"if you have a problem with something and need to get your teeth capped and need to go somewhere else, then there are no dentists here for that."* A member of a different focus group similarly stated that, *"there are lots of dentists but not a lot of specialists, and so if you need something special, you'll wait a long time to access it."* Parent focus group members reported challenges in finding lower cost orthodontists and oral surgeons for their children. While safety net providers have sought to increase access to specialty oral health care by contracting with specialists, this has had limited success because specialists are in high demand from those with private pay resources.

Fragmentation

Several respondents observed that oral health services in the region are fragmented, and there is not always a continuity of care for patients. Respondents mentioned this particularly in relation to school-based services where the focus is on screening and cleanings. As one interviewee noted, *"if work gets done at school, then a family dentist won't get paid for the work because they did not do it."* Another provider echoed this, asking *"what happens after you screen, where do you refer those 10% kids who have urgent care needs?"* Others expressed concern about the rise in "corporate dentistry" in which providers, some from out-of-state, diagnose but do not treat children's dental problems. One provider described the situation as follows: *"the biggest reimbursement is 6-month recall and x-rays; fillings don't get much of a reimbursement. This is why the [corporate chain provider] does only consult and x-rays."*

According to providers, a substantial challenge related to fragmentation is the fact that Greater Kansas City straddles two states, each of which has different rules and regulations governing oral health and related services. As one provider stated, *"we have a state line running down the middle of everything."* Missouri and Kansas differ in the structure and coverage of their Medicaid programs, the scope of practice for mid-level providers, oral health screening requirements for school, and practice ownership.

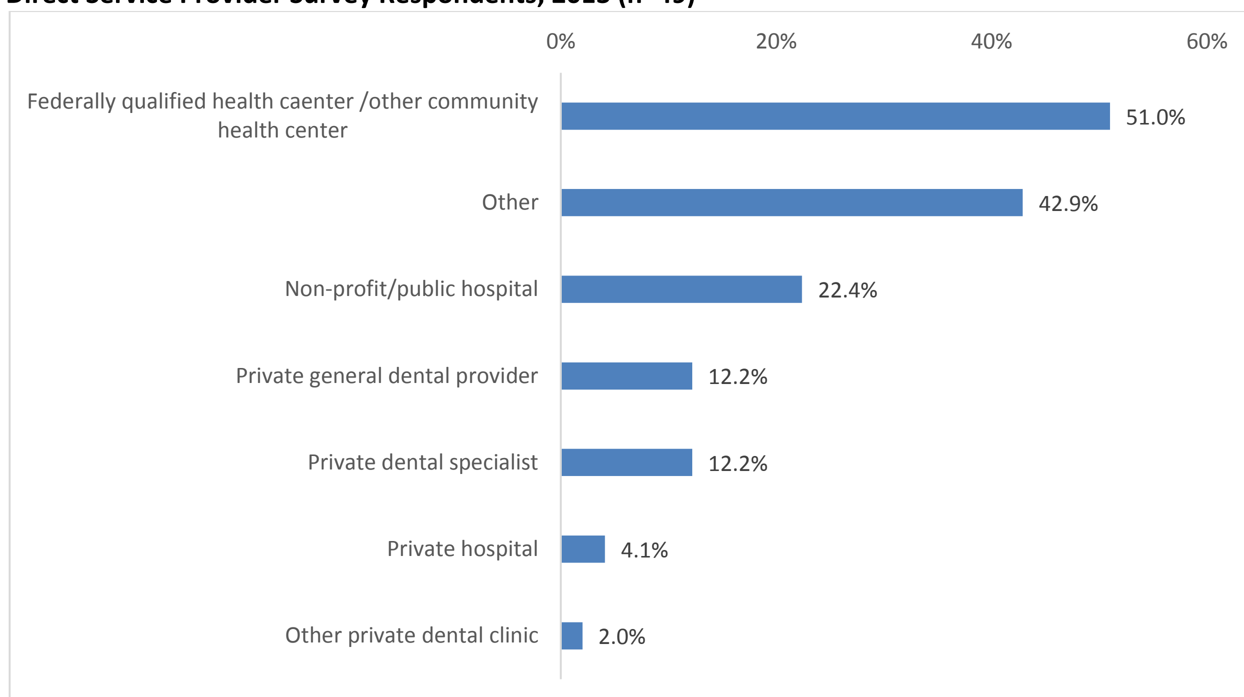
This affects which and how dental health services operate in Greater Kansas City and who can access care.

Uncoordinated Referral System

In interviews, providers highlighted the lack of a clear and robust referral system in the Greater Kansas City area. Oral health care providers viewed medical care providers as having an effective referral system but noted that they are territorial and *"not really interested in tackling indigent dental care."* Interviewees mentioned referring patients to FQHCs and the UMKC dental school, both of which they noted were dealing with more patients than they can handle. When provider survey respondents for this study were asked to which resources low-income patients were referred for dental needs, providers were most likely to mention FQHCs as the most frequent locations for referral (Figure 15). Nearly 4 in 10 survey respondents indicated "other" in the answer. When probed to specify, most of these respondents indicated that they referred low-income patients to the dental school for care. Additionally, 22% of provider respondents referred low-income patients to the public or non-profit hospitals for further care.

Patients in focus groups similarly described the referral system for dental care as challenging for the patient. They discussed the frustration of waiting for weeks to get an appointment for their child for routine care, only to be told at the appointment that they had to schedule another appointment much farther away for specialty care. The insurance paperwork confusion, transportation concerns, and time away from work and school further challenged low-income patients who needed to be referred to dental specialists.

Figure 15: Locations to which Low-Income Patients are Referred for their Dental Health Needs by Direct Service Provider Survey Respondents, 2013 (n=49)



DATA SOURCE: Greater Kansas City Oral Health Assessment survey, 2013
NOTE: Other includes University of Missouri Kansas City Dental School

Quality of Care

> *"I had better dental care when I was in prison. When you come in, they give you an examination and they say that the tooth might need to be pulled."* –Community resident focus group participant
>
> *"But, if we come in with a tooth pain, they try to take the cheapest way out and pull it. Rather than deal with filling it. They take the cheapest way out."* –Community resident focus group participant
>
> *"Here you come in with a swollen, hurting mouth and they give you an ice pack and some meds and send you on your way. They really don't care about you. You may not come in for something needing antibiotics, but they are going to give it to you anyway."* –Community resident focus group participant

Quality of care emerged as a prominent theme in focus group discussions with low-income residents. They were concerned that they were receiving incomplete care, in that their provider would only focus on one aspect of the problem. Additionally, focus group participants talked about providers' focus on pulling teeth rather than trying to find a longer-term solution. Several focus group members reported that, in their experiences, providers tended to prescribe antibiotics and painkillers rather than address underlying issues. One focus group member mentioned, *"it's a rush job. They want to hurry up and go in and go out."* In another focus group, members shared the same perspective. As one participant stated, *"they just give you antibiotics and call it a day."*

A related issue among focus group members was the need to have multiple appointments to address dental issues, which translated into higher costs for the patient. One focus group member shared, *"they only do half of what they say they will do."* Some focus group members also expressed concern about painkillers. As one focus group member shared, *"I've also seen people who don't do drugs getting addicted to pain meds their dentist prescribed because they didn't get the care they needed. They just got something for the pain."*

Another concern about quality of care reported by parents was treatment of children with special needs. As one focus group member shared, "*I have an autistic son and he can be a bit problematic with not opening his mouth. And at [the clinic], they are so rushed and the dentists/hygienists just don't feel comfortable with kids with special needs that they won't spend the time to try to make them feel comfortable."* Several interviewees also mentioned that providers may not always have the skills to address behavioral as well as underlying health issues of patients. As one safety net provider explained, "*we see so many kids with special health care needs, including pediatric patients with maladies that in the past would be fatal, and they are now thriving but come with complications."*

The lack of access to dental care, especially preventive care, was cited as a significant source of oral health concerns and later oral health problems. Several respondents spoke about the high use of hospital emergency rooms for urgent dental health issues, especially tooth pain. An overwhelming number of these patients, according to respondents, are adults with no access to oral health care. Focus group respondents shared that ER physicians are, in the words of one oral health provider, *"ill-equipped to deal with oral health."* Those working in emergency rooms are frustrated as well. As one individual providing urgent oral health services explained, *"a lot of these folks, once you look at their mouths, are in desperate need of other services but we can only do the emergency work."*

BARRIERS TO ORAL HEALTH CARE SERVICES IN GREATER KANSAS CITY

This section of the report discusses barriers to oral health care services for patients and providers.

Patient Barriers to Care

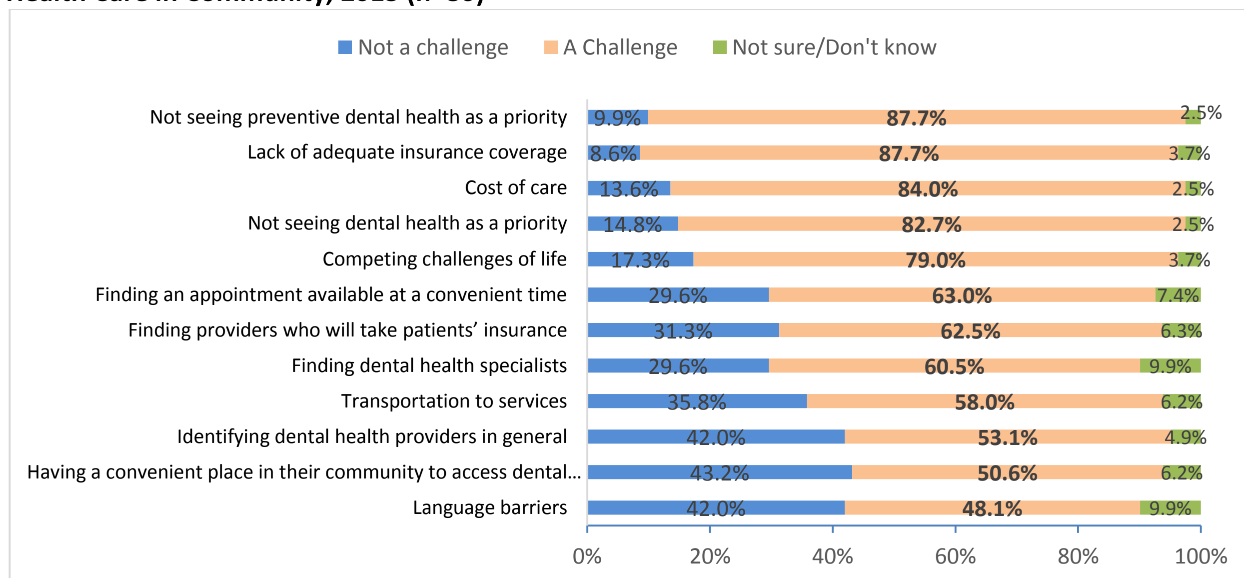
According to respondents, oral health care is accessible to children, especially due to Medicaid coverage, but poorly accessible for adults. Lack of insurance coverage for adults, workforce issues, cost of care, transportation, and language issues were the main challenges cited as barriers to oral health care.

On the assessment survey sent to providers and other oral health leaders, respondents noted which issues they considered the biggest barriers for low-income adults and low-income children. For both types of patients, survey respondents indicated that not viewing preventive dental health or overall dental health as a priority was considered one of the top perceived barriers for patients of any age (Figure 16 and Figure 17).

When reporting on adult patients specifically, survey respondents also perceived lack of adequate insurance coverage, cost of care, and the competing challenges of life as top patient barriers among provider and oral health leader survey respondents (Figure 16). These themes also emerged as barriers in discussions with low-income residents.

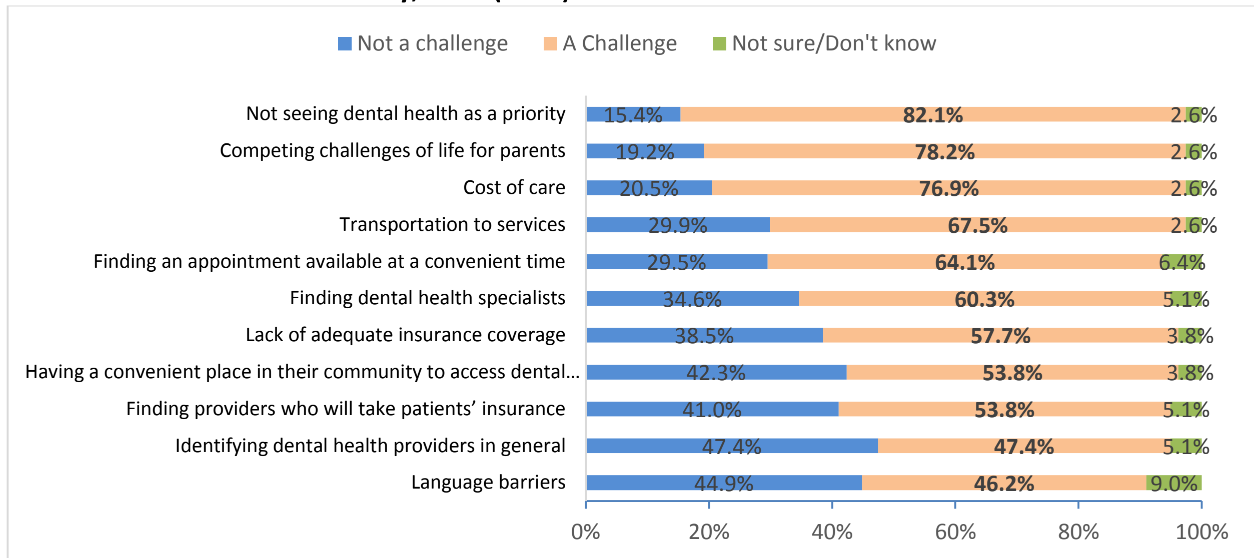
For pediatric patients, survey respondents additionally cited competing challenges of life for parents, cost of care, and transportation to services as patient barriers (Figure 17), themes that were also discussed among parents in focus groups.

Figure 16: Survey Respondents' Perceived Challenges for Low-Income Adult Patients Seeking Dental Health Care in Community, 2013 (n=86)



DATA SOURCE: Greater Kansas City Oral Health Assessment survey, 2013
NOTE: Rating was on a scale from 1-5 with 1=not a challenge at all; 5 = great challenge. Analyses collapsed responses to 1, 2, 3 = not a challenge and 4 and 5= a challenge

Figure 17: Survey Respondents' Perceived Challenges for Children of Low-Income Families Seeking Dental Health Care in Community, 2013 (n=86)



DATA SOURCE: Greater Kansas City Oral Health Assessment survey, 2013
NOTE: Rating was on a scale from 1-5 with 1=not a challenge at all; 5 = great challenge. Analyses collapsed responses to 1, 2, 3 = not a challenge and 4 and 5= a challenge

The following section delves deeper into many of these patient barriers.

Cost of Services

> *"The biggest issue is being able to afford it."* – Community resident interviewee
>
> *"Adults can only have procedures they can pay for."* –Oral health care provider interviewee
>
> *"Some providers don't have payment plans to allow patients to pay for dentures or other more costly procedures over a longer period of time."* –Community resident focus group participant
>
> *"It costs a lot, the dental care. I have insurance, but they want a lot of the money up front. If you don't have the money, they don't want to see you."* –Community resident focus group participant

Although data are not available for Missouri adults, 17.2% of adults in Kansas reported that they did not receive needed dental care in 2011, according to the Behavioral Risk Factor Surveillance Survey. Among those adults, 81.8% said that they did not receive dental care due to cost. The cost of services and affordability of dental services, especially for adults, emerged as another prominent theme among focus group members and interviewees. Many focus group members reported that they do not access dental care because they are unable to pay. As one member reported, *"I have Medicaid and Medicare. A lot of dental offices don't accept that. And even when they do, they need a co-pay and I can't pay that."*

Many adult focus group participants who did not have dental insurance for themselves talked about forgoing preventive dental care since they could not afford it. Several discussed experiences of not having the money to take care of a small dental issue and then having to wait until the problem deteriorated until they were able to seek care. As one provider interviewee noted, *"people need to not get to the point of going to ER for abscess."* Residents told similar stories: *"for me, I was told it was 3*

months for dealing with my teeth. I got an appointment. And I went to the ER two times to get pain meds because I couldn't stand it anymore." Several focus group participants discussed that because they did not have insurance, they would wait for nearly an entire day in the waiting room during some of the free care days at local organizations or the dental school. They remarked that *"if you get there by 7am on those free days, maybe they'll see you by 4pm."* This also resulted in a significant opportunity cost for patients, as they typically were not paid for the missed day of work if they held an hourly job.

Additionally, several assessment participants mentioned that some families are unable to afford the basics for dental hygiene such as toothpaste or toothbrushes. Several seniors mentioned the lack of financial support to purchase dentures. As one older focus group member stated, *"I can't afford to misplace them (dentures), replace them, or break them."*

Insurance Coverage

> *"I haven't been able to go anywhere for dental care since I was pregnant because I have no insurance."* –Community resident focus group participant
>
> *"[It's] hard because you can treat a child but not a parent, which is a difficult cycle, because bacteria and habits/choices transfer to children."* –Oral health care provider interviewee
>
> *"Most people I know don't have dental insurance. Even people with good jobs, they need make a choice between dental insurance and health insurance. And when they need dental work to be done, they just go and figure out a way to get a done."* –Community resident focus group participant

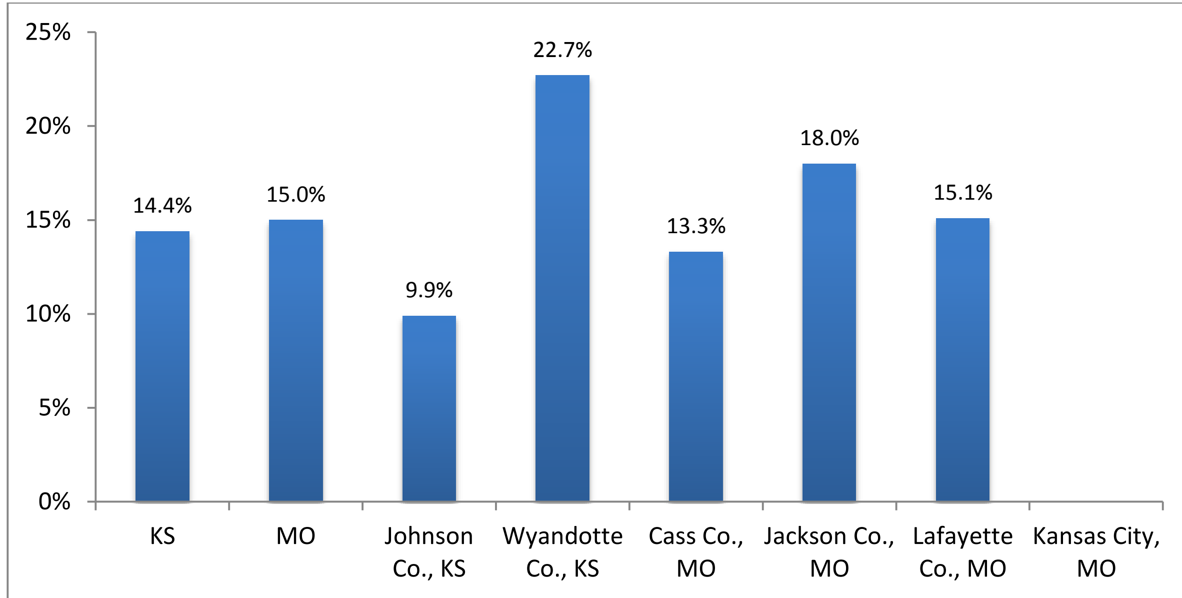
Limited insurance coverage for oral health care, specifically lack of Medicaid dental coverage for adults, was the theme that emerged most frequently when discussing access to adult care in interview and focus group discussions. As noted previously, survey respondents reported that they perceive lack of insurance coverage as one of the greatest barriers to adult access to oral health services.

Compared to health insurance, dental insurance coverage is much less common in Kansas and Missouri. According to the Behavioral Risk Factor Surveillance Survey, 66.8% of Kansas residents reported that they had any type of insurance coverage for dental care in 2012. These data are not available from the same source for Missouri residents. However, the Missouri Department of Insurance reports that 28% of Missouri residents have dental insurance coverage, 15% of whom are eligible for dental coverage under Missouri's Medicaid program. As discussed in the section regarding the federal and state policy landscape, Kansas and Missouri Medicaid programs cover only emergency dental care for the vast majority of adults.

Interviewees noted that it seemed like the number of people with health and dental insurance coverage has decreased in the past several years, largely in response to the economic downturn, which has affected employer decisions about insurance. As one focus group member stated, *"now it seems like a lot of people don't have extra dental care or insurance for employees."* For many respondents, this was emblematic of a larger issue affecting oral health—in the words of one interviewee, *"dental is often considered an add-on to the health care system."*

Data by county on dental insurance are limited. Data on health insurance rates indicate that in several counties, such as Wyandotte County, KS and Jackson County, MO, approximately 1 in 5 residents do not have overall health insurance (Figure 18). Johnson County, KS and Cass County, MO have the lowest uninsurance rates in the region at 9.9% and 13.3% respectively.

Figure 18: Percent of Population without Health Insurance by State, County, City, 2011



DATA SOURCE: U.S. Census Bureau Small Area Health Insurance Estimates, 2011
NOTE: No data are available for Kansas City, MO due to small sample size

When looking at health insurance coverage by type for the US, Kansas, and Missouri, it can be seen that between 50% and 60% of people under age 65 are insured through an employer. Approximately 30% of children age 18 years and younger are insured through Medicaid in each Kansas and Missouri, while 12% of adults in Kansas and 13% of adults in Missouri are insured through Medicaid or other public insurance (Table 7).

Table 7: Type of Health Insurance Coverage Type by Country and State, 2011-2012

	US		Kansas		Missouri	
	0-18 years	19-64 years	0-18 years	19-64 years	0-18 years	19-64 years
Employer	50%	58%	51%	62%	55%	60%
Individual	4%	7%	5%	8%	5%	8%
Medicaid	35%	11%	33%	7%	29%	9%
Other Public	2%	3%	-	5%	-	4%
Uninsured	9%	21%	8%	19%	11%	19%

DATA SOURCE: Kaiser Family Foundation State Health Facts, US 2012, KS & MO 2011-2012

Transportation

"Transportation is a huge issue for patients. [The clinic] is on a bus line, but people might have to transfer three times to get there."" –Oral health care provider interviewee

"Now that you do qualify [for oral health services]...then you find out how far away it is and then you realize that the busses don't go there." –Community resident focus group participant

"Transportation is huge. There is no bus, no taxi out here [in a more rural area]." –Community resident focus group participant

One barrier to accessing oral health care cited by focus group members and interviewees is lack of public transportation. The provider assessment survey indicated that 68% of respondents cited lack of transportation as a barrier for adult patients. Focus group and interview participants described public transportation options in the region as limited, especially in rural areas. As one focus group member shared, "*they may take Medicaid and Medicare in small towns, but the issue is: how do you get there? There are no buses.*" While one interviewee noted that FQHCs have vans for their patients, the perception was that other safety net providers do not. There are some services, such as ShareFare Medicaid cab, but residents reported that these require substantial advance notice. Finally, while school-based services were seen as effectively addressing transportation barriers so students could receive screenings and cleanings, as one provider reported, *"but if a tooth needs to be pulled, it's difficult to get transportation to the dentist for treatment."* The environmental scan of oral health services indicated that the majority of services are located in Kansas City, Missouri, and not the outlying areas.

Language/Cultural Differences

> *"Immigrants fear seeking services because they think they'll be reported."* –Oral health provider interviewee

> *"Most providers don't speak Spanish, so that's difficult for parents in this neighborhood where most people don't speak English or not well enough to talk about health."* –Community resident focus group participant

Although not a prominent theme, for some respondents the issue of language access and cultural competency was identified as a concern related to oral health services in Greater Kansas City. While safety net clinics largely serve the non-English speaking population and have interpreters to ensure language accessibility, many private and specialty providers do not. Additionally, some respondents noted that there is little racial and ethnic diversity among dental professionals, which can create barriers to working with non-White patients. One interviewee stated that it can be challenging for patients "*feeling comfortable going to providers who don't look like them or sound like them."*

In addition to language issues, sensitivity of providers overall to patient needs and culture was an issue noted by a few residents. As discussed earlier in the report, a few parents talked about how general oral health providers did not seem to be able to react well to children with special needs. Parents discussed that it would be helpful if providers took time to show their children the instruments and help calm them down before trying to provide care. The lack of sensitivity they have seen among providers and the rush in the office has resulted in experiences of autistic or other special needs children not opening their mouths for the appointment and then parents needing to see a specialist for their children's regular dental checkup.

In focus groups, parents noted that it was important for providers to understand parents' and children's perceptions of the dental visit. Parents noted that even minor changes to an office visit can enhance their family's experience. For example, parents noted that some dental clinics have no toys, books, or games in the waiting room for children. This starts the dental visit off negatively. As one parent remarked, *"the kids need something to do in the waiting room at the clinic, so they can have a better experience there. They are just bored while they wait around. They need books, videogames, something."*

Convenient Hours of Care

> *"Many clinics don't have evening or early morning hours"* –Oral health advocate interviewee

> *"One night a week the [dental clinic] has hours. But I can't get my four kids there so that the clinic can take all of them."* –Community resident focus group participant

Another challenge to accessing dental services is limited after-hours care. As a result, patients also end up using the ER for dental problems. Respondents frequently noted that it is difficult for parents, especially low-income parents, to miss work to take a child to the dentist. For this reason, several respondents noted that school-based dental services were beneficial. Many expressed a need for expanded service hours in dental clinics.

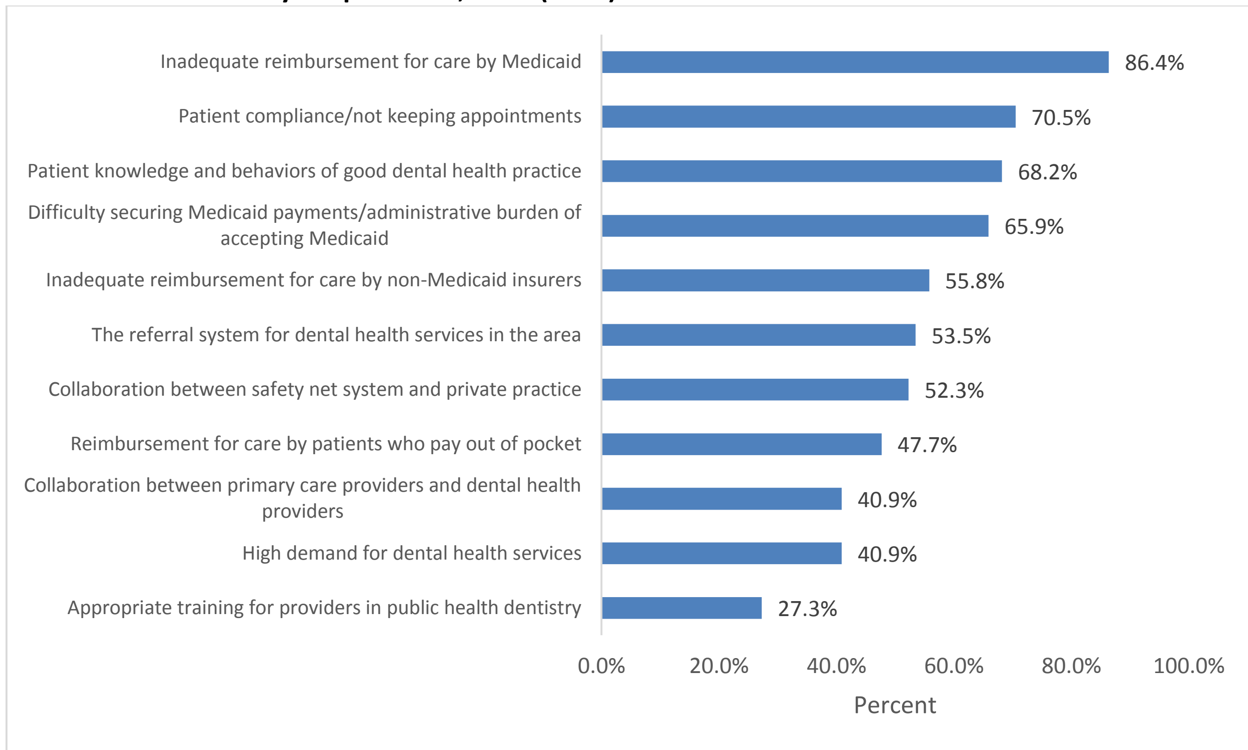
Provider Challenges to Care

While there are numerous individual patient barriers to accessing care, patients are seeking care within a system that presents many challenges for providers as well. Lack of Medicaid coverage for adult oral health services, patient compliance, cost of services, hours of operation, integration and coordination of care, and workforce issues were most commonly cited.

As Figure 19 indicates, insurance-related barriers were strong for providers; more than 86% of survey respondents who are providers indicated that inadequate reimbursement for Medicaid was a great challenge for them, while 66% said the difficulty securing Medicaid payments/administrative burden of accepting Medicaid was a challenge. Other top challenges for providers were patient-related—patient compliance or patients not keeping appointments and patient knowledge or behaviors of good dental practice.

The referral system in the area and collaboration between the safety net system and private practice were two other barriers cited by more than half of provider survey respondents. These themes also emerged in interview discussions.

Figure 19: Provider Challenges for Treating Low-Income Patients in Community Perceived by Direct Service Provider Survey Respondents, 2013 (n=49)



DATA SOURCE: Greater Kansas City Oral Health Assessment survey, 2013
NOTE: Rating was on a scale from 1-5 with 1=not a challenge at all; 5 = great challenge. Analyses collapsed responses to 1, 2, 3 = not a challenge and 4 and 5= a challenge

The following section discusses in more depth some of the provider barriers to offering care within the larger oral health system.

Insurance Reimbursements and a Cumbersome Process

While low-income children have insurance coverage for oral health services through Medicaid, focus group members and interviewees reported that many dentists do not take Medicaid. Although safety net dental services in Greater Kansas City have grown substantially over the past decade, they are insufficient to meet demand and thus, many residents seek services from the few private dentists who take Medicaid. While this was seen as an issue generally in urban Kansas City, MO, Medicaid participation of private dentists in rural areas and dental specialists was reported to be particularly low. Providers shared several reasons for not participating in Medicaid, including a low reimbursement rate, substantial paperwork required to participate in the program, and challenges to working with the Medicaid patient population, including high no-show rates, as discussed below. For these reasons, as one provider explained, "*in a small office, private practitioners can't afford to take patients on Medicaid."*

Respondents perceived that both Kansas and Missouri have among the lowest Medicaid reimbursement rates in the country. As mentioned previously, only 46.7% of Missouri dentists' median retail fees were reimbursed by Medicaid, compared to 55.0% in Kansas. Nationally, 60.5% of dentists' median retail fees are reimbursed by Medicaid. According to interviewees, there have been state-focused efforts to raise reimbursement rates, although these have not been successful. For example, one provider noted that legislation was passed in Missouri that Medicaid would reevaluate fees and adjust them yearly with an overall goal to get them up to the 65th percentile; the rates were adjusted upward in the first year, but

then budget issues arose and rates were no longer raised. For a number of private providers, the lack of sufficient reimbursement was their biggest constraint to participating in Medicaid. As one private practice dental provider shared, *"until [rates] are high enough to cover the overhead, the majority of dentists won't accept Medicaid. It's not a wise business decision."* However, not all respondents believed that reimbursement rates were too low to make dental care to Medicaid patients financially unviable. As one provider stated, *"there are four for-profit Medicaid practices in Kansas that make money by accepting Medicaid."*

Paperwork associated with Medicaid was also reported to be a barrier to Medicaid participation. As one private dental provider explained, *"[we] used to accept Medicaid, but the paperwork involved was cumbersome. Everything had to be hand-filed. If anything wasn't exactly correct, it was sent back."* Similarly, nearly two-thirds of survey respondents cited the administrative burden of accepting Medicaid patients as a challenge for them.

Patient Compliance/Attendance at Appointments

Dental providers participating in both the interviews and survey cited the high no-show rate among Medicaid patients as another challenge for them. While no-show rates reported by interviewees ranged, many indicated that they experienced rates of about 30%. As one provider stated, *"the patient population often misses or breaks appointments, which is a challenge for scheduling."* While safety net clinics have found ways around this, for example by double and even triple booking appointments during specific times or using a check-in system, this is difficult for smaller providers to implement. A private provider interviewee noted that the high no-show rate was a greater hindrance to Medicaid participation than the reimbursement rate. As this provider stated, *"it's the no-shows that kill the bottom line."*

A related issue reported by interviewees is that providing dental services to the Medicaid population can sometimes be more challenging than serving other patients. Respondents reported that Medicaid patients tend to have more complex dental issues which may require more expertise. As one provider explained, *"many times patients are not receiving care until their cases are very complicated, and the cases are beyond skills of general dentists."* Several respondents praised the collaboration between local dental schools and the safety net providers which enables dental students to do rotations in practices that serve lower income patients. As one provider reported, *"it's exposed our students to the safety net system and many students have chosen that instead of private practice."* Another provider concurred, stating, *"it breaks into their misconceptions about FQHCs."*

System Level Challenges

In addition to insurance coverage and reimbursement which were discussed earlier, other challenges that were identified as affecting the oral health environment were the lack of integration and coordination of care and the appropriate match of workforce and settings to the patients' needs.

Integration and Coordination of Care

> *"It's time for folks to look at dental health the way they look at other health care issues*."
> –Insurer interviewee
>
> *"Dental health is seen as 'drill and bill,' but is not viewed as part of the overall medical team; this is probably because dentistry has been isolated private practice industry and not as integrated into overall medical team for years."* –Oral health care provider interviewee
>
> *"Oral health is the 'bastard step child' of primary care."* –Oral health advocate interviewee

> *"Family physicians and primary care doctors should know more about connections to oral health and refer patients to oral health clinics."* –Medical care provider interviewee

As mentioned in the perceptions of the oral health system section, focus group and interview respondents reported that a systemic challenge is the lack of coordinated care and communication across systems and providers. According to assessment participants, this means that many patients are not able to access appropriate treatment or follow up support after emergent situations. The lack of coordination between oral health and primary care providers in particular was a recurring theme in interviews and was cited as a challenge among survey respondents. While provider interviewees recognized that some in-roads had been made in the area of care coordination, especially because FQHCs by their nature provide coordinated care, respondents felt that this model should be expanded to other medical settings, including primary care, pediatrics, and OB/GYN practices. Outside of FQHCs, as one interviewee noted, *"you go to medical doctor for general health and dentist for dental care, and it's up to the patients to connect these."* This was seen as especially important for young children who are more likely to see a doctor than a dentist.

Many interviewees saw oral health education as an important component for primary care providers to take on. As one interviewee stated, *"every doctor should include oral health questions in their basic intake and patient visit; ask if you have a dentist, who it is, provide a list of dentists."* Several acknowledged, however, that physicians are often pressed for time during a patient visit and are limited on what they are reimbursed for. As a more financially viable model, interviewees noted that other health providers such as nurse practitioners would be well positioned to take on this educational role during the primary care office visit. One other issue was the importance of dental educators not being part of the larger medical team for more at-risk population groups such as those with diabetes or heart disease. Just as there is a diabetes educator, some interviewees noted that there should be an oral health educator for patients who are at higher risk of complications due to oral health problems.

Focus group members differed in their views about whether primary care physicians adequately address oral health issues. Some reported that their pediatricians are not interested in their child's oral health issues. As one stated, *"[my child's] primary care physician – he doesn't think about the mouth/teeth."* But other parents reported different experiences. Another member of the same focus group stated, *"[my children's doctor] is very focused; she asks if my kids have seen a dentist, if they have seen an eye doctor, etc. They really look at everything."* A participant of a different focus group reported the same thing saying, *"pediatricians bring it up during kids' well-visits."*

Appropriate Workforce and Settings for Low-Income Patient Care

As noted in the section regarding the oral health system landscape, respondents generally agreed that there are a sufficient number of dental providers in Greater Kansas City. However, not enough of these providers accept Medicaid. Numerous interviewees noted the inability of the system to fill these gaps with other types of providers, such as dental hygienists, to provide more comprehensive access to patients.

Interviewees and survey respondents had mixed reactions on the role of alternative providers in providing different types of oral health care services. Some interviewees and survey respondents considered mid-level providers such as ECP dental hygienists to be an integral part of the system and could provide necessary services in less complicated cases. However, other respondents were skeptical that these alternative providers had the appropriate training to engage in these services. Additionally, they required a licensed dentist to sponsor them which might put an undue burden of liability on the dentist. Additionally, as discussed in the previous sections, lack of dental specialists, especially those

that take patients with government-sponsored insurance or no insurance, was another workforce challenge across the system.

Additionally, several interviewees discussed the importance of—but complicated process of—providing care in alternative settings such as schools or community centers. Meeting patients where they are was viewed as an important way to reach them. However, providing appropriate treatment with the right equipment was also deemed critical. Mobile dental care, even for preventative services such as sealants, involves a lot of equipment and a sink. Having adequate funding not just for staffing but for new equipment or regular maintenance of equipment was challenging. As one interviewee noted, *"we need all the tools in our toolbox, but most of dentistry is a surgical process. We are cutting into gums, tissue, etc. That should be done in a hospital environment or similar. There is a lot of equipment that is needed even for basic prevention services in the community like putting in sealants. You need an air dry, vacuum pump, etc."*

In addition to equipment for mobile dental care, some interviewees talked about the need for newer equipment among all safety net facilities both in the clinical and administrative sides. For example, as one interviewee specified, *"technologically, the safety net clinics are in late 20th century. Things like digital X-rays to increase efficiency, quicker sterilization techniques, and electronic medical records. This would streamline the process a bit."*

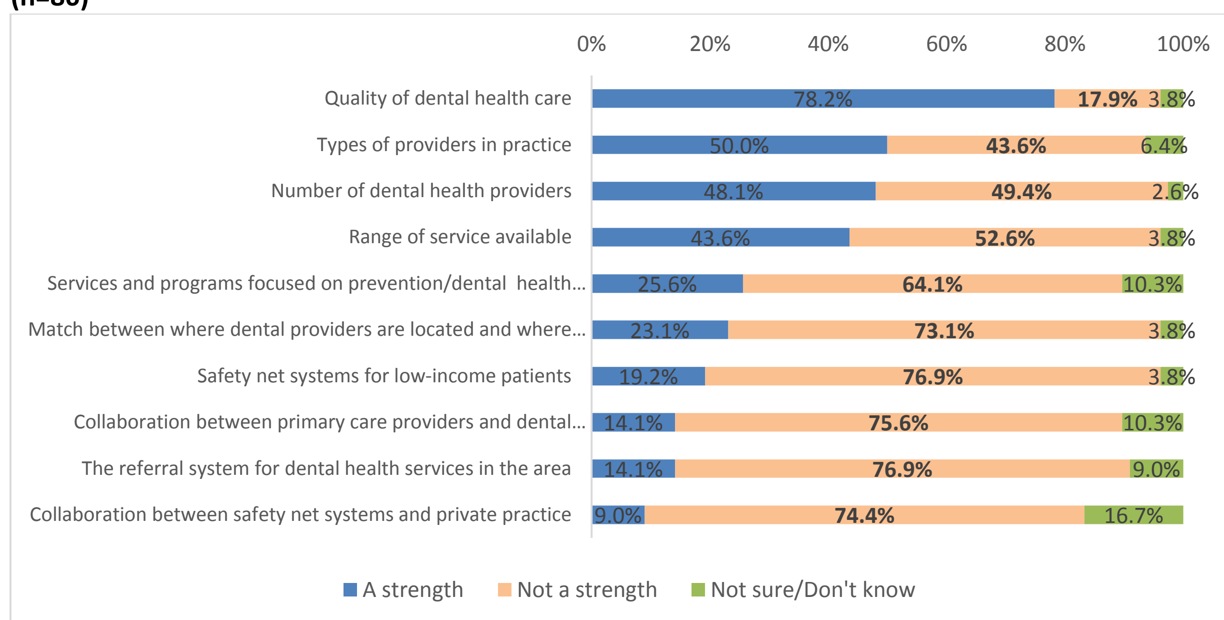
The discussions around addressing patient needs in various settings dovetailed with conversations about the misuse of the emergency department (ED) for dental needs. Many interviewees discussed that the ED sees numerous patients for dental-related pain that could have been avoided with more preventative care. Currently the Oral Health Working Group within the Health Care Access Initiative is examining ED utilization and ED costs for dental-related visits to try to find a more effective and streamlined way to treat these cases.

STRENGTHS OF THE ORAL HEALTH SYSTEM

Most respondents spoke positively about the quality of the regional oral health system that currently exists, which includes FQHCs, community-based services, active statewide organizations, and local collaborations, but that it is important for it to be expanded to meet patient needs. As one interviewee summed up, "the structure is in place, but it needs beefing up. We don't have enough, but we have a foundation."

When providers and leaders in the oral health field were asked on the assessment survey about the strengths of the existing oral health system, quality of dental health care was clearly identified as the top strength, with nearly 80% of respondents noting this (Figure 20). Other strengths cited by 40-50% of survey respondents included the type of providers in practice, number of providers, and range of services available. Consistent with the discussion on barriers, the referral system and collaboration across providers were the least likely to be identified as strengths of the region's oral health system.

Figure 20: Survey Respondents' Perceived Strengths of the Dental Health System in Community, 2013 (n=86)



DATA SOURCE: Greater Kansas City Oral Health Assessment survey, 2013
NOTE: Rating was on a scale from 1-5 with 1=not a strength at all; 5 = a great strength. Analyses collapsed responses to 1, 2, 3 = not a strength and 4 and 5= a strength

The following highlights further some of the strengths identified in discussions with providers, leaders, and patients. These were also viewed as major accomplishments of how the system has changed over the past 10 years.

Number of and Quality of Dental Providers

Greater Kansas City has numerous prevention services as well as a significant number of dental providers. More recent expansions of the types of providers in both states—Missouri has expanded function dental assistants and Kansas law has expanded to include Extended Care Permit hygienists, who are able to practice in community-based centers (schools, Head Start, nursing homes)—have been successful so far in increasing the provider base and creating the potential for expanding the breadth and depth of the provider community and future initiatives. The sheer number of dental providers in the region was seen as a major accomplishment of the past 10 years. As one interviewee commented,

"there are so many places to go now. There was not these numbers before. We have more of a structure in place now too. It's really grown."

Additionally, providers—and for the most part, low-income patients engaged in this assessment—generally perceived the quality of oral health care to be high. While patients encountered access barriers to care, it was discussed that they received high quality care when they did see a provider.

Strong Safety Net System

Patients, providers, and other oral health stakeholders recognized the strength of the safety net system, particularly, FQHCs, in treating uninsured and medically underserved population. Respondents particularly noted the efforts of FQHCs to integrate oral health with other health services, and believed that this model should be expanded to other medical settings, including other primary care providers, pediatrics, and obstetrics and gynecology.

Specifically, when asked about how the oral health system has changed in the past 10 years, the expansion of the safety net system was by far noted as one of the greatest accomplishments. As one interviewee remarked, *"things looked very different 10 years ago. There were two safety net clinics back then that provided dental. Since that time the FQHCs really have flourished. The hospitals have taken on more too. We also see an increase in dental [care] provided in specific community settings like homeless shelters."*

Collaboration

Several respondents praised the collaboration between local dental schools and the safety net providers, a relationship which enables dental students to do rotations in practices that serve low-income patients. Additionally, collaborations between foundations and community-based partners were seen as an asset that could be leveraged to focus more attention on the importance of oral health. Finally, the statewide oral health coalitions were mentioned as critical partners in shaping the state landscapes within which the local partners work. The coalitions are talking about how to change policies, coordinate efforts, and match resources, all critical to the oral health work providers are doing.

Ten years ago, the oral health field was viewed as even more siloed. Several interviewees discussed that collaborations have been strengthened in the past several years. One leader in the field noted, *"I've seen the FQHCs and other community-based organizations just getting stronger. We have a real strong group. We are meeting and comparing notes. We are talking to each other how to coordinate efforts and match resources."*

PARTICIPANTS' VISION OF THE FUTURE AND RECOMMENDATIONS FOR THE ORAL HEALTH SYSTEM

> *"It's time for folks to look at dental health the way they look at other health care issues*." – Insurer interviewee

> *"I do feel like there should be options and resources for low-income residents, but people with more income still can't afford certain things... People are losing their teeth, getting sick because they can't afford it."* – Community resident focus group participant

> *"[We] need to look at models of dental service delivery that are more cost-efficient such as mid-level providers."* –Oral health care provider interviewee

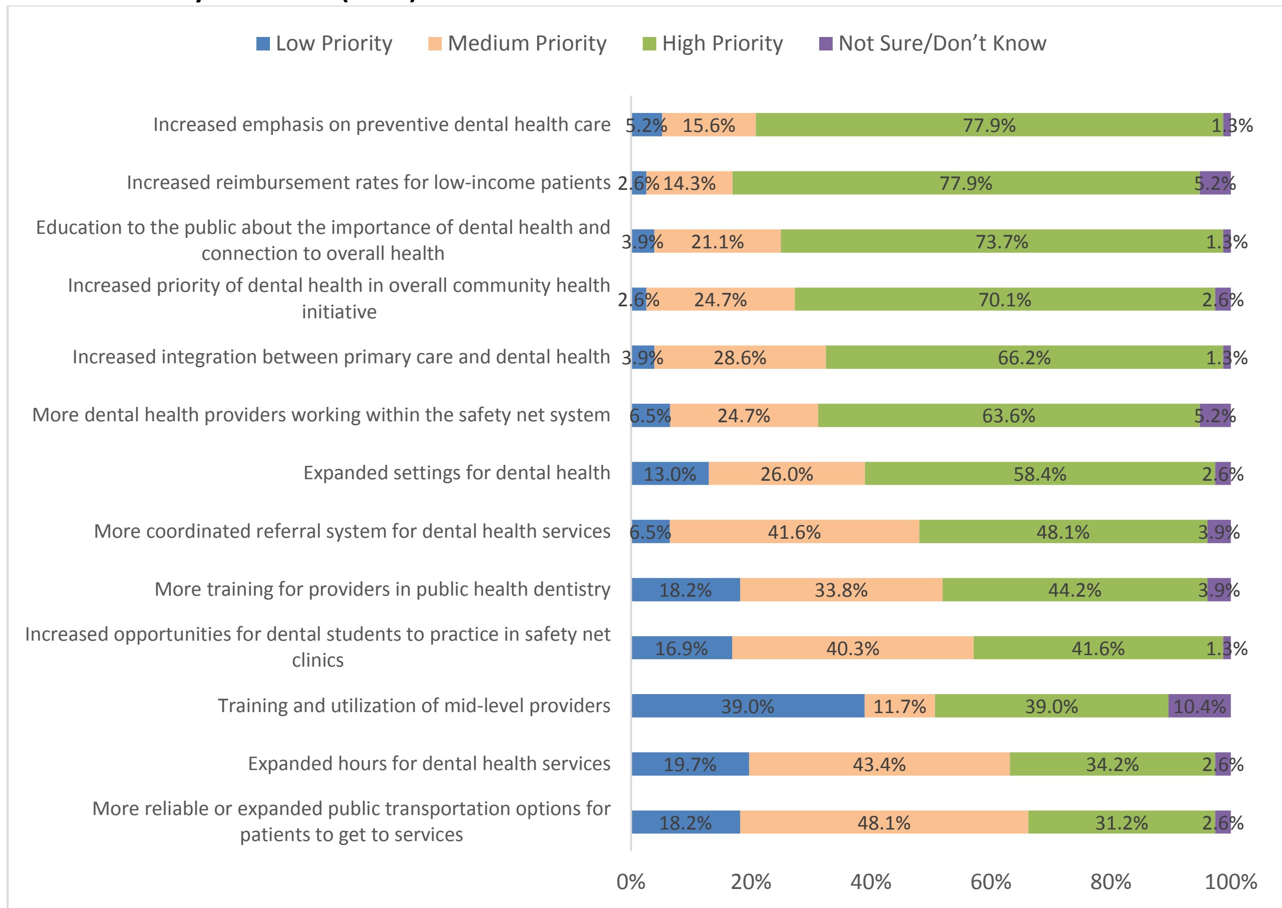
> *"The challenges are great for adults. It's hard to take time off from work; it costs money. This is why place-based services are so important. They provide treatment in school and parents don't need to take off work. It's more efficient to take a service to a population."* –Oral health advocate interviewee

Focus group members and interviewees were asked for their thoughts about what could be done to address challenges in oral health status and oral health care in Greater Kansas City and their vision for the future. Several themes related to the future vision for oral health in Greater Kansas City emerged including the need for greater integration of dental care with primary care, Medicaid coverage for adult oral health care, expansion of the safety net system, more mid-level providers, greater prevention education, and more outreach and services through schools and other community-based organizations.

Oral health provider and leader survey respondents were asked about their priorities for improving the region's dental health system. Nearly 8 in 10 survey respondents indicated "increased emphasis on preventive dental health care" and "increased reimbursement rates for low-income patients" as high priorities (Figure 21). Other high priorities included greater education about the important connection between oral health and overall health, improved prioritization of dental health within larger community health initiatives, and increased integration between primary care and dental health.

Other important issues among oral health providers and leaders were to increase the number of dental health providers in the safety net system, expand oral health settings, and have a more coordinated referral system.

Figure 21: Survey Respondents' Perceived Priorities to Address in the Future to Improve the Region's Dental Health System 2013 (n=86)



DATA SOURCE: Greater Kansas City Oral Health Assessment survey, 2013

The section below delves into the main themes around vision for the future discussed in the interviews and focus groups.

Integration and Coordination of Oral Health and Primary Care

Community residents and providers recognized that a more effectively and efficiently integrated system of care is key to achieving improved oral health outcomes.

Several interviewees reported that higher education institutions can play a key leadership role in better linking the disciplines. As one respondent observed, *"get practitioners and providers as they're young, in formative years, to provide education experiences that cut across fields and put all of the providers together early in their careers."* Several respondents spoke of efforts to begin to integrate fields. One mentioned a program in Kansas City at Samuel U. Rogers FQHC where there is a joint training program for the dental school, medical school, and nursing school students. As one medical care provider noted, *"I would like more focus on education for residents about the importance of oral health. We need a cultural shift to make oral health an important part of a healthy lifestyle."* Assessment participants envisioned primary care providers and pediatricians asking about oral health issues at office visits and being able to refer patients to appropriate dental providers when needed. In addition to integrating oral health and primary care through higher education, assessment participants also hoped for improved

referral systems and collaboration among primary care, emergency medicine, and oral health providers through greater communication and better infrastructure.

Medicaid Dental Coverage for Adults

The most frequently cited aspiration among assessment participants was the inclusion of dental coverage under Medicaid for adults.

According to respondents, expanding adult coverage for Medicaid dental services was seen as critical to increasing access to oral health care. As one provider summed up what needs to be done: "a*nything to increase access to care – and that falls 99% of the time under coverage and reimbursement."* According to a couple of respondents, there are efforts underway in Missouri to reinstitute adult coverage for oral health. As one interviewee shared, *"everyone agrees these things need to happen, but the legislation has to figure out how to pay for these."*

For some providers, the level of reimbursement that Medicaid provided for dental care was an issue, but for numerous providers, it was the administrative burden of Medicaid that was a greater a challenge to them. Several interviewees wanted to see an easier paperwork process for Medicaid so that more private dentists would participate. One private provider stated that his practice would accept Medicaid patients, "*if there was a more streamlined process for applying to accept Medicaid patients, as well as a more streamlined process for reimbursements."* Requiring a number or percentage of Medicaid patients each practice takes was also suggested. Finally, a few respondents noted that outreach should be conducted to ensure that all eligible children are covered by Medicaid. *"Some are non-English speakers, some are illegal aliens so they won't sign the paperwork for their kids for fear of law enforcement."*

Lower Cost Oral Health Services for Patients and Providers

Given the limited insurance coverage for adults and lack of providers who accept Medicaid, lower cost oral health services were the vision of many community residents and some providers.

A prominent theme across focus groups was that cost was a barrier for many patients. Yet, Medicaid reimbursement, if expanded for adults, would only partially address some of these concerns. Even with insurance, low-income residents identified cost as a significant challenge for them since insurance did not cover all of their needs. Thus, many interviewees and focus group members reported that there was a need to expand existing volunteer programs that provide free dental services such as cleanings, extractions, and sealants. One focus group member suggested a fund to help those in need pay for oral health services.

Maximizing the cost-effectiveness and administrative efficiency of existing safety net services was also seen as important by interviewees. Several respondents mentioned that dental safety net providers in the region are working with Safety Net Solutions, a national consulting firm, to enhance the operations of the oral health safety net. Streamlining administrative practices and integrating electronic medical records were two suggestions by interviewees. Others noted that more could be done to integrate dental students into safety net clinics to reduce provider costs and offer them greater hands-on training. One interviewee mentioned that there had been a school loan repayment program for dental school graduates in private practice who agreed to treat Medicaid patients; however, funding for that program ended. Additionally, as discussed below, helping patients get the appropriate care with different types of providers was seen as a significant way to reduce costs since it would prevent ED visits when unnecessary.

Additional Oral Health Care Providers: Specialists, Hygienists, and Others

Key to improving access, according to many respondents, is enhancing the number and types of providers able to provide a range of oral health care services.

Many interviewees mentioned the need for more specialists to serve low-income patients. As one respondent stated, *"we need to develop a system where we have access to specialists (oral surgeons)."* Another safety net provider reported, *"I would like to see network of oral surgeons who are willing to take on certain number of cases of indigent cases... keep them out of the ER altogether. We need to see what we have available and how can we reallocate those resources."* Focus group members also mentioned the need for specialists, including oral surgeons, lower-cost orthodontists, and dental professionals who are skilled at working with more challenging children. As one focus group member stated, *"we need someone who is specialized for high needs kids, kids with special needs – they need to be treated somewhere. They need to have more patience with these kids."*

In addition to increasing the supply of dental specialists, participants envisioned increased access to oral health care by improving the number and types of providers able to provide oral health care services, especially in community settings. In recent years, expanding access through mid-level providers has been considered and some inroads have been made, for example, through the extended care permit in Kansas, which allows dental hygienists to practice in community-based centers, like schools, Head Starts, preschools, and nursing homes. As one provider noted, *"I wish that oral health care was a bit more like medical care, totally supportive of a mid-level practitioner (someone like an nurse practitioner on the dental side); dentists should not be scared of this. It has not bankrupted colleagues on the medical side. Resistance in the dental community is interesting to me because we acknowledge that we have workforce issues."*

Most interviewees supported an enhanced scope of practice for dental hygienists, believing that enabling them to practice, particularly in safety net settings, would contribute substantially to enhancing access to care, including in locations now underserved, such as schools and nursing homes. As one person added, *"dental hygienists should be trained in extended functions to cover for lack of dentists in rural areas – dentists are against this, but there are more hygienists than there have been in years, so it seems logical that they would be trained to do more."* Some described the movement toward mid-level practitioners as a natural progression of a field, similar to the introduction of nurse practitioners in the medical field. As one interviewee stated, *"oral health is behind the times. Every other health profession has a mid-level practitioner."*

However, several interviewees disagreed with this view, noting that expanding mid-level providers will not address access challenges in Greater Kansas City. As one interviewee stated, *"we've had [mid-level providers] work with children and still plenty of kids haven't seen a provider."* Others expressed concerns about the use of mid-level providers, specifically around the quality of care, training they receive, and liability to the dentist sponsoring the mid-level provider.

Some interviewees suggested maximizing existing opportunities such as increasing use of the extended care permit dental hygienist (reportedly only about 10% of hygienists utilize this) to expand care in community-based settings. One interviewee suggested waivers for hygienists who work in safety net clinics.

Increased Provision of Community-based Services

There is a disconnect between where oral health services exist and where community residents live and work. Competing priorities of life make it difficult for residents to access services where and how they are currently provided.

While interviewees and focus group members reported that dental outreach through community-based organizations currently exists in Greater Kansas City, they reported that more was needed. Due to transportation, time, and convenience challenges, assessment participants noted that matching services to locations that people could easily access was important. As one respondent stated, "*we would like to see some outreach into…places that make sense to reach people."* A variety of settings were suggested: schools, health departments, WIC offices, childcare centers, pharmacies, and churches. In the words of one respondent, *"anywhere there is a large number of people would be the right place."* Schools especially were seen as an important location for oral health services, and participants cited a number of initiatives currently in place in Greater Kansas City involving schools including Score 1 for Health. As one person explained, *"The school district is a vital point because we have kids and can catch them young and for an entire day as well as have access to the parents and families."*

Some, however, expressed concern about school-based services because of limitations on the types of oral health services that can be provided in the schools and that these programs only serve students. As discussed earlier, several interviewees noted that there are limited services provided to students in schools, such as cleanings and x-rays, but then there is difficulty when more complex cases arise and children need to be referred out somewhere. However, several respondents reported that they would like to see expansion of mobile dental services to provide more comprehensive services.

A Greater Priority on Prevention and Integration into Overall Community Health

Community residents and oral health providers agree that the system needs to focus more on prevention of oral health issues, including various means of education about prevention and consequences of oral health issues, and integrate these into overall community health initiatives.

Several respondents reported a need for more education about oral health and how to prevent dental decay, especially the importance of oral hygiene and diet. Overall, respondents reported that they were not aware of any large-scale community-level education about oral health, although some mentioned the Fall for Smiles campaign every year, which was described by one interviewee as *"not very high profile."* Both residents and providers noted that it was important for people to be more aware of the consequences of poor oral hygiene and health. As one interviewee stated, *"it all comes down to getting information in the hands of the adults in our area and changing the way we think about dental care… it's no small task…I grew up here. There is pervasive thinking that dental care is just something you think about when you have pain."* Some respondents saw education as a dental professional's role. Others suggested broader messaging, including having information in multiple languages, such as an oral health awareness month, with dissemination of information through WIC offices, schools, and churches.

When talking about the importance of improving oral health prevention efforts, several interviewees discussed how critical it is for oral health to be a greater part of the larger public health dialogue. They wanted to see oral health talked about in public health circles with the same passion and frequency as public health professionals discuss obesity and chronic disease. They noted that elevating and integrating oral health more within public health might help bolster prevention efforts and bring on more partners into collaborative efforts.

OVERARCHING THEMES AND RECOMENDATIONS

This report provides a comprehensive review of the oral health-related data from Greater Kansas City as well as perceptions of the oral health landscape and suggestions for addressing challenges. This final section highlights some of the overarching themes that appear to be challenging the Greater Kansas City area in addressing its oral health issues and provides recommendations based on the larger literature of best and emerging practices in the field.

Overarching Themes

In a synthesis of both the quantitative and qualitative data, several overarching issues emerge that have been particularly challenging to addressing the oral health challenges in the area. These provide important context for the discussion of future directions and the implementation of evidence-based and promising practices.

- **Cost of Service and Lack of Medicaid Coverage for Adult Oral Health Services:** Throughout the assessment process, participants discussed time and time again that the lack of government-sponsored dental insurance for adults severely limits the ability of residents to access oral health care. Even for adults who had dental insurance, cost of care was a significant barrier. This was seen as the primary access issue for adults.

- **Number of Providers Who Accept Medicaid:** Almost all stakeholders cited the large number of dental providers in the region but the dearth of providers who treat Medicaid patients. Many children are on Medicaid but most do not receive oral health services for which they are eligible. Barriers to accepting Medicaid include low reimbursement rates that do not cover providers' costs for services, administrative burden for providers, and high no-show rates among patients.

- **Coordination and Integration across the Health Care System**: The vast majority of assessment participants talked about the need for collaboration and communication between oral health care private providers and safety net providers as well as with primary care providers and others in the overall health care system. Patients and providers alike highlighted the discontinuity between prevention, treatment, and acute care. Participants noted that important components of a coordinated system include a clear and robust referral system between these providers as well as integrated training for medical and dental students.

- **Workforce and Settings:** The majority of assessment participants—providers and community members alike—discussed the mismatch that sometimes oral health providers, including specialists, are not where the neediest populations are. Participants emphasized the challenge of services not being provided when and where medically underserved patients are, suggesting that more providers should be in the community at alternative community settings.

- **Importance of Prevention:** Given the challenging environment for oral health treatment services, numerous stakeholders emphasized the importance of focusing on preventive activities related to oral health, in addition to improvements on the oral health care delivery side. As discussed earlier, perceptions were that the health care system focuses much more on oral health treatment than prevention, although prevention is of utmost importance to building and maintaining good oral health, especially in children.

- **Highlighting the Importance of Oral Health**: Most assessment participants noted the need for the oral health community as well as public health and health care communities to understand and highlight the importance of oral health and its connection to overall health. Many voiced

their concerns about the lack of attention paid to oral health in comparison to medical care and the ways in which oral health is not given the same attention in health policy and financing.

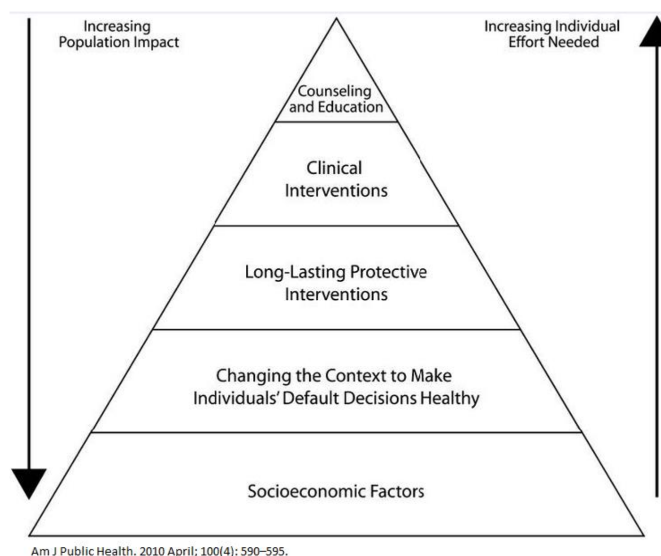
Recommendations

The following section discusses recommendations and ideas for strategies and initiatives to address the oral health issues described in the assessment. Where possible, evidence-based practices from the larger oral health literature have been provided. Only strategies that seemed feasible and applicable to the local context of Greater Kansas City were included. Where no evidence-based strategies existed in the literature, HRiA provided suggestions on promising strategies based on work and experience in the field.

Recommendations are organized around four areas, all of which incorporate a need for increased prevention of oral health disease: Education and Convening, Enhancing the Workforce, Improving Integrated Care, and Financing. Within these four areas, programmatic, systems, and policy level interventions are suggested. This delineation of interventions is informed by the Centers for Disease Control's 'Health Impact Pyramid', which suggests that the range of interventions have differing population impact and require varying levels of effort. As discussed below, all are important, and the combination of approaches has been recommended as optimal.

- *Programmatic level* interventions align most closely with the top tiers of the pyramid and are focused on creating behavior change in an individual patient, oral health provider, or community member.
- *System level* interventions align most closely with the middle of the pyramid and are aimed at engaging groups (rather than individuals) and working to create a broader system or environment that supports easier healthy behavior choices.
- *Policy level* interventions are aimed toward the bottom of the Health Impact Pyramid and includes more formal changes in policies, regulations, and rules that both improve overall access to oral health services and prevent oral health disease in a population.

Figure 22: Health Impact Pyramid



In some instances, all three levels of intervention are not appropriate for each strategy – e.g. interventions that are part of the Financing strategy are only *policy* focused – but *programmatic, system,* and *policy* strategies are included whenever possible.

By nature, system and policy level interventions are more sustainable than programmatic interventions because they change the formal and informal context in which individuals behave. However, programmatic interventions should not be overlooked, as these are highly important to changing the behaviors and attitudes that set the stage for more sustainable changes in the oral health landscape. It is important to consider a mixture of programmatic, system, and policy level interventions in order to achieve meaningful change. For example, an oral health literacy campaign is a programmatic approach that is not necessarily sustainable on its own. However, there is such a widespread lack of awareness about the importance of oral health compared to total body health, that such a campaign would be a valuable stepping stone on the path towards systemically integrating oral health into primary care. The

strategies and initiatives highlighted in this report should not stand alone, but should work in concert to improve conditions in the Greater Kansas City oral health landscape.

Recommendations on Education and Convening

Results of this assessment recognized a need for elevating the importance of oral health among patients as well as practitioners. This need is well recognized in the literature, and provider and stakeholder education is highlighted as one of six priority areas for philanthropic investment in Grantmakers in Health's *Returning the Mouth to the Body: Integrating Oral Health and Primary Care*.[12] Educating children and families about oral health is also a key recommendation of the Centers for Medicare and Medicaid Services (CMS).[13] Surveys by the American Dental Association and Hispanic Dental Association found a lack of knowledge about oral health in consumers overall, including prevalent misinformation about treatment of cavities among those who considered themselves to be knowledgeable on the subject. Grantmakers in Health contend that grant funding for community education work around oral health can later serve as a catalyst in creating community support for other efforts, such as integrated care and financing improvements.

In Greater Kansas City, participants noted that patients had limited understanding about the important connection between oral health and total body health. While a lack of knowledge is just one barrier to appropriate care, an increased understanding of the importance of oral health in the Greater Kansas City area could increase the rate at which underserved children receive covered preventive care. It can also help support greater integration between the oral health and public health fields. Incorporating dental health providers into local and regional planning and decision-making bodies can raise the profile of oral health and therefore promote the implementation of patient-level education programs as well as systems- and policy-level initiatives.

Some specific suggested approaches include:

Programmatic Approaches

- **Engage schools in preventive dental education by utilizing existing, evidence-based curricula.**
    - Greater Kansas City comprises numerous school districts, so further examination of what is happening at each district may be warranted. While no formal evaluation studies have been conducted, there are promising approaches in the literature that focus on dental-related prevention education in schools. The American Dental Association encourages use of their 'Smile Starts!' oral health curriculum in schools. The curriculum includes four separate components targeted at varying age groups from preschool through middle school. All materials, including lesson plans, educator guides, and activity sheets are available for free download from the American Dental Association website.[14]
- **Utilize staff at dental offices (safety net clinics and private providers) to provide preventive education, especially among patients with missed appointments.**
    - Dental offices can provide education to parents at the time of visits, or by utilizing missed patient appointments to increase patient education. Not only do missed appointments have a detrimental effect on a patient's dental health, they are one of the contributing factors to why providers are reluctant to accept Medicaid. The Center for Medicaid and Medicare Services (CMS) recommends having staff (at a practice level or state Medicaid dental plan staff) provide an advance reminder to patients about upcoming appointments as well as follow up with families who miss an appointment. In this role, staff can also provide guidance about the importance of dental health and assist patients in troubleshooting issues that may prevent them from attending an appointment. Additionally, a 2013 article in the *International Journal of Dentistry* found

that a one-time interactive educational intervention with the parent of an infant could indicate a reduced rate of caries, increased dental utilization, and retained knowledge in the years following the intervention.[15] This study provided education to caregivers of children under 31 months of age via a dentist and the "Baby Oral Health" DVD. Results were measured by a pre and post intervention survey that compared the study group to a control group and indicated that even a one-time educational intervention could make a significant impact, although repeated educational interventions were recommended.

- **Work with public health partners to conduct a multi-faceted public campaign to emphasize importance of oral health**.
    - Social marketing is an approach to utilize commercial marketing techniques to improve behaviors related to the social good. Evidence suggests that communication campaigns alone may not achieve change, but can reinforce and transform behaviors when integrated into a larger multi-pronged initiative coupled with programmatic and system change. Promoting an intensive oral health awareness campaign sponsored by both the oral health and larger public health community can help strengthen the dialogue among the two fields as well as increase the public's understanding that oral health is a critical part of overall health and where to go for services. An example of a successful campaign that could be utilized in Greater Kansas City include '2Min2X', which was produced by the AdCouncil and the Partnership for Healthy Mouths and Healthy Lives. It encourages brushing children's teeth two times per day for two minutes. Campaign materials, including video and print, are available on the website: http://2min2x.org.
- **Create a cadre of early childhood practitioners who are equipped to promote oral health education.**
    - As mentioned in this report's environmental scan, Oral Health Kansas and the Kansas Cavity Free Kids initiative of the Kansas Head Start Association have implemented a Teeth for Tots training program for home visitors of 0-3 year olds, and a Circle Time for Teeth workshop for early childhood teachers. The Cavity Free Kids Program for early childhood practitioners was developed in Washington State, tested in a multi-cultural setting, and independently evaluated to show an increase in tooth brushing and understanding of oral health prevention among pre-school children. A 'train the trainer' initiative such as this raises the profile of oral health in early childhood by working to institutionalize oral health knowledge among practitioners. The Cavity Free Kids Initiative is promising for more widespread replication as materials are culturally appropriate and available in multiple languages.

System Level Approaches

- **Reinvigorate existing stakeholder groups and/or develop community or regional coalition(s).**
    - While the Mid-America Regional Council Regional Health Care Initiative's Oral Health Access Committee has been working on these issues, attendance at meetings has waned. Reinvigorating and expanding this group—or another similar entity—to include representatives of additional sectors (e.g., engaged individuals in the educational sector, business, PTA, transportation) would strengthen it and provide greater buy-in for strategies implemented by the group. A stakeholder group with active involvement from all sectors of the oral health community, including health care providers (including school nurses), community-service providers, and payers will be important in energizing collaborative efforts in oral health. Such a group can increase understanding of the importance of oral health – and its urgency – beyond a patient level. Title V programs can be key partners as they have existing relationships with the state Medicaid office. In addition to working on issues within the local context, the group can also consider

raising the profile of oral health and affect policy via developing a business case for the provision of and payment of oral health services under new models.

- **Integrate oral health providers and leaders in the larger public health dialogue and decision-making bodies.**
    - Grantmakers in Health additionally recommends facilitating the inclusion of oral health leaders in decision-making bodies as a way to systematically raise the profile and educate high level stakeholders about oral health. Health funders, advisory councils, or health departments can make a concerted effort to include dental health professionals on their own decision-making boards in order to raise the profile of oral health among decision-makers. An increased awareness of oral health access issues among decision-makers can create a pool of valuable advocates for statewide policy improvements.
- **Develop a more comprehensive data surveillance system in Greater Kansas City on oral health behaviors and awareness to help track changes across time.**
    - Organizations interested in improving oral health in the area will need current data on the topic collected consistently across the region. While health care utilization and ED data are available, data related to oral health attitudes, awareness, and behaviors among the public and provider attitudes and perceptions are not tracked consistently. Some suggestions include implementing a modified Youth Risk Behavior Survey in the middle and high schools, including questions addressing oral health knowledge, attitudes, and behaviors as well as administering a survey for adults in the region (modified BRFSS, including oversampling for the region) using similar types of questions as on the youth survey.

Policy Approaches

- **Support initiatives aimed at increasing the number of communities implementing community water fluoridation policies**
    - By building off of programmatic recommendations on increasing oral health literacy and utilizing the systems level recommendations on increasing stakeholder engagement around oral health, work with the community to promote water fluoridation policy in Greater Kansas City communities that are not fluoridated. The Community Preventive Services Task Force's *Community Guide to Preventive Services*, among a multitude of other literature, recommends community water fluoridation as an effective, population-based method of reducing dental caries.[16] In making this recommendation, the Community Preventive Services Task Force reviewed over 150 studies on the effects of community water fluoridation on caries, oral health disparities, and dental fluorosis, and the Centers for Disease Control has recognized water fluoridation as one of 10 great public health achievements in the 20th century. While there are various approaches to implementing community water fluoridation, an engagement of both community and health care stakeholders is crucial to all of them. A January 2013 article in the *Journal of the American Dental Association* highlights both the lack of public knowledge about oral disease and the role that optimally fluoridated water plays in preventing caries, as well as the fact that only a very small percentage of people received information about water fluoridation from their dentist.[17] The article cited a study concluding that people who received information on community water fluoridation from a dentist or other health care professional were more likely to be in support water fluoridation than those who received information from other sources. Likewise, there is evidence that dentists can be effective in supporting campaign efforts aimed at increasing community water fluoridation. Policy change for community water fluoridation can be adapted in many ways (e.g., referendum, city council vote, etc.), but improving awareness of the benefits of community water fluoridation is a cornerstone for successful efforts.

Recommendations on Enhancing the Workforce

Issues surrounding improvements to the oral health workforce are a priority among national thought leaders, including Grantmakers in Health, the Pew Charitable Trusts, Centers for Disease Control, and the Institute of Medicine, which highlight a need for reliance on a variety of types of providers.[18] Although specific approaches vary, workforce development is also a priority of national and local dental and dental hygienist associations.

Recommended improvements to the oral health workforce are not focused solely on increasing the numbers of providers, but ensuring both current and future practitioners are well equipped to provide oral health services to the Medicaid and/or uninsured population in a culturally appropriate manner that increases access to oral health preventive services and treatment.

In Greater Kansas City, there is a documented shortage of dental providers who accept Medicaid, creating a barrier to access of care for populations most in need of services. Addressing issues of both real and perceived administrative and cultural barriers can encourage more private providers to begin accepting Medicaid patients. Working with providers as well as KanCare and MO HealthNet to increase efficiency in completing enrollment forms and other required paperwork may serve to address some of the administrative barriers identified by providers in Greater Kansas City. While Missouri does use an online form for provider enrollment, as of January 2014, the website noted that it was “backlogged.” Kansas still uses a downloadable paper enrollment form.

Data show a lack of a robust referral system, preventing patients from efficiently finding a Medicaid provider. While referrals will be discussed in the following section, expanding an easily accessible online registry of providers can improve patients’ ability to connect with a Medicaid provider who is accepting patients, and support providers in increasing their reach. Additionally, supporting existing programs that provide dental students with structured community experience, as well as the creation of new workforce models like the Community Dental Health Coordinator (CDHC) and mid-level dental providers can all work to increase the number of providers who work in safety net settings treating Greater Kansas City’s underserved population.

Some specific suggested approaches include:

Programmatic Approaches

- **Encourage private dental providers to begin accepting Medicaid and/or accept a greater percentage of Medicaid patients via a peer mentoring or training program**.
    - One important initial component is to understand who is accepting Medicaid and how providers have overcome the barriers to enrollment. Initiatives can highlight model programs and document localized best practice strategies, including contact names for dentists who are willing to support their peers in becoming Medicaid providers. Having providers serve as champions to their peers in explaining why there is a business case to accepting Medicaid and that providers can overcome administrative barriers through specific approaches might help expand the pool of providers for these patients.
- **Update content of and increase utilization of searchable online databases that highlight local providers who accept Medicaid and/or other specific populations like Head Start children**.
    - An example in this area is the Points of Light website and database (www.pointsoflightonline.org) which began as an initiative to connect providers and patients in Michigan but is now also supported by the Missouri Dental Association and Missouri Academy of Pediatric Dentistry.[19] The goal of this project is to connect children with a dental home beginning in infancy. The website includes text and video resources

for both parents and providers, and includes a geographic search function where parents can easily search for local providers who accept Medicaid and/or specifically serve infants, Head Start children, or pregnant women. Insure Kids Now (www.insurekidsnow.gov), the national CHIP website, also includes a geographic search function that allows patients to search for Medicaid providers, but the website is written at a relatively high literacy level, and the search function is several steps away from the main website, creating a barrier to accessing the search.[20]

System Level Approaches

- **Work to reduce actual administrative barriers to enrolling in and billing for dental services through KanCare and MO HealthNet.**
  - Working with and advocating the state Medicaid offices in Kansas and Missouri may help in transforming the administrative process for Medicaid enrollment. In its *Keep Kids Smiling* report, CMS makes a specific recommendation to reduce the administrative burden to providers, including designing simpler, shortened enrollment forms and creating more straightforward procedures for claims submissions.[21] In Maryland, the state Medicaid program worked to streamline dental provider credentialing forms, resulting in a Medicaid form that was half the length of forms used by private insurers. Oklahoma created a Provider Secure Website, which serves as a one stop web portal for providers, allowing them to enroll electronically in Medicaid and to monitor patient care. This model has greatly reduced the amount of time it takes the state Medicaid program to approve of new providers.
- **Support, and/or expand dental school rotational programs and curricula that encourage public health dental work among dental school graduates.**
  - The School of Dentistry at UMKC curriculum includes courses in Applied Ethics (including a community dentistry case), Dental Public Health, and two Extramural Rotations that place students in community settings.[22] Structured programs like this should continue to be supported and expanded upon. A January 2014 article in the *Journal of Dental Education* concluded that a well-structured (v. not well-structured) community based dental education program as part of dental school significantly influences dentists' personal and professional attitudes and behaviors towards underserved patients. Dentists who experienced a well-structured community education program were more likely to treat underserved patients and to have a positive attitude towards them.[23]
- **Integrate training on providing oral health care to children with special health care needs into dental school curricula and existing professional development programs.**
  - Some parents in focus groups noted that providers had little patience and sensitivity to work with developmentally disabled children such as those with autism. This resulted in poor experiences in the dental clinics, sometimes to the point of children not even opening their mouths for care. One opportunity may be to ensure that dental students are provided learning opportunities with this population. A *Journal of School Nursing* study supports this approach, citing the positive outcomes from an evaluation of a service learning project with dental hygiene students and school nurse mentors.[24] The project reinforced the need for on-the-ground clinical experience in treating children with special needs to be included in dental school curricula and emphasized a lack of confidence among providers in working with this population. In North Carolina, the Department of Public Health formed a "Special Care Dentistry Advisory Group" to look at state specific issues related to the provision of oral health care to special needs populations. Similar to the article mentioned above, the North Carolina group found there to be a lack of dental providers who were specifically trained in treating special needs children, as well as insufficient payment for services based on the extra treatment

time needed.[25] While these barriers are likely similar to those found in the Greater Kansas City region, it may be useful to convene a similar advisory group that could guide region-specific training initiatives. In addition to supporting revised curriculum in the dental school, training could be provided to established oral health providers and their staff on more effective ways to work with families to find easy-to-administer approaches in providing care for these challenging patients.

- **Promote initiatives like the National Health Service Corps (NHSC) and other loan forgiveness programs among dental students in order to encourage practice with underserved communities**.
  - The NHSC offers financial and other support to primary care dentists who choose to work in underserved communities, including sites in Greater Kansas City. There are dental practices in Cass, Jackson, and Lafayette counties in Missouri as well as Johnson and Wyandotte counties in Kansas that are already designated as appropriate sites for NHSC service. Both NHSC and the U.S. Public Health Service programs are noted by the American Dental Association.[26]
- **Create a Community Dental Health Coordinator (CDHC) program at the UMKC School of Dentistry.**
  - This program is based on the widely accepted community health worker approach but includes an oral health curriculum and training on limited oral health services. This model has been proposed and piloted in several states by the American Dental Association (ADA), as an alternative to the mid-level provider models discussed later. The ADA has made available a standard CDHC curriculum that has been refined and piloted in several states and is committed to leveraging its own funding to work with states to disseminate this model.[27] Results from pilot CDHC programs seem positive. In one instance where a CDHC worked alongside a single dentist in a private practice, there was greater than a 200% increase in the number of billable procedures and the total care value of services provided. The CDHC has been highlighted as a promising model not only by the ADA, but by CMS and the *Journal of Dental Education.*[28]

    Due to the lack of providers treating the underserved population in Greater Kansas City, it is important to consider a role for both these community level oral health workers in addition to other new models of dental providers. CDHCs could play a vital role in addressing barriers voiced by residents of Greater Kansas City – in providing culturally appropriate oral health education and guidance on disease prevention, assisting patients in navigating the care delivery system, as well as troubleshooting barriers like lack of transportation, by drawing on knowledge of community resources. Ideally, CDHC could practice in both clinical and community settings, and may be a promising model to partner with private practices as an impetus for them to become Medicaid enrolled dentists.

Policy Approaches

- **Support and advocate for the authorization of alternative models of oral health providers.**
  - Increased availability and utilization of new types of dental health providers can increase the number of entry points into a dental office and the availability of important preventive services. While controversial among some stakeholders, the concept and success of mid-level providers is well accepted in the medical community, and increasingly cited in literature as an important next step in increasing access to care for underserved populations in need of oral health care. Notably, both of these models include a provision requiring the mid-level providers to practice in underserved areas. In supporting the adoption of new models that would serve the Greater Kansas City area,

this is an important consideration, as recent proposals for mid-level providers in both Kansas and Missouri have not included that provision.

Recommendations on Improving Integrated Care and Enhancement of Existing Oral Health Care

The need for a better coordinated and integrated oral health system was an overarching theme in this assessment, as well as in the literature. Coordination and integration must be improved not only among oral health providers, but among medical providers. The importance of collaboration and multidisciplinary care teams was highlighted in the Institute of Medicine's vision for oral health in its 2011 report on increasing access to care for vulnerable populations. In *Returning the Mouth to the Body*, Grantmakers in Health proposes a continuum for better coordination of oral health care, ranging from fully integrated models to models that provide important cooperation and collaboration (3). Currently, fully operationally integrated care delivery models are rare due to the significant burdens of implementing dental and medical provider training, developing appropriate facilities, and creating a working management and financial infrastructure. However, a co-location model, which is a step removed from full integration, is a promising way to increase partnerships among dental and primary care providers without having medical and dental practices operationally integrated. Because the overall lack of coordination is such a significant issue, any movement towards integration can prove useful. Recommended approaches fall along different areas of the care integration spectrum.

Table 8: Overview of Practice Models

Model	Level of Integration
Full integration	High
Co-location	Moderate
Primary Care Provider Service Focus	Moderate
Cooperation and Collaboration	Low

DATA SOURCE: Adapted from Grantmakers in Health, *Returning the Mouth to the Body: Integrating Oral Health & Primary,* 2012

In Greater Kansas City, many people talked about the burden of having to go to multiple places to receive health care services and were confused about how to navigate the system. The provider survey indicated a need for improved collaboration between primary care and dental providers, as well as a better coordinated referral system. Importantly, survey data indicate a willingness and readiness for better integration among providers. A better coordinated or integrated dental and health care system can have far reaching effects not only on providing services, but also elevating the importance of oral health relative to total body health.

Some specific suggested approaches include:

Programmatic Approaches

- **Provide increased training for primary care practitioners to administer oral health services in order to increase access points for underserved patients**.
    - Patients are more likely to see their primary care provider than a dental provider, and so it is logical and widely promoted in literature that primary care providers should be equipped to provide basic oral health education and services. In 2008, the American Academy of Pediatrics published a policy statement in *Pediatrics* emphasizing the important role of pediatricians in primary dental care, and recommended specific

practices as well as increased collaboration with local dentists to assist in establishing a dental home.[29] While primary care providers in Greater Kansas City are permitted to provide these services, national and regional trends indicate that patients often do not receive any kind of dental care in a primary care setting.

Successful models that focus on primary care providers integrating oral health practices exist in other parts of the country. North Carolina's "Into the Mouths of Babes" program includes training for medical providers in oral evaluation, anticipatory guidance, application of fluoride varnish, and prophylaxis.[30] Providers receive a toolkit that includes patient education materials, tips on referring to Medicaid-enrolled dental providers, and supports them in the administration and billing for the program. An evaluation of this program showed that Medicaid enrolled children who received varnish via Into the Mouths of Babes had fewer caries-related treatments than other Medicaid enrolled children who did not receive the service. Similarly, in South Dakota, Delta Dental organized a training series for primary care providers that was led by dentists. These trainings not only educated medical providers about early signs of tooth decay and how to administer fluoride, but strengthened relationships among dental and medical providers.

In *Returning the Mouth to the Body*, Grantmakers in Health notes that several funders have supported utilization of the nationally recognized Smiles for Life curriculum to train various levels of primary care clinicians on preventive oral health education and service provision.[31] Utilizing this curriculum and/or supporting the development of a coordinated program similar to the models above could increase the availability of preventive services for Medicaid-enrolled children in Greater Kansas City.

- **Enhance the experience of patients and their families seeking care at existing dental facilities by aiming to address transportation barriers and other challenges.**
  - Those without a car—particularly those in the outlying counties—have difficulty accessing many services. Limited public transportation in the area exacerbate the challenges in reaching needed services. Some suggestions include expanding the existing bus service to areas throughout the region and extending the hours of operation to allow for getting to and from evening appointments, especially for those who work during the day and collaborating among agencies to purchase and share vans (or use existing vans) to provide transportation to services for those who do not have a car. Additionally, it may be possible to consider alternative transportation models. For example, the Independent Transportation Network (ITN America) is a program that provides rides to seniors and the visually impaired, charging affordable fares. An affiliate is located in Greater Kansas City.[32] Most rides are provided by volunteer drivers who are reimbursed for part of the ride and are provided transportation credits for the remainder which can be used by them for future rides, be transferred to friends/family, or be donated to a road scholarship program for low income riders. A similar type of program might consider partnering with the ITNnetwork to expand its target audience beyond seniors and encourage participation to low-income patients needing to get to oral health appointments.
  - One simpler issue to enhance families' experiences with existing dental services is to provide a better waiting room experience for children. Children are already nervous for dental appointments. Parents in focus groups noted that there were not sufficient books or toys in the waiting rooms at health centers or dental clinics. By improving the waiting

room environment for families, it would set a much more positive tone for the overall dental care experience.

System Level Approaches

- **Support health care settings in becoming better integrated and meeting specific needs of underserved populations**.
  - Increase capacity at existing clinics with co-located services. Some existing safety net clinics, FQHCs in particular, are playing an important role in reducing barriers to access of oral health services by utilizing a co-location model for provision of dental and health care services. Assessment data indicate that these types of facilities in Greater Kansas City are at capacity and include long waits for service. Because these existing models are successful, efforts should be made to increase their capacity to better meet community demand for services.
  - Improve the referral system between medical and dental providers via co-locating (even in private practices) and offering primary care practitioners access to a network of referring dentists. CMS notes that medical providers would be more inclined to conduct basic oral health work if there was an effective referral system in place.[33] Primary care practitioners could use the Points of Light or Insure Kids Now database as a starting point. Washington State has an Access to Baby and Child Dentistry program in which primary care providers connect with local agency staff who in turn refer children to dentists who have participated in their trainings.
  - Encourage providers to vary their hours of operation so that they are open some nights and weekends. For underserved populations who often do not receive paid sick time, having clinics open only during business hours is a significant barrier. The Oral Health Access Committee is working towards developing a more systemic approach to after-hours oral health care.
  - Build on the work of the Oral Health Access Committee examining how to most effectively divert patients who are seeking oral health care in the emergency department to primary care settings. The Oral Health Access Committee is already focused on this effort. Examples in the larger literature include having a Community Dental Health Coordinator (described in Workforce Recommendations) that could be employed in an emergency department to assist patients in finding appropriate, non-emergency care for dental pain. This could increase coordination of a referral system as well as provide another point of oral health education.
- **Encourage the incorporation of dental health educators, such as hygienists, as part of the larger medical team for specific at-risk population such as diabetics.**
  - Specific patients such as those with diabetes and heart disease have conditions that would be substantially worsened by poor oral health or periodontal disease. Having an oral health educator as part of the larger medical team, such as in partnership with the diabetes educator or community health worker, would help reduce complications and therefore medical costs, an important component in this health care environment of bundled payments. The DentaQuest Foundation has recently funded the Marshfield Clinic Research Foundation in Wisconsin to support a pilot program aimed at improving the oral health of diabetics through patient education, provider and staff education, and the development of health information technology.[34] Integrating dental educators into the larger medical care of specific patient groups is a natural fit for reducing complications and treating high-risk population in a holistic way.
- **Increase collaboration and cooperation with non-traditional, community care settings**.
  - The importance of place-based care, in child care, schools, and other community settings was highlighted in the assessment focus groups and stakeholder interviews.

While there are several community-based programs providing oral health preventive and treatment services, these types of programs are often subject to changes in the funding environment unless they can secure reasonable insurance reimbursement. Provision of oral health care in community settings via Head Starts, schools, or mobile services is an efficient way to provide services to organized groups of patients and these efforts should continue to be supported and/or expanded.

- Head Start's federal Dental Home Initiative is an important entry point into the oral health 'system' as Head Start staff must work to link children with comprehensive oral health care. Local clinics, like the Health Partnership of Johnson County, provide on-site care in settings including Head Start and schools, including education, screenings, cleanings, and restorative care. In MO, expanded function dental assistants are authorized to provide care in these community settings, and in Kansas, extended care permit hygienists can provide similar services in the community while under the supervision of a dentist.
- Schools, like Head Starts and other child care sites, are also important sites for the provision of oral health services and for sealants in particular. The Pew Charitable Trust, Community Preventive Services Task Force, CMS, and the ADA recommend the use of sealants as a highly effective preventive strategy from a quality and cost perspective. While Kansas has a school-based sealant program through the Department of Health and Environment, Missouri is only one of four states in the country without a comprehensive statewide program. Working with partners at the state level to advocate for state funding to be allocated for a school sealant program in Missouri may be one step. Recognizing the importance of dental sealants, the Pew Center on the States issued a 2013 report grading each state in performance on providing dental sealants – with Kansas receiving a C grade, and Missouri a D.[35]
- It is important that community settings have communication and integration within the larger referral system. In the assessment, providers expressed frustration about providing services to children in community settings but not having a clear route for referral for children who needed follow-up care. Ensuring that community providers can clearly identify appropriate facilities for follow-up care for their patients with more complicated cases is critical for promoting the continuum of care.

Policy Approaches

- **Support regional and/or national advocacy work to integrate medical and dental billing codes.**
    - In a long-term move towards full integration, the completely different billing and coding system required of medical and dental providers creates a significant barrier to full operational integration. One first step would be to join or convene advocacy groups to support policy change for this integration.

Recommendations on Financing

Improving financing for both preventive and restorative oral health services is among the highest priorities for improving the availability of dental care to underserved populations. Although they would have a profound impact on the local population in Greater Kansas City, financing recommendations rely on policy changes at a state level. The Institute of Medicine highlights the lack of comprehensive dental coverage as a major barrier to accessing and utilizing care. Similarly, Grantmakers in Health identify the need for finance reform as a significant barrier in the provision of services and integration of care and note several philanthropic organizations that have worked to improve state policy around reimbursements. A lack of non-emergency dental coverage for adults on Medicaid emerged as an overarching theme in this assessment, and compounds other barriers to adults receiving care. For

example, adults' lack of entry points into the dental health system exacerbates the misperception that oral health is not as important as overall health, and a robust referral system between primary and dental care providers would do little to help adults if adults are not able to pay for services. Although Medicaid enrolled children have comprehensive insurance, financing issues, including a lack of approval and financing for alternate providers, as well as low reimbursement rates, prevents parents from seeking appropriate care for their children.

In Greater Kansas City, adults from the underserved population are largely not getting the care that they need, and Medicaid enrolled children often do not receive comprehensive preventive services despite having coverage. Reinstating adult dental coverage, expanding the types of dental care providers available, as well as increasing reimbursement rates would play an enormous role in increasing utilization of care among those in need of services. As Medicaid financing is a state rather than local function, strong support of state advocacy organizations like Oral Health Kansas and the Missouri Oral Health Coalition is key to improving conditions for those living in Greater Kansas City.

Some specific suggested approaches are:

Policy Approaches

- **Advocate to increase Medicaid reimbursement rates**.
    - Low reimbursement rates were cited by providers in the Greater Kansas City region as the biggest barrier to providing services to the Medicaid population – a conclusion well supported in the literature. One of CMS's key strategies for improving oral health care for children is for states to increase Medicaid reimbursement rates as a mechanism to form and maintain adequate provider networks – at least to the point where providers can break even.[36]
- **Encourage Medicaid to reimburse a wide range of providers.**
    - This recommendation is in support of workforce development efforts described above. Not only do state dental boards need to permit the creation of new provider models, but state legislatures must approve them and allow for state Medicaid programs to reimburse for their services.
- **Support instituting comprehensive oral health coverage for adult Medicaid population by developing a business case to be used for advocacy efforts.**
    - Again, when state Medicaid programs do not provide a comprehensive dental benefit for adults, there is an enormous barrier to patients seeking care and providers treating adults. This results in utilization of the emergency department and other safety net settings for what should be routine and/or preventive oral health care. Because of the significant costs to the health care system associated with the provision of dental-related emergency services and treatment of advanced dental disease (v. prevention), a business case for coverage could help move the policy needle. Oral health stakeholders could collaborate on return on investment studies for providing adult dental coverage and produce a white paper or business case that can be utilized as an advocacy tool with KanCare, MO HealthNet, and decision makers in the state legislatures.

Numerous services, agencies, and organizations are currently working in Greater Kansas City to address oral health issues. From discussions with stakeholders from a range of different sectors, it is clear that there are various challenges to both individual patients and providers as well as the oral health system as a whole. While these challenges are great, there are existing individuals and groups working on these

issues locally and statewide. However, efforts are fragmented, uncoordinated, and insufficient to meet the needs of the uninsured and medically underserved. There was strong interest for oral health to be addressed via a more strategic, coordinated way across the oral health system- from advocacy for comprehensive Medicaid dental coverage for adults and increasing the number of providers accepting Medicaid patients to establishing a Community Dental Health Coordinator program and supporting community/place-based oral health services. Overall, participants in this assessment recognize the solid foundation of Greater Kansas City's oral health system and look forward to the entire system moving forward in an innovative, collaborative, and comprehensive approach toward addressing the oral health issues of the region.

APPENDIX A: List of Organizations Engaged

- Cabot Westside Clinic
- Cass County Dental Clinic
- Children's Mercy Hospital
- Delta Dental
- Health Care Collaborative of Rural Missouri
- Health Partnership of Johnson County
- Hope Network of Raytown
- Independence School District
- Kansas City, MO Health Department
- Mid-America Regional Council's Regional Health Care Initiative
- Missouri Coalition for Oral Health
- Oral Health Kansas
- REACH Healthcare Foundation
- Samuel U. Rodgers Health Centers
- Seton Center
- Stand Up Blue Springs
- Swope Health Services
- Truman Medical Center
- University of Missouri Kansas City School of Dentistry
- University of Missouri Kansas City School of Medicine

APPENDIX B: Interview and Focus Group Guides

Health Care Foundation of Greater Kansas City
Greater Kansas City Oral Health Assessment
Key Informant Interview Guide
Health Resources in Action

[NOTE: QUESTIONS FOR THE INTERVIEW GUIDE ARE INTENDED TO SERVE AS A GUIDE, NOT A SCRIPT.]

I. BACKGROUND

- Hi, my name is __________ and I am with Health Resources in Action, a non-profit public health organization working with the Health Care Foundation of Greater Kansas City. Thank you for taking the time to speak with me today.

- The Health Care Foundation of Greater Kansas City is undertaking a comprehensive study on the oral health system in the region to gain a greater understanding of the related needs and services in the area, how these needs are currently being addressed, and opportunities for addressing these needs more effectively. This assessment study is specifically focusing on the geographic area of Jackson, Cass, and Lafayette Counties in Missouri, Johnson, Allen, and Wyandotte Counties in Kansas, as well as the city of Kansas City, Missouri. As part of this process, we are having discussions like these with oral health care providers, government officials, educational leaders, insurers, staff from community based organizations, and medically underserved community residents. We are interested in hearing people's feedback on the strengths, weaknesses, and needs around oral health and suggestions for the future.

- We are conducting interviews—as well as an online survey—with leaders and providers in the six county area as well as focus groups with residents to understand different people's perspectives on these important issues. We greatly appreciate your feedback, insight, and honesty.

- Our interview will last about ____ minutes [EXPECTED RANGE FROM 30-60 MINUTES, DEPENDING ON INTERVIEWEE]. After all of the interview and focus group discussions are completed, we will be writing a summary report of the general themes that have emerged during the discussions. We will not include any names or identifying information in that report. All names and responses will remain confidential, and study participation will have no bearing on future funding decisions. Nothing sensitive that you say here will be connected directly to you in our report.

- Any questions before we begin our introductions and discussion?

II. THEIR AGENCY/ORGANIZATION (5 minutes)

1. Can you tell me a bit about your institution/practice/organization? [TAILOR PROBES DEPENDING ON AFFILIATION; FOR FUTURE QUESTIONS, USE "COMMUNITY" OR "REGION" DEPENDING ON SCOPE OF THEIR WORK]

    a. [PROBE ON ORGANIZATION: What is your organization's mission/programs/services? What communities do you work in? Who are the main clients/audiences for your programs?]

        i. What partners do you collaborate with in providing your services (particularly oral health services)?

ii. What are some of the biggest challenges your organization faces in providing these services in the community?

III. COMMUNITY AND RESIDENT/PATIENT ISSUES

2. How would you describe the community which your organization serves?

   a. What do you consider to be the community's strongest assets? What are some of its biggest concerns/issues in general in the community?

3. What do you think are the most pressing overall health concerns in the community? Why? [PROBE ON SPECIFICS]

   a. Where does oral health fall in this list?

      i. What oral health issues are most of concern in the community?

      ii. What populations (age, race, gender, income/education, etc.) do you see as being most affected by these?

4. Why do you think you are seeing these oral health issues in the community? [PROBE ON UNDERLYING ISSUES]

5. What are residents' biggest challenges to addressing their oral health needs? [PROBE ON RANGE OF CHALLENGES: E.g., Various barriers to accessing treatment and services, socioeconomic factors, lack of services available, social/community norms, lack of knowledge about importance of oral health, etc.]

   a. [PROBE IF NOT MENTIONED IN Q5] What are residents' biggest barriers to accessing oral health care services? [PROBE FOR BOTH PREVENTATIVE/WELLNESS VISITS AND FOR SPECIFIC TREATMENT]

      i. Are these issues different for adults vs. children? [IF YES, how so?]

   b. What do you think needs to happen in your community to help residents overcome these challenges?

IV. ORAL HEALTH SYSTEM/LANDSCAPE

6. How would you describe the oral health services/system in the area? Can you tell me about the services in the area – what's available, how services are delivered and paid for, who's providing them, etc. [PROBE WHEN APPROPRIATE ON PREVENTIVE AND TREATMENT SERVICES, INTEGRATION WITH PRIMARY CARE, WORKFORCE, SCHOOL-BASED SERVICES, REFERRAL NETWORK, ETC.]

   a. What do you see as the strengths of the region's oral health services?

   b. What do you see as the limitations?

   c. What changes have you seen in the oral health system over the past ten years? [PROBE ON KEY ACCOMPLISHMENTS]

7. What are the biggest challenges for those that provide oral health care in the region? [PROBE ON REIMBURSEMENT ISSUES, WORKFORCE, PATIENT BARRIERS, REFERRAL SYSTEM, ETC.]

    a. What do you see as the ways to address these challenges?

8. In what types of settings do oral health services for the traditionally medically underserved generally take place in the region? [PROBE ON SETTINGS AND DIFFERENCES IN PREVENTATIVE CARE VS. TREATMENT: private dental office, safety net hospital, schools, FQHCs, community based organizations, etc.]

    a. Who provides these services for this population? [PROBE ON TYPE OF ORGAINZATION AND PROVIDER]

    b. Where do you think they should take place? [PROBE ON SETTINGS]

    c. Who do you think should be involved in providing oral health care in the region? [PROBE ON WORKFORCE]

9. To what extent do you think oral health is integrated into general primary care in the region? How about into behavioral health care?

    a. In your opinion, is this integration what it should be? Why/why not?

        i. What would you like to see?

        ii. What are the challenges to integrating oral health into primary care? Behavioral health?

            1. What do you think could be done differently to facilitate greater integration? [IF NOT BROUGHT UP, PROBE SPECIFICALLY HOW THIS MODEL COULD BE REIMBURSED]

10. I'd like you to think about the oral health systems in the region –from workforce to care integration to referral networks to the oral health service infrastructure. When you think about these systems level issues in the region, what changes would you like to see made? [PROBE ON CONNECTIONS BETWEEN DIFFERENT PARTS OF THE SYSTEM- COLLABORATION/REFERRALS/INTEGRATION]

    a. What do you think is most important to focus on—that would have the biggest impact on the oral health system in the region?

        i. What do you think needs to happen to take the next steps towards this goal?

        ii. Who needs to be involved? [PROBE ON TYPES OF STAKEHOLDERS NEEDED FOR INVOLVEMENT]

        iii. Are there efforts currently in the Greater Kansas City region focusing on these systems issues? Do you see opportunities to leverage existing initiatives or collaborations? What specifically? [PROBE ON CONNECTIONS/COLLABORATIONS ACROSS THE SYSTEM AND WHAT COULD BE BUILT ON]

        iv. Are there other places that you know of who are doing this well?

V. VISION OF ORAL HEALTH

11. I'd like you to think ahead about the future of the region's health. When you think about the region 3-5 years from now, what changes would you like to see in the overall health of the region? What is your vision for the future?

    a. What is your broad vision for the future related to oral health?

VI. CLOSING

Thank you so much for your time. That's it for my questions. Is there anything else that you would like to mention that we didn't discuss today?

We greatly appreciate you sharing your perspective today. In addition to these interview discussions, we also will be conducting focus groups with residents, administering an online survey for oral health care providers, and reviewing the existing health and health care services data in the region. This information will be synthesized into the oral health assessment report which will be disseminated in early 2014 and will be shared with stakeholders and through the Foundation's website.

Thank you again.

Health Care Foundation of Greater Kansas City
Greater Kansas City Oral Health Assessment
Focus Group Guide
Health Resources in Action

[NOTE: QUESTIONS IN THE FOCUS GROUP GUIDE ARE INTENDED TO SERVE AS A GUIDE, NOT A SCRIPT.]

I. BACKGROUND (10 minutes)

- Thank you for taking the time to speak with me today. My name is __________ and I am with Health Resources in Action, a non-profit public health organization working with the Health Care Foundation of Greater Kansas City.

- The Health Care Foundation provides money to non-profits to promote quality health for uninsured and underinsured people in Greater Kansas City. The Foundation is doing a study about dental health – what are the needs, what and where are the existing services, where are the gaps in services, and how can the community's dental health needs be better addressed. The Foundation is interested in this information in order to decide what efforts it should fund in the future.

- Has anyone here been part of a focus group before? You are here because we want to hear your opinions. I want everyone to know there are no right or wrong answers during our discussion. Please feel free to share your opinions, both positive and negative.

- As part of this study, we are having discussions like the one we'll have tonight with people from around the Greater Kansas City area. We are interested in hearing different people's opinions on the strengths and weaknesses, and needs around dental health and suggestions for the future. After all of the groups are done, we will be writing a report of the general themes that have come up. In that report, we might provide some general information on what we discussed tonight, but we will not include any names or identifying information. Your responses will be strictly confidential

- Lastly, please turn off your cell phones, beepers, or pagers or at least put them on vibrate mode. The group will last only about 80-90 minutes. If you need to go to the restroom during the discussion, please feel free to leave, but we'd appreciate it if you would go one at a time.

- Any questions before we begin our introductions and discussion?

II. INTRODUCTIONS (5 minutes)

Now, first let's spend a little time getting to know one another. Let's go around the table and introduce ourselves. Please tell me: 1) Your first name; 2) what city or town you live in; and 3) something about yourself you'd like to share– such as how many children you have or what activities you like to do in your spare time. [AFTER ALL PARTICIPANTS INTRODUCE THEMSELVES, MODERATOR TO ANSWER INTRO QUESTIONS]

III. COMMUNITY ISSUES (5-10 minutes)

1. Tonight, we're going to be talking a lot about the community that you live in. How would you describe your community?

    a. When I say the words, "your community" – what comes to mind?

2. If someone was thinking about moving into your community, what would you say are some of its biggest strengths or the most positive things about it? [PROBE ON COMMUNITY AND ORGANIZATIONAL STRENGTHS/ASSETS]

    a. Overall, what are some of the biggest problems or concerns in your community? [PROBE ON ISSUES IF NEEDED – HEALTH, ECONOMIC, SOCIAL, SAFETY, ETC.]

3. What do you think are the most pressing health concerns in your community?

    a. How have these health issues affected your community? In what way?

IV. PERCEPTIONS OF ORAL HEALTH (25 minutes)

4. When I say that we are talking about "oral health" or "dental health" as a concern, what does that mean to you? What issues come to mind when you hear that phrase?

5. When you think about all the issues that are a concern for your community or you personally, where does oral health or dental health fall on the list?

    a. Why did you place it there on the list? [PROBE WHY ORAL HEALTH WOULD BE HIGH/NOT HIGH ON THE LIST?]

        i. [PROBE IF NEEDED] What is it about oral health that makes it more/less important to you compared to other health issues?

    b. [ASK/PROBE OF PARENTS] Does that differ for you vs. your children? When you think about your children's health, how much of a concern is oral health? Where does that fall on the list? Why?

        i. At what age do you think it's important for a child to see a dentist or dental provider?

    c. Where do you receive information about oral health/the importance of taking care of your teeth, gums, and mouth? [PROBE ON WHERE THEY RECEIVE INFO ABOUT PREVENTION OR IMPORTANCE OF GOOD ORAL HEALTH FOR THEM OR THEIR CHILDREN]

V. ORAL HEALTH SERVICES (30-35 minutes)

6. I'd like to ask specifically about health care in your community. If you or your family had a general health issue that needed a doctor's care or prescription medicine – such as the flu or a child's ear infection– where would you go for this type of health care? [PROBE IF THEY GO TO PRIVATE PRACTICE, COMMUNITY HEALTH CLINIC, E/R, ETC]

    a. Has your doctor or general health care provider ever talked with your about dental issues? How about your children's dental health?

        i. [IF YES] When/in what situation? What did he/she bring up?

7. What about if you had a dental issue, an issue with your mouth or teeth – such as tooth pain – where would you go for this type of care? [PROBE IF THEY GO TO PRIVATE PRACTICE, DENTAL CLINIC, E/R, ETC]

a. When do you see a health care provider for dental issues? Do you see someone for regular dental/teeth cleaning or is it only when you have a problem?

   i. [IF ONLY HAVE A PROBLEM] At what point is a dental problem so bad that you see a health care provider for it? [PROBE ON AT WHAT POINT IS THE PAIN OR IS IT AN AESTHETIC ISSUE]

b. [PROBE FOR PARENTS] Is this the similar situation for your children or is it different? When do they see a health care provider for dental issues?

8. Do you see the same provider every time you get care for care for your teeth, gums, or mouth? [PROBE FOR DENTAL HOME/REGULAR ORAL HEALTH CARE PROVIDER]

   a. [IF YES, PROBE ON SETTING] Where do you generally see this person?

   b. [PROBE FOR PARENTS] How about your children? Do they have one person that they generally see? In what type of setting?

9. What do you think about the dental services in your community? [PROBE ON POSITIVE AND NEGATIVE ASPECTS OF THE HEALTH CARE SERVICES]

   a. How happy have you been with the dental care you have received? Why/why not? [PROBE ON SATISFACTION, PERCEPTION OF QUALITY, ETC.]

   b. [PROBE FOR PARENTS] What do you think of the dental services for children in the area?

10. Many of you mentioned that you don't have one person you see for your dental needs or you don't see a dental provider for check-ups. Why not? [PROBE FOR BOTH ATTITUDES – E.g., scared, don't see dental issues as important –AND BARRIERS TO CARE – more probes on question below]

    a. What are some of the biggest challenges in getting dental care? Tell me about some of these experiences.

       i. [PROBE ON SPECIFICS: FINDING A DENTIST, INSURANCE COVERAGE, FINDING AN APPOINTMENT AT A CONVENIENT TIME, TRANSPORTATION, ETC.]

    b. [PROBE FOR PARENTS] Are these challenges different for whether you are seeking dental care for you vs. your children? How?

11. [NAME BARRIER] was mentioned as something that made it difficult to get dental care. What do you think would help so that people don't experience the same type of problem that you did in getting care?

    a. What do you think is needed in the community to make it easier to get dental care? [REPEAT FOR OTHER BARRIERS]

       i. [PROBE IF NOT YET MENTIONED] People might receive their dental care in different types of settings – from dental offices to health clinics to schools. Where would you like to receive your/your family's dental care? What would

make the most sense to you? [PROBE ON SETTINGS – MOST APPROPRIATE, MOST CONVENIENT, ETC.]

VI. VISION OF COMMUNITY (5 minutes)

12. We have spent a lot of time talking about care for your teeth, mouth and gums and what's working and not working for you, your family, and community. Looking ahead 3 to 5 years, what would a healthy community look like to you? [PROBE: Would it include easier access to dental care/care for your mouth, teeth, and gums?]

    a. When you think about the community 3-5 years from now, what would you like to see as far as your community's health –and specifically dental health? What is your vision for the future?

        i. What do you think needs to happen in the community to make this vision a reality?

VII. CLOSING (2 minutes)

Thank you so much for your time. That's it for my questions. Is there anything else that you would like to mention that we didn't discuss today?

The report will be completed and made public in 2014 by the Health Care Foundation of Greater Kansas City. [INSTRUCTIONS ON HOW TO RECEIVE A COPY]

Thank you again. Have a good afternoon/evening.

[MODERATOR WILL ASK PARTICIPANTS TO SIGN STIPEND RECEIPT IN ORDER TO RECEIVE $25 CASH]

APPENDIX C: Provider and Stakeholder Survey

Health Care Foundation of Greater Kansas City
Greater Kansas City Dental Health Assessment
Provider and Stakeholder Survey
Health Resources in Action

NOTE – THIS SURVEY INCLUDES THE CONTENT OF THE QUESTION. THE ACTUAL SURVEY WAS ON-LINE AND FORMATTED AS SUCH.

We are requesting a few moments of your time in completing this important survey.

The Health Care Foundation of Greater Kansas City is conducting a study on the dental health system in the region to understand the related needs and services in the area, how these needs are currently being addressed, and opportunities to expand on addressing these needs.

As part of this effort, we are conducting this survey with providers and other stakeholders involved in dental health in the Greater Kansas City region. We would greatly appreciate 5-7 minutes of your time to complete this anonymous survey. We would greatly appreciate your candid responses so that we can accurately assess these issues. The results of the survey will be reported as group summaries. Your responses are anonymous, and the anonymity will be maintained through this project.

After completing this survey, you will have an opportunity to enter a drawing where 3 participants will be selected for a $100 gift card to purchase oral health patient educational materials. We will request contact information for entry into the drawing (if you choose to participate), but this information will not be connected to your survey responses.

Thank you again for your participation.

1. Which best describes your role/position? (check all that apply)
- General Dentist
- Dentist specialist (e.g., dental surgeon, endodontist)
- Dental hygienist
- Dental assistant
- Primary care medical provider
- Pediatrician
- School nurse
- Other health care provider
- Payer/in insurance industry
- Instructor of health care students (dental or medical)
- Public health program planner (not direct service provider)
- Other (please specify)

2. Where do you primarily work?
- Kansas City, MO
- Jackson County, MO (non-KCMO)
- Cass County, MO
- Lafayette County, MO
- Johnson County, KS
- Wyandotte County, KS
- Other (please specify)

THE QUESTIONS BELOW ARE ONLY FOR HEALTH CARE PROVIDERS. IF YOU ARE NOT A DIRECT PROVIDER OF HEALTH CARE SERVICES, PLEASE SKIP TO QUESTION 7.

3. If you are a general health or dental health care provider, in what setting do you practice? (check all that apply)

- o Private practice
- o Federally qualified health center or other community health center
- o Other private dental clinic (faith-based, commercial chain)
- o School (dental school, school-based clinic)
- o Non-profit/public hospital
- o Private hospital
- o Other setting (homeless shelter, Head Start) (please specify)

4. If you are a health care provider, how long have been practicing?

- o Less than 1 year
- o 1 year to less than 5 years
- o 5 years to less than 10 years
- o 10 years to less than 20 years
- o 20 or more years

5. If you are a health care provider, where do the majority of your patients live? (check all that apply)

- o Kansas City, MO
- o Jackson County, MO (non-KCMO)
- o Cass County, MO
- o Lafayette County, MO
- o Johnson County, KS
- o Wyandotte County, KS
- o Other (please specify)

6. Do you accept any of the following government-sponsored insurance plans? (check all that apply)

- o Medicaid
- o Medicare
- o CHIP
- o MO Health Net
- o MC+
- o KanCare
- o MediKan
- o PACE
- o Other (please specify): ______________________

7. Please indicate how much you agree or disagree with the following statements.

	Strongly disagree	Disagree	Agree	Strongly agree	Not sure/Not applicable
We have enough dental health providers in my community to meet low-income patients' needs.	O	O	O	O	O
Where dental health providers are located in my community is where the most need is.	O	O	O	O	O
Medicaid and similar government-sponsored insurance plans reimburse dental health services at a rate that covers their costs.	O	O	O	O	O
Private insurance plans reimburse dental health services at a rate that covers their costs.					
It is not cost-effective for dental health providers to accept patients with Medicaid.	O	O	O	O	O

My community provides high quality dental health care for its low-income populations.	O	O	O	O	O
The dental health care system in my community emphasizes prevention.	O	O	O	O	O
The dental health care system in my community is hard for low-income patients to navigate.	O	O	O	O	O
It is important that dental health services are provided in community settings such as schools or homeless shelters.	O	O	O	O	O
There is good coordination and communication between the primary care and dental health care communities in my community.	O	O	O	O	O
It is appropriate for alternate providers such as mid-level providers or other health professionals to expand the dental health care services they provide.	O	O	O	O	O
There is too much liability of having mid-level providers or other health professionals expand the dental health care services they provide.	O	O	O	O	O
Mid-level providers are adequately trained to meet the needs of the population in my community.	O	O	O	O	O
I think the future implementation of the Affordable Care Act will help us better meet the dental health needs of low-income patients.	O	O	O	O	O

8. On a scale of 1-5, how much do you consider each of these a challenge for <u>low-income **ADULT** patients</u> seeking dental health care in your community?

	1 = Not a challenge at all to seeking care	2	3	4	5 = A great challenge to seeking care
Lack of adequate insurance coverage	O	O	O	O	O
Identifying dental health providers in general	O	O	O	O	O
Finding providers who will take patients' insurance	O	O	O	O	O
Finding dental health specialists (e.g., endodontists)	O	O	O	O	O
Cost of care	O	O	O	O	O
Transportation to services	O	O	O	O	O
Finding an appointment available at a convenient time (e.g., evenings, weekend)	O	O	O	O	O
Having a convenient place in their community to access dental health care	O	O	O	O	O
Competing challenges of life (e.g., other health problems, can't take time off from work)	O	O	O	O	O
Not seeing dental health as a priority	O	O	O	O	O
Not seeing preventive dental health as a priority	O	O	O	O	O
Language barriers	O	O	O	O	O
Other (please specify):	O	O	O	O	O

9. On a scale of 1-5, how much do you consider each of these a challenge for **CHILDREN** of low-income families seeking dental health care in your community?

	1 = Not a challenge at all to seeking care	2	3	4	5 = A great challenge to seeking care
Lack of adequate insurance coverage	O	O	O	O	O
Identifying dental health providers in general	O	O	O	O	O
Finding providers who will take patients' insurance	O	O	O	O	O
Finding dental health specialists (e.g., endodontists)	O	O	O	O	O
Cost of care	O	O	O	O	O
Transportation to services	O	O	O	O	O
Finding an appointment available at a convenient time (e.g., evenings, weekend)	O	O	O	O	O
Having a convenient place in their community to access dental health care	O	O	O	O	O
Competing challenges of life for parents (e.g., other health problems, can't take time off from work)	O	O	O	O	O
Not seeing dental health as a priority	O	O	O	O	O
Language barriers	O	O	O	O	O
Other (please specify):	O	O	O	O	O

10. On a scale of 1-5, how much do you consider each of these a challenge for providers of dental health care for treating low-income patients in your community?

	1 = Not a challenge at all to providing care	2	3	4	5 = A great challenge to providing care
Inadequate reimbursement for care by non-Medicaid insurers	O	O	O	O	O
Inadequate reimbursement for care by Medicaid	O	O	O	O	O
Reimbursement for care by patients who pay out of pocket	O	O	O	O	O
Difficulty securing Medicaid payments/ administrative burden of accepting Medicaid	O	O	O	O	O
High demand for dental health services	O	O	O	O	O
Patient knowledge and behaviors of good dental health practice	O	O	O	O	O
Patients compliance/not keeping appointments	O	O	O	O	O
Appropriate training for providers in public health dentistry	O	O	O	O	O
Collaboration between primary care providers and dental health providers	O	O	O	O	O
Collaboration between safety net system and private practice	O	O	O	O	O
The referral system for dental health services in the area	O	O	O	O	O

11. On a scale of 1-5, how much do you consider each of these a strength of the dental health system in your community?

	1 = Not a strength at all	2	3	4	5 = A great strength
Quality of dental health care	O	O	O	O	O
Number of dental health providers	O	O	O	O	O
Types of providers in practice (dentists, dental hygienists, etc.)	O	O	O	O	O
Match between where dental health providers are located and where there is need	O	O	O	O	O
Range of services available (prevention, treatment, surgery, etc.)	O	O	O	O	O
Safety net system for low-income patients	O	O	O	O	O
Collaboration between primary care providers and dental health providers	O	O	O	O	O
Collaboration between safety net system and private practice	O	O	O	O	O
The referral system for dental health services in the area	O	O	O	O	O
Services and programs focused on prevention/dental health wellness	O	O	O	O	O

12. When you refer low-income patients to other practitioners for their dental health needs, to whom do you generally refer them? (please check all that apply)
    - o Private general dental provider
    - o Private dental specialist
    - o Federally qualified health center or other community health center
    - o Other private dental clinic (faith-based, commercial chain)
    - o Non-profit/public hospital
    - o Private hospital
    - o Other (please specify): ________________________________

13. Please rank the following as low, medium, or high priorities to address in the future to improve the dental health system in the region?

	Low priority	Medium priority	High Priority
Increased integration between primary care and dental health	O	O	O
Increased reimbursement rates for low-income patients	O	O	O
More training for providers in public health dentistry	O	O	O
Expanded settings for dental health (e.g., schools, homeless shelters, Head Start, mobile clinics)	O	O	O
Increased opportunities for dental students to practice in safety net clinics	O	O	O
Increased emphasis on preventive dental health care	O	O	O
Education to the public about the importance of dental health and connection to overall health	O	O	O
Increased priority of dental health in overall community health initiatives	O	O	O
More reliable or expanded public transportation options for patients to get to services	O	O	O
Expanded hours for dental health services (weekend, evening)	O	O	O
More coordinated referral system for dental health services	O	O	O

More dental health providers working within the safety net system	O	O	O
Training and utilization of mid-level providers	O	O	O
Other (please specify):	O	O	O

14. What dental health initiatives or models have worked well in your community or in other communities that should be expanded upon or replicated in the region?

____

____

____

____

15. Do you have any other comments, suggestions, or feedback related to the dental health system in the region that you would like to provide?

____

____

____

____

Thank you!

APPENDIX D: List of Oral Health Treatment Safety Net Services

Below is a listing of treatment providers and facilities in the Greater Kansas City area that focus on treating low-income patients.

Cabot Westside Medical and Dental Center
Location- Kansas City, MO
Services- provides oral health care services for adults and children.

Cass County Dental Clinic
Location- Belton, MO
Services- provides oral health care services for children

Children's Mercy Pediatric and Specialty Care
Location- Kansas City, MO
Services- provides oral health care services for children

Community Health Center of Southeast Kansas
Location- Iola, KS
Services- provides oral health care services for adults and children

Health Partnership Clinic
Location- Olathe, KS and Overland Park, KS
Services- provides oral health care services for adults and children

Indian Springs Dental Clinic
Location- Kansas City, KS
Services- provides oral health care services for children

Kansas City CARE Clinic-Prospect
Location- Kansas City, MO
Services- provides oral health care services for adults

Live Well Health & Wellness Center of Waverly
Location- Waverly, MO
Services- provides oral health care services for adults and children

Mercy & Truth Medical Missions
Location- Raytown, MO
Services- provides oral health care services for adults

Samuel U. Rodgers Health Center- dental clinic
Location- Independence, MO
Services- provides oral health care services for adults and children

Samuel U. Rodgers Health Center- J.A. Rodgers Family Dental
Location- Kansas City, MO
Services- provides oral health care services for children

Samuel U. Rodgers Health Center- Lafayette

Location- Lexington, MO
Services- provides oral health care services for adults and children

Samuel U. Rodgers Health Center- Downtown Campus
Location- Kansas City, MO
Services- provides oral health care services for adults and children

Seton Center
Location- Kansas City, MO
Services- provides oral health care services for adults

Swope Health Northland
Location- Riverside, MO
Services- provides oral health care services for adults and children

Swope Health Independence
Location- Independence, MO
Services- provides oral health care services for adults and children

Swope Health Central
Location- Kansas City, MO
Services- provides oral health care services for adults and children

Swope Health Wyandotte Dental Clinic
Location- Kansas City, KS
Services- provides oral health care services for adults and children

University of Missouri- Kansas City School of Dentistry Clinic
Location- Kansas City, MO
Services- provides oral health care services for adults and children

Truman Medical Center Lakewood
Location- Kansas City, MO
Services- provides oral health care services for adults and children

Non-Safety Net Providers
Corporate dental clinic chains, such as Small Smiles and Gentle Dental, also provide oral health treatment services to children and adults in Greater Kansas City. There are also numerous private dental providers who provide treatment services, but do not accept Medicaid patients.

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