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Interviews of Oral Health Stakeholders in Michigan

CHWS
Center for Health Workforce Studies

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Interviews of Oral Health Stakeholders in Michigan

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PREFACE

This report summarizes the common themes derived from personal telephone interviews with 25 oral health stakeholders in Michigan, based on information compiled by the Center for Health Workforce Studies. The interviews were completed between February and April 2015. The objective of the research was to identify gaps in access and barriers to oral health services.

The interviews and this report were conducted and prepared by the Center for Health Workforce Studies (CHWS), by Margaret Langelier. Funding for this report was provided by the Pew Charitable Trusts.

CHWS, established in 1996, is based at the School of Public Health, University at Albany, State University of New York (SUNY). The mission of CHWS is to provide timely, accurate data and conduct policy-relevant research about the health workforce. The research conducted by CHWS supports and promotes health workforce planning and policymaking at local, regional, state, and national levels. Today, the CHWS is a national leader in the field of health workforce studies. CHWS has been designated as the Oral Health Workforce Research Center under a cooperative agreement with the National Center for Health Workforce Analysis at the Health Resources and Services Administration.

The views expressed in this report are those of CHWS and do not necessarily represent positions or policies of the School of Public Health, University at Albany, SUNY, the New York State Education Department, or the New York Department of Health.

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Executive Summary

STUDY BACKGROUND

The Center for Health Workforce Studies (the Center) at the School of Public Health, University at Albany, SUNY conducted a study to describe the oral health status of the population of Michigan. The research included an extensive review of literature describing oral health in Michigan and analysis of relevant state and national surveillance data.

The goals of the research were to:

- describe rates of oral disease in the state's population,
- determine levels of oral health service utilization,
- understand disparities in oral health status among population cohorts, and
- define gaps in oral health service availability.

A background report was compiled to describe the literature review and the secondary data analysis. Project activities also included interviews of oral health stakeholders in Michigan. This report summarizes common themes derived from the interviews.

In the period between February and April 2015, Center staff conducted interviews with 25 oral health stakeholders in Michigan. Interview participants were identified by project advisers and other interview participants. Informants were selected based on their interest in improving oral health service delivery in the state. Those interviewed included a broad cross-section of dental professionals, including both dentists and dental hygienists, executive staff of safety-net provider organizations, advocates for children and families, dental insurers, educators from oral health professions education programs, clinic administrators, and others. Informants were located in various regions of Michigan, including the more rural areas of the Upper Peninsula, and major urban areas, including Detroit and Flint.

The telephone interviews lasted between 40 and 90 minutes and were arranged and conducted at the convenience of the participants. Although an interview protocol was developed and shared with informants, the protocol was used only as a guide to the discussion. This unstructured approach allowed informants to talk about topics related to their particular perspective on oral health access issues in the state.

Informants were assured of confidentiality with no direct attribution of an individual's remarks within the report. Interview participants were advised that benchmark programs might be cited by name as examples of successful strategies to meet demand for oral health services in Michigan. The summaries that elaborate on the derived common themes in this report were based on informants' remarks and represent the opinions of individual participants. They do not necessarily reflect the opinion or attitudes

of their employers or the author of this report.

This executive summary is followed by a technical report that further elaborates common themes from the interviews. The interview protocol is included in this report as Appendix A. The organizational affiliations of informants are listed in Appendix B. This list was compiled to document the wide array and geographic diversity of organizations with an interest in oral health in Michigan.

COMMON THEMES

Although informants offered a variety of perspectives on oral health in Michigan, common themes emerged from the insights of those who participated in the interviews for this project. Informants frequently agreed that there are oral health disparities in Michigan. There was also unanimous agreement that effective strategies for improving oral health status require engagement of a broad spectrum of stakeholders, including individual patients, policymakers at the local, state, and federal levels, and oral health professionals and provider organizations. The interplay of geography, social factors, limited oral health literacy, and lack of resources complicate the design of appropriate interventions to achieve and sustain better oral health for the state's population. The following summarizes points of agreement and difference among interview participants. The common themes are further elaborated in the technical report that follows this summary.

ACCESS TO ORAL HEALTH SERVICES

Theme 1:
Despite resurgence in the state's economy and an increase in the percentage of the population with dental insurance in Michigan, oral health disparities persist.

Informants acknowledged the impact of the state's economy on the ability of the public sector to provide oral health benefits in public insurance or to support oral health programs. The state of the economy also limits or enables the ability of private employers to provide dental insurance benefits. The economic downturn that began in 2008 resulted in:

- the cutback of the adult dental benefit in the state Medicaid program,
- increased rates of joblessness in Michigan, with accompanying loss of health and dental insurance, and
- reductions in the quality and extent of health and dental benefits for those who remained employed.

By 2015 Michigan's economy had improved. The state had restored the adult dental benefit to its Medicaid program and had contracted managed care insurance providers to administer parts of the program. Also, many people were once again working in jobs that provided commercial health and dental insurance coverage. However, while economic resurgence in Michigan was thought to have enhanced access to oral health services, informants commented that not all people in the state had improved access. One informant described Michigan as the "land of haves and have nots."

Although there were many in Michigan with excellent insurance coverage and good union benefits enabling access to a wide array of oral health services in the private sector, informants voiced concern about subpopulations for whom access to oral health services continued to be tenuous. Subpopulations of common concern included those living in poverty (especially children), the confined elderly, pregnant women, underrepresented minority and immigrant populations, and those challenged by rurality.

Theme 2:
Michigan's diverse geography results in uneven distribution of oral health providers, particularly in rural areas of the state. In addition, poor neighborhoods in Michigan's cities often lack a sufficient supply of oral health providers willing to meet the needs of the population.

Michigan is a large state with both densely populated urban areas and sparsely populated rural regions. In the more populous areas of the state, supply of dental professionals on a per population basis appeared to be adequate. However, in the more sparsely populated regions, especially the Upper Peninsula, provider supply was very limited or, in some instances, nonexistent. One informant asserted that although every county in the state needed help to improve access to oral health services, some needed it more than others.

Although access to dental providers for rural residents was a concern of informants, there was equal concern for those who lived in inner-city neighborhoods in places such as Detroit and Flint. Informants commented that amid a seemingly plentiful supply of professional providers in these cities, opportunities for Medicaid enrollees to access oral health services were often scarce because many dental practices treated only patients who were commercially insured or who could afford to self-pay for services.

BARRIERS TO ORAL HEALTH

Theme 3:
Certain population groups in Michigan are at risk for poor oral health outcomes due to a complicated interplay of factors.

Informants identified at-risk populations as those in Michigan who were disadvantaged by lack of education, low socioeconomic status, poor health status, and/or remote geography, all of which limited their ability to access oral health services at needed levels. Underserved populations were described as residents of rural areas and inner cities, children (especially the very young), people with disabilities and special needs, the elderly (particularly those confined to home or elder care facilities), pregnant women, immigrants (both documented and undocumented), underrepresented minorities including Native Americans and those who are publicly insured, the uninsured, and the working poor. The 2 most commonly identified barriers to access to oral health services were lack of basic oral health literacy and financial issues, including lack of dental insurance and lower socioeconomic status.

Theme 4:
A low level of oral health literacy, particularly in underserved populations, is a major barrier to improved oral health outcomes.

Informants were thoughtful about knowledge of oral health motivating oral hygiene and care–seeking behaviors. Many commented that literacy about nutrition, oral hygiene, and oral disease was lacking in many populations and that poor outcomes reflect the low priority given to oral health. A common concern among those who participated in the interviews was the difficulty of engaging individuals with routine prevention services and the importance of personal oral hygiene. Familial beliefs and culture were cited as impacting oral health outcomes across generations.

Theme 5:
Relevant knowledge about the barriers to oral health services encountered by underserved populations is also lacking among providers, policymakers, and others.

Although many informants believed that the general population would benefit from better information about the importance of oral health to systemic well-being and the impact of neglectful behaviors and poor nutrition on oral integrity, many also remarked that lack of knowledge about the issues in oral health extends to even well-educated professionals.

In the opinion of informants, full integration of oral and physical health will only occur when physicians

give oral health screening the same priority as assessments for other chronic diseases. Informants also remarked that dentists in private practice need a fuller understanding of the very poor oral health status of populations who generally receive services in the safety net. Patients in private practice do not generally present with progressed untreated oral disease that is common among patients seeking care in the safety net. Therefore, private-practice dentists may not be aware of the extent of the unmet need in the population. Policymakers were cited as needing a better understanding of the impact of poor oral health outcomes on employability, absenteeism from school and work, and the ability of children to learn and about the systemic barriers to obtaining oral health services, including low funding for oral health in Medicaid.

Theme 6:
Barriers to oral health services include financial limitations, transportation issues, primary language other than English, and difficulty getting time from work to obtain services.

Stakeholders discussed the barriers encountered by patients that impact their ability to access oral health services, even when services are available. Informants cited the impact of the social determinants of health, especially persistent poverty on an individual's ability to obtain, maintain, and sustain good oral health. Informants identified the following issues as access barriers:

- culture impacts expectations about oral health outcomes and interest in obtaining oral health services;
- primary language influences the ability of individuals to not only find services but to understand and follow dental recommendations and treatment protocols;
- reliable and available transportation is a necessity for accessing the established delivery system for oral health services;
- having dental insurance enables patients to seek care; conversely, lack of dental insurance proves to be an important deterrent to obtaining services;
- the structure of minimum-wage jobs restricts patients because taking time from work is difficult and costly; and
- patients living at the economic margins and experiencing unstable housing or employment are often in crisis, and therefore give oral health a low priority on the hierarchy of needs.

Informants were clear that many patients experience multiple barriers to oral health services on an ongoing basis.

FACILITATORS TO ORAL HEALTH

Theme 7:
The conversion to managed care insurance for some Medicaid-eligible populations including children and the Medicaid-expansion population has been a positive strategy to increase access.

Michigan was a pioneer state in transitioning medical coverage in its Medicaid program from fee for service (FFS) to managed care. Informants were complimentary of the impact of the transition of the Medicaid dental benefit for children in 80 counties to the Healthy Kids Dental Program and of the embedded dental coverage in the Healthy Michigan Plan for those who qualified under Medicaid expansion in the state. The higher reimbursement rates from managed care carriers and the streamlined administrative processes were viewed as positively impacting patient choice and improving availability of oral health services in the private sector for the publicly insured. Informants were gratified that Michigan restored the adult dental benefit in the Medicaid FFS program. Stakeholders in federally qualified health centers (FQHCs) also commented that they were better able to support oral health service capacity because of an enhanced prospective payment system (PPS) rate that had been negotiated with the state Medicaid program.

Informants remarked that expanded public insurance eligibility and conversion to managed care was impacting the characteristics of patients seeking oral health services in the safety net. Medicaid-expansion populations in Michigan are now covered by managed care dental insurance and are thus better able to access care in the private sector. In addition, the conversion to the Healthy Kids Dental Program in many counties has resulted in increased availability of services for Medicaid-eligible children in private practices. Safety-net clinics that had mainly served children on Medicaid in the past were now seeing a greater proportion of adults than children on their caseloads.

Medicaid managed care products were causing a shift in the payment mix in some safety-net organizations. In the past the major payment source was FFS Medicaid. The mix now included a variety of managed care insurers and, in some cases, a slightly higher proportion of patients who were self-pay.

When informants described populations with limited access to oral health currently, many commented on the plight of the working poor and immigrants. The working poor were described as those who did not qualify under expanded income eligibility parameters for the Medicaid program but still live on the economic margins. In the experience of informants, many in that population can still not afford the cost of dental insurance, the high patient share of dental costs in limited-coverage insurance products, or to pay for services, even when a sliding fee scale is in place. Immigrants, both documented and undocumented,

were generally excluded from the provisions of the Affordable Care Act (ACA) and they remain underserved in many areas of Michigan.

Theme 8:
Although the oral health safety net in Michigan is generally thought to be robust, many informants were concerned that safety-net resources are limited. Despite ongoing expansion, the existing safety net does not have the capacity to address the persistent unmet need in many of the communities it serves.

The safety net for oral health services in Michigan was described as highly developed, diverse in reach, and competent in delivering oral health services that meet the needs of its service populations. Michigan Community Dental Clinics, more than 30 FQHCs and look-alike clinics, rural and faith-based clinics, county oral health programs, school-based and school-linked oral health programs, programs in the voluntary sector, and private dental practices were all cited as constituting a diverse array of providers that offer oral health services to safety-net populations.

Safety-net providers commonly discussed existing capacity to meet the needs of the underserved. Many commented on ongoing expansions in infrastructure that had resulted in increased service capacity and had situated oral health services more conveniently in many areas. However, despite these efforts, informants agreed there is still an unmet need for services. Many offered that while the safety net is a useful and necessary part of the oral health service delivery system, private-practice providers must also be engaged with at-risk patients for population oral health to improve in Michigan. There was consensus that public and private stakeholders must collaborate to address discrepancies in population oral health. Suggested strategies included more funding to pay for services and outreach programs, integration of oral health assessments and screening in primary care provider systems, expansions in professional workforce capacity, and the full engagement of the existing health and oral health care delivery system with the goal of improving population oral health.

Theme 9:
Local initiatives have been successful in addressing the unmet need for oral health services in their communities.

The importance of designing programs that address the unique needs of communities was another common observation among interview participants. Reducing local need for oral health services requires program design that targets local gaps in care delivery and engages and empowers community

participants. Interview participants also indicated that local solutions can sometimes be replicated in whole or in part by other similar communities with re-engineering of program delivery to accommodate variation in population need and provider capacity.

The Calhoun County Dentist Partnership was advanced as an excellent example of a community-initiated program that has bridged gaps in availability of care and improved access to oral health services for the local population. The program uses a "pay it forward" design that requires patients to "earn" dental services by completing volunteer hours in the community. Private-practice dentists in the area volunteer to treat patients in the program, donating both their time and the cost of services. The community at large benefits from the volunteer work that the patients provide.

The program benefits from the financial support of local donors for its administration. However, donated services and time are the mainstay of its success. Patients and providers continue to be satisfied with the process and the outcomes. One indicator of the impact of the initiative was a significant reduction in the number of patients visiting the hospital emergency department (ED) in Battle Creek for treatment of dental pain and infection.

Informants were clear that the needs of populations in the various regions of Michigan differ. Whereas transportation is a fundamental consideration for program design in northern Michigan, it is a less important consideration for those with access to municipal transportation in metropolitan areas. The language and culture of populations in need of oral health services are also generally more diverse in the densely populated cities than in rural areas of the state, and thus require an emphasis on culturally competent care delivery in those places.

Theme 10:
Oral health services payment policy in public insurance programs is sometimes inconsistent with goals for improvements in population oral health.

Interview participants commonly acknowledged that stakeholders in oral health at all levels were engaged with planning, programs, and projects throughout Michigan to remove barriers to oral health service access and to encourage appropriate utilization of oral health services. Many were complimentary about the ability of a variety of stakeholders from the policy and services arenas to work together for the common objective of improving oral health.

However, many were also critical of the limitations on oral health services in public insurance, citing inconsistency between national and state policy goals for improvements in oral health outcomes and actual coverage policy in public insurance programs. For instance, Michigan Medicaid policy denies

coverage for final tooth restoration, thus encouraging extraction over tooth preservation. Low reimbursement ratesoverall in FFS Medicaid were also cited as inconsistent with a goal of improving access and outcomes. Dental providers, particularly those in the private sector, were discouraged from participating in Medicaid because of an inability to cover the costs of providing services to publicly insured patients.

PROVIDERS OF ORAL HEALTH

Theme 11:
A well-distributed oral health workforce is a critical component of efforts to increase access in safety-net settings in Michigan.

A point of agreement among informants was that a sufficiently sized professional workforce is essential to meet the extensive demand for oral health services from safety-net populations. The quality of work in the safety net varies from that in private practices. Safety-net practice was described as demanding because patient oral health is often degraded and frequently requires extensive dental treatment services.

Recruiting and retaining dentists was easier for some safety-net providers than for others and was dependent on location and availability of financial resources to support professional salaries and benefits. Dental loan repayment programs were considered critical to being competitive with the private sector when recruiting new dentists. Student externships and residency programs were also viewed as facilitating interest among new dentists in employment in safety-net clinics.

Informants commented that recruiting dentists in rural areas in Michigan is significantly more challenging than recruiting them in metropolitan areas. Low population density and rural poverty are factors that adversely affect the opportunities for building successful dental practices in rural areas. Quality-of-life issues impact the ability of safety-net organizations to recruit and retain dentists in those places.

Access to specialty dental services was described as challenging for safety-net populations regardless of location, but finding specialty dentists in rural areas was extremely difficult. Safety-net patients in metropolitan areas of the state, particularly those living near dental schools, were able to access specialty services with some limitations. Although there were often long waits for appointments, a full spectrum of specialty services was available from dental school faculty practices, student dental clinics, and specialty residency clinics.

However, in many areas of the state, lack of access to pediatric dentists and to oral and maxillofacial surgeons was especially concerning considering the high number of children insured by Medicaid who needed extensive dental treatment. Informants commented that in some metropolitan areas there were several pediatric dentists, while in other areas there were none for many miles.

Informants discussed the contributions of dental hygienists to improved oral health outcomes especially

for children. Dental hygienists were identified as first-line providers when practicing in public health settings. They were considered conduits to more extensive treatment opportunities in the safety net. Public Act 161 (PA 161) was described as a good program that could be improved if dental hygienists were permitted to provide a broader range of services under program parameters. One informant surmised that if dental hygienists were allowed to work to the full extent of their existing competencies in public settings, they would have a significant impact on reducing the rates of extensive periodontal disease in the population.

Informants also discussed whether a midlevel oral health provider model would be useful in the state. There was disagreement on the utility of the model, with some feeling that the primary workforce strategy should be to maximize the use of the existing workforce through full use of its skills. According to some, if the current workforce was permitted to perform to its current level of competency in all settings, there would be no need for a new workforce model. Others believed that a midlevel model would be extremely useful, especially in rural areas or in safety-net clinics, where capacity for services is limited by a finite number of dentists.

Theme 12:
The integration of oral health with primary health care is an important aspect of improving oral health status for underserved populations in Michigan. Engaging primary care providers, especially pediatricians, is essential to early intervention in the disease process.

Informants discussed current projects in Michigan to increase the participation of primary care providers, especially pediatricians, with oral health assessment and screening services for patients with an emphasis on children. The Altarum Institute in Michigan is collaborating with several partners in a project to increase integration of primary medical care with oral health services. Primary care providers will be trained in oral health assessment and screening activities for young children. Project participants may also benefit from grants of right-sized pediatric equipment to better enable services. Major activities include building an electronic tool for an existing surveillance system to help pediatricians identify, in real time, dentists in their area that are accepting new patients and are willing to treat Medicaid-insured children. Improving referral processes for treatment services is a primary goal.

Points of Light was cited as another example of an effort to improve service integration. Points of Light is an initiative conceived by a pediatric dentist that engages pediatricians and general and pediatric dentists with building a referral network for oral health services for young children in a local area.

The program recruits dentists who are willing to treat children insured by Medicaid or those with special needs in their community. The initiative uses a web-based application that contains instructive videos for pediatricians on examining a child to assess oral health status. Parents and pediatricians can access the program website to identify a dentist in the area who is willing to treat young children. The initiative began in Livingston County, but its reach has extended throughout Michigan as well as to other states.

DISCUSSION

Interview participants noted overall progress in recent years toward improved population oral health in Michigan due to numerous public and private programs and to public policies that support this goal. The proposition of improving population oral health was considered especially difficult because of its fundamental reliance on limited public resources that were easily diverted from oral health programs when competing priorities and budget challenges arise. Informants were complimentary of Michigan's commitment to adult dental benefits in Medicaid. However, informants were also vocal about coverage limitations in Medicaid policy that interfere with treatment protocols designed to maintain oral integrity. For instance, advocates for children were concerned that services such as orthodonture were not available even to children experiencing jaw pain or with significant overbites. Also, dentists were generally concerned that extraction was a more common service for the publicly insured than for those with commercial insurance because of the coverage limitations on final tooth restoration in state Medicaid policy.

There was informant consensus about the persistent unmet need for the range of oral health services in certain populations. The difficulty in reducing need and solving the issues surrounding access to oral health services is that the problem is multifactorial and is influenced by economics and a variety of social issues. The challenge is that poor oral health is both an individual patient problem and a public health problem. Individuals encounter a unique mix of barriers to obtaining oral health services, which makes system-level interventions especially difficult to design. The oral health delivery system must be flexible and responsive to individual need in order to achieve improved population oral health. There was consensus among informants about the importance of basic interventions to improve oral health literacy, to foster appropriate utilization of preventive and early treatment services, and to encourage individuals to assume personal responsibility for routine oral hygiene.

The policy, program, and workforce interventions needed to create better access to oral health services elicited more divergent opinions among interview participants. Some believed that payment policy should be a primary reform strategy, whereas others thought that program or workforce innovation could significantly impact outcomes.

Informants unanimously asserted that oral health delivery systems must be conveniently located and adequately resourced to meet the extensive need for dental treatment services in many populations. Recruiting and retaining a competent and skilled workforce was one notable challenge in the safety net, where capable oral health teams working to full capacity are a necessity. This was difficult because safety-net systems must not only find resources to provide primary dental services but they must also fill gaps in specialty care for patients not served by the private sector in locations where geography and economic

conditions are especially challenging.

There was acknowledgment among informants that the private sector does an excellent job of delivering quality oral health services to a large segment of Michigan's population. The existing safety net for oral health services in Michigan was also recognized as doing an extraordinary job of engaging limited resources and finding capacity to meet an ever expanding need for oral health services.

Informants were clear that exclusive reliance on either sector to solve the difficult access issues in oral health is not reasonable. Collaborations across provider systems, more efforts to integrate oral health with primary care service delivery, creative use of existing workforce capacity and enabling new workforce capacity, innovations in care delivery program design, and oral health payment and policy supports at the state level were all cited as necessary to achieve and sustain improvements in population oral health in Michigan.

Technical Report

BACKGROUND

The following technical report provides more detail about the comments of interview participants. Elaborations on the themes are organized under the same bullet points as those in the preceding executive summary. Once again, the comments under each of the themes are paraphrased from the remarks of interview participants.

ACCESS TO ORAL HEALTH SERVICES

Theme 1:
Despite resurgence in the state's economy and an increase in the percentage of the population with dental insurance in Michigan, oral health disparities persist.

Michigan's economy has been improving faster than many state economies in the United States, and the rate of joblessness has been decreasing, although it remains higher than the national rate. Increased employment and Medicaid expansion has resulted in improved access to dental insurance for many state residents.

Informants described disparate access to dental services in Michigan. In some urban and metropolitan centers in the state a high percentage of the population is employed, with many enjoying benefits that include private insurance coverage for oral health preventive and restorative services, orthodonture, and even high-end cosmetic services such as dental implants. As a result, there are many dentists in the marketplace.

However, disparities emerge among those with Medicaid insurance or for the uninsured. These populations frequently encounter difficulty finding an oral health care provider or locating a consistent source of care to enable a dental home. Because most dental care is provided in private-practice settings, increasing the participation of the private-practice dental community with public insurance plans must be a continuing goal in Michigan. Participation of dentists with the Medicaid program is not guaranteed, and even among dentists who are enrolled as Medicaid providers, many restrict the number of Medicaid-insured patients on their caseload. Although safety-net providers are located throughout the state to fill gaps in oral health services availability, capacity in the safety net is limited and need is great.

Theme 2:
Michigan's diverse geography results in uneven distribution of oral health providers, particularly in rural areas of the state. In addition, poor neighborhoods in Michigan's cities often lack a sufficient supply of oral health providers willing to meet the needs of the population.

Geographic disparities in access to oral health services were identified as problematic in Michigan. Areas of the Upper Peninsula are relatively isolated, with large areas consisting mainly of summer cottages and hunting cabins. These areas are known for having a high rate of poverty among the year-round inhabitants. Unemployment rates approach 40% in some locations due to the prominence of tourism and seasonal fluctuations in the population. The educational attainment of the population is lower than in some other parts of the state, which also limits employment opportunities. There are very few health

and dental providers located in the Upper Peninsula, where population density is the lowest in the state.

Interview participants also remarked on difficulties in finding oral health services in several of the major urban areas in the state. People on the east side of Detroit, which is a high-poverty/high-crime area, were considered to be at significant risk for lack of access to oral health services and for persistently poorer oral health outcomes. The urban centers of Detroit and Flint were also identified as being underserved, despite the presence of large numbers of safety-net providers and of a seemingly adequate supply of private-practice dentists.

Informants also remarked on the "invisible poverty" in some of the most affluent counties in Michigan. Although the poor in these counties benefit from an environment with more social capital and resources, they still lack the resources and sometimes the personal ability to find oral health services, much like those living in neighborhoods where there is visible poverty. Informants cautioned that even in high-income counties, the safety net must be available and durable.

According to informants, a number of logistical issues impact access. Transportation was frequently mentioned as a reason for high no-show rates for appointments. As one participant commented, "poor people have poor cars" that may not always work properly and may limit the patient's ability to be timely or to arrive at all. In addition, the high cost of gasoline to cover the long distances to dental providers, especially specialty dentists, in many areas of the state is a huge barrier to encouraging access. One informant commented that the county in which the clinic operated was relatively affluent, especially in the surrounding suburbs, but that many of the poor in the county lived on the borders, where the metropolitan public transportation system near the safety-net clinic was unavailable.

Transportation is an issue even when safety-net dental clinics are located on bus lines. For some, the cost of round-trip bus fare is burdensome, especially if a treatment plan requires multiple visits to the dental clinic. Some patients qualify to use medical transportation, but those companies are not always reliable. Patients can wait hours for rides home or arrive late for their appointments and then have to wait to be seen.

BARRIERS TO ORAL HEALTH

Theme 3:
Certain population groups in Michigan are at risk for poor oral health outcomes due to a complicated interplay of factors.

Despite Michigan's progress in improving access to oral health care, there remain populations in the state with limited ability to obtain services. Many of the interviews were with safety-net providers who have direct experience serving populations with limited access to oral health care. Informants were knowledgeable about the barriers their clients encounter in obtaining oral health services, including different languages or cultures, unreliable transportation, and lack of knowledge about how to access or behave in the health care system. The 2 most commonly identified barriers to accessing oral health services were financial impediments, such as lacking dental insurance or having a lower socioeconomic status, and lack of basic oral health literacy.

Stakeholders described insufficient access to oral health services for a variety of populations, including very young children, pregnant and parenting mothers, adults with public dental insurance (especially those with extensive dental reparative needs), migrant workers, immigrants and refugees (including both documented and undocumented people), people with special needs, rural populations, underrepresented minorities, and those who live in persistent poverty. Informants commonly expressed concern that many in these populations either lacked the oral health literacy to understand the need for routine services and the importance of establishing a dental home or were simply unable to access services.

One informant used the metaphor of a leaky faucet to describe experiences in providing oral health services to underserved populations in inner-city Detroit. He commented that it is as if there is a leaky faucet, and all you do is keep mopping the puddle on the floor instead of fixing the source of the problem. You lose lots of water; the puddle just keeps getting bigger; the problem never goes away; and the incidental damage becomes greater. The oral health needs of the previously incarcerated, of populations with histories of persistent substance abuse, of people with special needs related to a variety of disabilities, and of the elderly living in public housing were a major concern to this safety-net provider.

Children

Gaps in oral health services in early childhood were commonly discussed. Children from at-risk families often arrive with significant caries and long-term chronic dental problems that require numerous restorations and/or multiple extractions. Socioeconomic status, parent's personal oral health experience

and literacy, and other family issues impact whether a child is routinely brought to a dentist. Providers lamented that sometimes young children need to be treated in hospital operating rooms to address serious dental decay. The risk of engendering dental anxiety in children from repeated visits to a dental office for restorative services, combined with the risk of seizures from certain kinds of sedation, make hospital dentistry necessary but regrettable for the very young.

Informants commented that children who begin life on Medicaid are more likely than others to become adults on Medicaid. Therefore, they must be viewed as a high-risk population. Developmentally disabled children are also at risk of needing special care dentistry to address particular oral health needs. There are very few dentists with appropriate training to meet special needs; therefore, this population is at particular risk for access problems.

Children from immigrant groups, including DACA (Deferred Action for Childhood Arrivals) children, are excluded from qualifying for public insurance programs. In one area of Michigan, a faith-based program with a dental clinic is available to treat these children. The community recognizes that the clinic is a valuable resource for DACA children and for children who are documented for less than 5 years and are thus ineligible for public coverage. Unfortunately, capacity is limited, so the clinic is unable to provide services to immigrant parents/adults.

Informants also commented that changing administrative and sponsorship structures in education programs were impacting access for children to dental services. Children in high-needs areas such as Detroit, where there are now many charter schools, are no longer routinely enrolled in neighborhood public schools. School-linked and school-based programs may not be seeing some of the children at highest risk for poor oral health outcomes because many of these outreach programs are mainly in public schools.

One informant talked about the importance of understanding the interplay of health and learning in children. Data show that caries is the number-one disease of childhood. Although caries is preventable, the amount of untreated caries in some children is alarming. Educators and policymakers are concerned about third-grade reading levels in some areas of Detroit. The informant lamented that children cannot learn to read when they have a toothache. Children cannot eat when their teeth hurt, so nutritional issues arise. As a result, there are learning deficits and attendance issues.

Pregnant Women

Pregnant women were a population of concern to informants. Women experience a shift in their oral flora due to hormonal changes in the body during pregnancy and are at higher risk for periodontal disease and dental decay due to a changing organismal load. Women remain at risk postpregnancy because it takes time for the oral flora to return to prepregnancy levels once the baby is delivered. The

repercussions of poor oral health in the mother include transmission of streptococcus mutans to the infant, with potentially serious impacts on preterm birth and early childhood caries rates.

Informants discussed the importance of removing existing decay and treating preexisting periodontal disease in pregnant women. Stakeholders also discussed the importance of education about not smoking, using fluoridated toothpaste and flossing, and about changing diet, including not consuming simple sugars between meals, eating slowly, and not snacking. Family care physicians and obstetricians/gynecologists were identified as important providers to screen pregnant patients for preexisting disease, to discuss oral health, and to make referrals for dental follow-up care.

Immigrants or Adults With a Primary Language Other Than English

Adults who are not primary English speakers were identified as at risk for disaffection from health care systems. Some do not qualify for public insurance programs due to immigrant status. Among those who do qualify for benefits, there is little understanding of how the health care system operates. According to informants, even some higher-income immigrants have trouble with appropriately accessing providers in the system. At times, there is also a cultural mistrust of the system that impacts care-seeking behaviors.

Informants discussed the risk for both patients and providers when primary languages differ. Patients do not understand or embrace treatment, and providers are at increased risk for not understanding the full scope of a patient's health or oral health complaint. Immigrants may defer necessary care to receive treatment in their home country, where care is perceived to be cheaper and more culturally competent. Informants were clear that encouraging cultural competency training for oral health professionals is essential to improving access. Safety-net clinic administrators spoke of efforts to hire staff that reflected the communities served to ensure language compatibility for patients.

Native Americans

The Native American population is a large minority in several Michigan counties. There are 12 tribes in the state, all of which have reservations with health services available through tribal clinics. However, nationwide 60% of Native Americans live off their reservation, so meeting the needs of the population is difficult. Although Indian Health Service (IHS) clinics are located both on and off reservations in Michigan, they have very limited resources and long wait lists for services. Some clinics in Michigan that serve Native American populations have difficulty retaining dentists. According to several informants, the demand for services in these clinics exceeds the capacity to meet the persistent need for oral health services.

The Elderly

The elderly were frequently identified as at risk for poor oral health outcomes. Elderly patients may

experience declining general and oral health and diminishing cognitive ability. The elderly in institutional care and those confined to their home were thought to be at special risk. Most elderly are uninsured for dental services because Medicare only pays for a small number of specific oral health services. Elders may not have symptomatic teeth, but they have a dry mouth, sharp edges on their teeth, poor periodontal health, and may be using medications including anticoagulants that contribute to declining oral health status and complicate provision of care. Some informants expressed concern that elders with dementia cannot even tell you that they have dental pain and are thus at high risk for complications from infection.

According to some informants, the elderly may also be entrenched in their belief system and be more resistant to the importance of seeking preventive oral health services. Some have experienced poor oral health for much of their life and do not see that better oral health is achievable. According to one informant, in certain senior housing complexes, especially in the inner cities, almost every resident has rampant decay including rotting roots and high rates of tooth loss. It is not unusual to find that most residents have not seen a dentist in at least a decade and that everyone needs gross debridement.

Michigan's Coalition for Oral Health for the Aging uses volunteer professionals to staff Dental Days to provide preventive oral health services to the elderly and people with special needs. Dental Days are scheduled 5 or 6 times a year. The coalition sponsors a service within the PA 161 Program that provides prophylaxis, x-rays, fluoride varnish, periodontal charting, and hygiene instruction for elderly patients. Volunteer dental hygienists travel from across the state to participate in the program.

Theme 4:
A low level of oral health literacy, particularly in underserved populations, is a major barrier to improved oral health outcomes.

Oral health education is essential if disparities are to be reduced and outcomes improved. Informants identified lack of oral health literacy or knowledge of public health issues at various levels among the general population. Informants emphasized the predictive quality of personal responsibility on oral health outcomes. Caries is a multifactorial disease and understanding risks, necessary preventive activities, and the importance of early intervention are essential.

Interview participants discussed the benefits of improving public oral health literacy starting with the education of young children to build a better oral health future. However, the general population at all ages was thought to benefit from a public information campaign about the true impacts of poor oral health on overall health. Participants also commented that oral health messaging must include the consequences of not brushing teeth, cautions about sharing food with children, and information about the sugar content in juices and soda. Most important, it should emphasize the value of establishing a dental home for routine oral health care.

Cultural attitudes toward oral health were identified as generational. When parents do not value oral health, children do not learn preventive behaviors or receive preventive services and they grow up to be adults who undervalue oral health. This attitude is reflected in patient behaviors. Safety-net providers commented that patients are more likely to not show for preventive oral health services than for emergency or acute care services.

The burden of disease is most prominent in populations that are underserved. Interview participants remarked that populations receiving care in the health care safety net often live life in survival mode. The car does not work, so there is no transportation; the children are sick, and they have no source of day care; the family is losing its apartment; or the patient forgot to recertify for Medicaid, and so on. Patients may have been recently incarcerated; others have drug problems; there is abuse in the home, and other problems. Teeth become a low priority for families in survival mode. Informants remarked that it is difficult to educate people who have been deprived of many things by the system or by life's circumstances, but it is imperative that the message is delivered.

Advocates also discussed the need to educate elder caregivers about the special issues related to oral health in older people. Informants remarked that dementias alter behaviors, including daily oral hygiene. Medications cause dry mouth. Arthritis makes it difficult to adequately brush teeth. Older people in nursing care are at special risk for declining oral health.

Elder oral health is a major problem because of the barriers to appropriate care. The confined elderly may have mobility issues and limited access to transportation. Caretakers may be overwhelmed by other needs and easily neglect routine oral hygiene. The implications of oral disease in the elderly can be deadly, with linkages to aspiration pneumonia and to heart and respiratory disease.

An informant commented on the utility of the home visitor network in Michigan for teaching seniors, pregnant women, and the parents of young children receiving early childhood services through the program. One home visitor program created colorful messaging about brushing the teeth of young children, and a maker of toothbrushes in Kent County provided toothbrushes to leave in the home. Home visitors address a variety of health care needs, including access to clinical providers, transportation, and paying for prescriptions, so navigating a client to an oral health provider could easily be added to the menu. Faith-based organizations were also identified as carrying weight with their community, so these organizations might be useful in delivering oral health messages.

Informants also commented that more needs to be done to educate the public that use of EDs for treatment of dental pain and infection is not only inappropriate but also unproductive because oral health services are not generally available in EDs. Responsibility for the misuse of EDs also lies with the delivery system. There is a pervasive need to create diversion and referral networks to address the demand for

emergency oral health services. Hospital systems now understand the implications of poor oral health and are seeking ways to address use of EDs. One suggested solution was to build dental clinics in or near hospitals or solicit established dental providers in an area to offer after-hour services.

Improving population oral health literacy is complicated by the quality of the information on the Internet. Many people consider information that is posted on the Internet as being legitimate and truthful and make decisions based on that experience. The volume of information that is available through the various media exacerbates the problem, as do sensational sound bites that garner public attention. The public does not understand that knowledge can be gained without a full understanding of the meaning. One provider discussed a patient who refused a needed root canal because the patient read on the Internet that not all root canals are successful.

Another issue is that the public does not always understand why dental services are expensive. Dental services are not generally portable and are provided in surgical suites that have been configured with costly equipment. As a result, the overhead costs are higher for dental practices than for general medical practices because of the expense of equipment and treatment supplies.

Theme 5:
Relevant knowledge about the barriers to oral health services encountered by under-served populations is also lacking among providers, policymakers, and others.

The Public Health Literacy of Clinical Providers

Clinical providers must acknowledge that good oral health is a primary outcome that directly impacts the course of many chronic diseases. Once that knowledge is secure, providers must act in ways that ensure the oral health of their patients. According to informants, there is some need to improve the public health literacy of community dentists, especially those in private practice who may not encounter the same need for extensive reparative services among their patients as do dentists practicing in the safety net.

Education about delivering culturally sensitive care would also be beneficial for providers. People in lower socioeconomic groups live life very differently than their medical and dental providers. Some patients are even unaware of how to make an appointment to receive services.

According to several informants, when you work in the oral health safety net you understand that the definition of oral health for publicly insured patients may differ from that for privately insured patients, who are likely to go to a private practice for treatment. The private dental practitioner can offer implants, veneers, and crowns to keep the mouth healthy, and patients can afford to pay for these services. These

interventions are not generally an option in the safety net, where providers are principally concerned about stopping infection and reducing pain.

Restoring the mouth to health has different meanings, depending on the viewpoint of the patient and the provider. In the safety net, discussions about treatment options for dental disease must be realistic. If the objective is to reduce acuteness and restore health, the primary consideration is function. According to informants, "white, bright, and straight" (aesthetic considerations) may not be the best goal for people with financial limitations. Providers need to consider not only the standard of treatment but also the extensive cost of restoration of debilitated mouths. As one informant commented, "If you tell someone with limited resources that restoring the mouth will cost $20,000, they may process the conversation as an all or nothing option. As a result they will leave and won't come back for even limited services."

There is also a need to educate more medical providers, especially obstetricians/gynecologists and pediatricians, about the importance of screening for oral disease and making referrals. Physicians generally need to change their attitudes and actions about oral health and to overcome the cultural separation between medicine and dentistry. One positive indicator of integration of oral health into health care is that oral health assessment is now a clinical indicator on many electronic health records.

A focus on prevention and preventive modalities and an understanding of oral disease processes is a basic tenet of good health care. Although there is abundant research that shows the linkages between a variety of diseases and poor oral health, the bridge between research and practice is weak. According to informants, research findings do not affect care delivery enough to improve outcomes. Dentists are not trained in a preventive orientation, and only a small percentage of physicians are profoundly motivated with concern about oral health in their patients. One informant commented that physicians who are concerned about oral health are often motivated by past experience having seen poor outcomes related to advanced oral disease in their patients. Dentists often know more about medicine than physicians know about dentistry, which may result in a reluctance in medicine to include oral health assessment and screening in the menu of services provided.

Oral Health Literacy of Policymakers

Informants commented on the necessity of continually reinforcing with policymakers the concept that oral health is important. Although the lack of oral health literacy in the population is a significant and sometimes intractable issue, policymakers generally know little about the implications of poor oral health. Advocates suggested a need to educate legislators and other policymakers to understand:

- that health comorbidities can be reduced with a clean mouth,
- about the linkages between oral disease and conditions such as h-pylori infection and

gastric cancers,

- about the connections of oral disease with diabetes and heart disease and periodontitis, or
- about oral disease and aspiration pneumonia in the elderly.

In the opinion of some informants, if policymakers could understand that improvement in health care outcomes occur with better oral health and that good oral health enhances the quality of life on many levels, there might be an attitude shift about paying for dental services. Oral health programs would gain traction in health care delivery if federal policy, such as the ACA, included oral health in a meaningful way.

Theme 6:
Barriers to oral health services include financial limitations, transportation issues, primary language other than English, and difficulty getting time from work to obtain services.

Populations at risk for poor oral health are often from low-income groups that lack economic, health, or employment security. These circumstances make it extremely difficult to regularly participate in health and oral health care. Informants commented that the interplay of the social determinants of health with oral health prejudices outcomes. The impact of unstable housing, lack of food, and financial insecurity on overall health cannot be ignored.

Cultural differences create fundamental barriers to registering for social benefits and engaging with health care opportunities. Enrollment in public programs requires cumbersome, often detailed paperwork, which is a barrier to entry to safety-net systems, especially for those with low English literacy. Many are flummoxed by the extensive forms and the documentation requirements to qualify for benefits. Once enrolled, the yearly requirement for renewal is an ongoing issue that continues to complicate service delivery.

Cultural differences in attitudes toward health care influence engagement. An informant provided an example of the practical manifestations of culture. A health insurance plan in Michigan noted that African American men insured by the plan were not seeking primary care services at desired levels despite outreach to the population through written communication and calls. A focus group was assembled in inner-city Detroit to explore the reasons why. The primary reason advanced by male participants in the focus group was a reluctance to remove their clothes to enable physical examination by a stranger. After receiving this input, the plan devised an intervention. The insurance company identified medical practices and individual doctors where high-risk patients generally sought care. The plan took pictures of these doctors and compiled biographies of each. A physician's picture and biography was sent to each patient. The plan offered the patient the opportunity to visit the medical office and meet with the doctor prior to scheduling an examination. Utilization of services increased, and the program won a Pinnacle Award

from the National Committee for Quality Assurance. The informant commented that it is important not to underestimate the value of listening to and engaging patients because providers do not really know all the barriers. There are assumptions that dental anxiety or poor oral health literacy interfere with access, but there are unidentified impediments as well.

Informants remarked that dental anxiety is an under-discussed barrier to patients seeking oral health services and that there is a self-fulfilling prophecy that dental services are painful and traumatic. Patients develop this belief from personal or familial experience and then avoid dental services until they have an infection or are in acute pain, when services are actually more painful and difficult.

Access to care has always been and continues to be a multipronged challenge. Barriers are related to economic issues, opportunity costs, and health-seeking behavior problems. Informants concluded that it is more than a geographic or economic issue. Consumption of dental services in the private insurance market is only about 60% in Michigan, so 40% of those with insurance are not using their benefit annually.

FACILITATORS TO ORAL HEALTH

Theme 7:
The conversion to managed care insurance for some Medicaid-eligible populations (including children) and the Medicaid-expansion population has been a positive strategy to increase access.

Michigan was one of the first states in the nation to convert the Medicaid insurance program to managed care contracts. In the opinion of interview participants, using managed care companies as a vehicle to increase access is a good strategy. Health and oral health care providers are more willing to participate with Medicaid managed care products because reimbursement, while still not at the level of commercial plans generally, is usually higher than in FFS Medicaid.

Informants commented that dentists serving FFS Medicaid patients often provide oral health services at a loss because Medicaid reimbursement rates do not generally cover the cost of services. Many dentists are willing to treat some Medicaid-eligible patients at a small loss when those losses are offset by a patient panel composed mainly of the commercially insured. However, having a large caseload of FFS Medicaid-insured patients is generally perceived as a risk to financial sustainability for dental practices.

Informants enumerated the benefits of converting Medicaid to managed care, including:

- Managed care plans have broad networks of providers available to eligible populations, which improves both choice and access.
- Administrative requirements are less cumbersome and well known to enrolled practices.
- Newcomers to managed care networks trust that there is an intermediary between the government and the insured.
- Managed care plans typically have member and provider advocates to resolve issues that arise.
- Provider networks are accountable to the insurance plan.
- Networks encourage all participating providers to serve patients, which results in a more even distribution of Medicaid-insured people across the network and thus minimizes the impact of lower reimbursement rates on cost recovery.
- The broad network of providers also enables better dispersion of risk.
- Claim payments are faster, and when payments are delayed there is recourse to the network for resolution.

Many informants agreed that managed care insurance is beneficial for patients, but they also remarked

on the downside of this policy strategy. The number of managed care plans available to Healthy Michigan program enrollees was described as problematic. According to interview participants, Michigan has contracted with numerous managed care plans to offer enrollees choice, which is mandated by the Centers for Medicare and Medicaid Services (CMS). However, choice is, at times, bewildering for both patients and providers, who experience confusion over which plan covers particular services or what is the allowable service frequency. Patients also have difficulty understanding the different participating providers and diverse plan benefits. In addition, patients experience difficulties in moving from one plan to another during reenrollment.

Although having dental insurance is predictive of increased access and utilization, being insured does not ensure that patients will seek services. One insurance company with a Medicaid managed care product found that cumulative annual utilization data were showing less than one annual dental visit per enrolled patient. Mailings to patients providing education about plan benefits helped increase utilization, but there was still less than desirable uptake in the population. Ongoing education about the importance of routine preventive visits to oral health providers continues to be essential.

Increases in the number of people with dental insurance after implementation of the ACA is changing the population groups that encounter financial barriers to obtaining services. Many informants discussed the current difficulties of the working poor who did not qualify under expanded Medicaid eligibility parameters for public insurance programs such as Healthy Michigan. Many people in these lower-income groups still live on the economic margins and cannot afford the cost of dental insurance, the high patient share of dental costs in limited-coverage insurance products, or pay for services, even when a sliding fee scale is in place.

In some places, both the county government and private-practice dentists have been innovative in finding ways to help uninsured patients get oral health services. For example, the Washtenaw County Health Plan insured more than 10,000 uninsured individuals prior to ACA implementation. Although the health plan did not include dental coverage, administrators were able to create a reduced-fee dental program with approval from the state that helped patients pay for dental services.

The county also has a Barrier Busters Network to enable local human service agencies to find services for needy clients. A grant from a health insurance plan provides the network with about $30,000 in funds for uninsured patients who are in need of emergency dental extractions. The process for applying to the program is efficient. A client's social worker identifies a dentist who is willing to provide the service and ascertains the cost. A request is then made to the fund, and the approval is quickly processed. The

dentist is paid within a day or two of providing the service. The network is considering expanding the fund to include dentures for those in need without the means to pay.

In addition, in some areas of Michigan private-practice dentists offer patients in-house prepaid discount plans that include a menu of oral health services. Depending on the menu selected and the annual cost of the bundled "premium," a patient may be entitled to x-rays, cleanings, periodontal maintenance, and a discount on other preventive or restorative treatments for a fixed sum. The cost for the bundle is less than the combined usual cost of each separate service.

The business paradigm in dentistry was cited as an issue affecting access. Dentists are taught to run practices with economic efficiencies. When providing care to the publicly insured generates low reimbursement that systematically erodes revenues, dentists dismiss options for treating lower socioeconomic groups. Informants cited this as an additional reason why converting FFS Medicaid to managed care was useful. The Healthy Kids Dental Program was administered by Delta Dental, so publicly insured children looked just like privately insured children with commercial Delta insurance. Although Healthy Kids Dental reimbursement rates were somewhat lower than Delta commercial rates, they were accepted as equitable. An additional benefit was that the dentist was not required to work directly with the Medicaid program, which was considered to be administratively burdensome.

Theme 8:
Although the oral health safety net in Michigan is generally thought to be robust, many informants were concerned that safety-net resources are limited. Despite ongoing expansion, the existing safety net does not have the capacity to address the persistent unmet need in many of the communities it serves.

Safety-net providers interviewed for this project described a diverse array of service populations and delivery configurations for oral health care. The oral health safety net in Michigan has been successful with building local delivery systems that are relevant to the populations in need of services. The diversity in approaches among safety-net providers interested in the common goals of increasing oral health access, providing quality care, and improving oral health outcomes was impressive.

Many informants representing safety-net organizations described ongoing outreach to populations in their catchment areas and program expansions to address unmet needs. It was apparent that safety-net providers have selected a multifaceted approach to program design that addresses limited access to oral health services as a multifactorial problem. Safety-net providers were engaged in community collaborations that involved a broad range of health and oral health provider organizations and community-based groups with an interest in helping underserved populations.

The oral health safety net is robust in many places in Michigan, but there are concerns that existing capacity cannot meet the extensive need for oral health services in safety-net populations. One informant discussed a needs assessment that was conducted several years before in the county. The assessment included a survey of all the practicing dentists that asked about the availability of sliding fee scales and participation in the Medicaid program. The survey showed that very few private dentists were accepting Medicaid-insured patients (only about 10%) and that among those who did participate with Medicaid, many only served a few patients.

At the time, it was determined that existing safety-net providers had the capacity to serve just 16% of the low-income population in the catchment area. Since that time, safety-net capacity has grown with the expansion of older clinics and the addition of new clinics. At present, it appears there is capacity to address 60% of the demand for oral health services from the low-income population in the county. However, capacity is less robust in surrounding counties, so people are crossing county boundaries to seek care. Although capacity continues to grow in many areas in the state, it is very likely that the overall safety-net capacity is insufficient to meet growing need.

Informants remarked on growth among a variety of safety-net provider types and the number of private-practice dentists who now participate with one of the Medicaid-sponsored insurance plans, especially the Healthy Kids Dental and Healthy Michigan plans. Although one might conclude that, in some places, safety-net capacity has grown to the point that safety-net clinics are now competing for patients, in reality, competition is not an issue. Interview participants were clear that while there are constantly new providers entering the market, there remain plenty of people for whom oral health services are still unavailable.

According to informants, it has been very helpful that Michigan provides an enhanced PPS dental reimbursement rate for FQHCs and others who qualify. FQHC agreements are renewed every 4 years, which provides an opportunity to renegotiate the services that are covered in the PPS bundle, including medical, vision, dental, and so on. The Michigan Medicaid program applied to CMS for approval of a separate proposed rate structure for dental services. The modification was approved by CMS. The new rate allowed for some add-ons for particularly difficult cases, such as 4 restorations in the same quadrant. For many years the medical and dental rates were the same, which was problematic when a patient needed extensive restorative care. Informants were of the opinion that global rates (encounter rates) do not work as well in oral health as in medicine. It is particularly difficult to draw the line on what is essential dental care during a single encounter.

Michigan Community Dental Clinics

Providing services in the safety net in underpopulated areas, especially rural areas, is difficult because it is

expensive to build dental operatories and there must be a sufficient number of potential patients to cover the cost. Michigan Community Dental Clinics (MCDC) is a not-for-profit organization that collaborates with county health departments to provide oral health services. It has been efficient in establishing safety-net clinics in rural areas of Michigan, where only limited oral health capacity (eg, 1 or 2 dentists) is warranted.

MCDC designs service delivery in each area to fill gaps in care. It will either build new capacity or supplement existing capacity. For instance, if there is already a dentist serving the Medicaid-insured population, MCDC might only provide mobile or portable preventive service programs in schools. MCDC fills other gaps as well. It has a memorandum of understanding to accept referrals from 6 FQHCs in Michigan that lack infrastructure to provide in-house dental services. Some MCDC clinics are colocated with an FQHC primary care clinic or are situated nearby to allow for easy referral. The MCDC model is unique and is supported by complicated financing. Efforts to establish clinics in areas of need throughout the state have been successful. According to informants, MCDC clinics provide quality services and are positively increasing opportunities for people who need oral health services to access them.

MCDC evolved from the Dental Clinics North model that had established successful collaborative clinics with county health departments to provide dental services to publicly insured and uninsured individuals in Michigan's Upper Peninsula. When organized as Dental Clinics North, each of the 10 original dental clinics had individual responsibility for staffing and managing scheduling and billing functions. As MCDC, these functions are managed centrally by the umbrella organization. In recent years, the MCDC-consolidated network has expanded to include 26 dental clinics across the state.

MCDC is a 501c3 organization and is the largest group dental practice in the state. It employs 67 dentists and 350 employees in affiliated clinics. In September 2014 it opened a new clinic in Kent County with 8 dental operatories and capacity for an additional 4. By December 2014 the clinic was being fully utilized, which suggests a prior unmet need for oral health services in that area. There are currently 3 additional clinics in the planning phase.

Profitably providing services in the safety net to sustain clinic operations is challenging, especially for providers that are not FQHCs. Community clinics do not generally benefit from the enhanced reimbursement rates that are available to FQHCs. The conversion to dental managed care for some Michigan residents, including children, and the Medicaid-expansion population has improved the financial opportunities for MCDC to recover the cost of services because reimbursement rates are higher from managed care plans than from FFS Medicaid. In the past, MCDC clinics mostly served children, and 90% were on Medicaid. Currently, about 60% of the client population is adult.

The MCDC model uses structural and administrative efficiencies and economies of scale to create sustainability. MCDC leverages extensive information technology capability to link network providers and

clinics across the enterprise. The robust information system is the backbone to quality improvement and patient safety initiatives at MCDC. The network allows providers to consult with professionals in other clinics to discuss difficult cases and to benchmark outcomes and production. The system has a live dashboard so that those with access can view, in real time, what has happened in a clinic on a particular day. The dental team in each clinic is committed to the mission of the organization, and each person on the team works to ensure that the clinic is productive.

MCDC has affiliations with 10 hospitals and credentialed oral surgeons to provide services for young children who need sedation and for special needs children and adults. One of the hospitals has been working with MCDC for 20 years. There are dental assistants who work with the patients and the clinics to coordinate scheduling and arrange for hospital services. MCDC will soon be offering intravenous sedation services in the Grand Rapids clinic, so this may reduce some of the need for hospitalization.

MCDC identifies opportunities to link underserved people to oral health services though other health department programs and activities. For instance, Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) programs in health departments serve mothers and infants up to age one. Women in these programs often have other children and as a group are difficult to reach with oral health messaging. In some of these programs, nurses apply fluoride varnish on the teeth of both the mother and the children; the nurse encourages positive oral health behavior and educates about oral hygiene. The nurse can also refer the family to the local MCDC dental clinic for services.

Federally Qualified Health Centers in Michigan

Safety-net dental clinics operated by FQHCs were widely acknowledged as significant contributors to improved oral health access in communities across the state. Michigan benefits from having more than 30 FQHCs and several look-alike clinics in a variety of geographic areas. On average, FQHCs in Michigan provide a higher percentage of their patients with oral health services than do FQHCs nationally. One facilitating factor is the state plan amendment for a separate PPS rate for dental services. This enables FQHCs to better cover the cost of providing oral health services. The PPS rate is higher in many places than the PPS rate for primary medical services.

Cherry Health, the largest FQHC in Michigan, has been expanding dental operatory capacity with funding from capital assets, private donors, and ACA expansion grants. The organization provides oral health services in 17 locations with a total of 75 operatories and a full contingent of dental and dental hygiene professionals. In the past year, the FQHC provided more dental services than primary medical services, which suggests substantial need for oral health services in the communities served. Although the FQHC expects no expansion in primary care capacity in the near future, it does expect growth in oral health capacity.

The FQHC offers not only in-clinic services but also school-linked oral health programs in 80 schools. These programs employ both dental hygienists and dental assistants on 7 teams that serve approximately 16,000 enrolled children. The FQHC has been operating school-linked programs for about 26 years. Data collected over that period show a reduction in the percentage of children with untreated dental disease among those served, from about 70% in the past to about 65% currently. One advantage of FQHC-sponsored school-linked oral health programs is that when children are identified as needing a referral for dental treatment services, they are easily referred to the FQHC when there is no preexisting dental home.

Cherry Health also provides on-site dental services in 4 school-based health centers that are equipped with multiple dental operatories. The staffing model in these clinics approximates 3 dental days and 2 dental hygiene days weekly.

Mobile and Portable Dental Programs in Michigan

Mobile and portable dental programs generally provide oral health preventive and/or treatment services in settings, such as schools, nursing homes, meal sites, and WIC programs, where patients congregate for other purposes. When sponsored by FQHCs or other community dental clinics, these programs link patients to oral health services at sponsoring clinics, which enables patients the opportunity to build dental homes.

According to informants, Miles of Smiles, a long established mobile dental program that is sponsored by the Ottawa County Department of Public Health, uses both paid and volunteer dental professionals to serve children in more than 30 elementary and middle schools in one area of Michigan. The program uses a mix of approximately 40 part-time volunteer dentists and 1 full-time paid dentist as well as dental hygienists and dental assistants to provide a comprehensive menu of services, including fillings, extractions, space maintainers, pulpotomies, and preventive services. The program is coordinated through school nurses and administrators. Forms that explain what services are offered are sent to the homes of the children in each school prior to the van's scheduled arrival. Children who are Medicaid eligible or those who are uninsured qualify for the program.

When treatment plans for children are developed, the Miles of Smiles van is deployed to the school on multiple occasions to allow for completion of the needed services. When more extensive care is needed, individual arrangements are made to see a child at another school location or parents are notified that their child needs to see a community dentist for further care. The van is an efficient way to deliver services. Services are provided during school hours, and if a child who is scheduled is absent, the next child on the list is summoned for care. If there is no dentist on the van on a particular day, which is rare, a PA 161–registered dental hygienist will assess children and provide sealants according to the governing

parameters of the program.

The van program provides a comprehensive range of services, so it could technically be a dental home for Medicaid-eligible or uninsured children. The van is regularly scheduled at schools on at least an annual basis, and parents are provided with a number to call when a dental emergency arises. If the child is in immediate need of services, parents can bring their child for services to the school where the van is located on that particular day. If that is not possible, the program will provide a referral. The van is in the community between 2 and 5 days every week depending on demand and staff availability.

The longitudinal outcomes data collected for the program show a decrease in the number of recall patients in recent years and a huge decline in rates of decay. Children are getting regular care, and some are getting checked very frequently. The schools served by the program must have at least 30% of the student population qualifying for the federal free or reduced-price lunch program. Every child that receives a prophylaxis through the program is instructed about drinking soda and juices and is given an activity book, a toothbrush, and a prize. Sometimes the dental hygienist will use disclosing solution to show children where there is plaque and debris. Children cannot prepare for the visits because they do not know when the van will come, so if they have not brushed, the result is evident.

Public Act 161

PA 161 enables dental hygienists to be employed in public settings, including schools, public health clinics, and nursing facilities, and work under a protocol with a collaborative dentist. According to informants, PA 161 has produced a positive, dedicated corps of dental hygienists who are working hard to improve access to preventive services. The PA 161 program was considered useful because dental hygiene services that can stand independently are provided distinct from dental services. Between 190 and 200 dental hygienists are currently authorized as PA 161 dental hygienists. Some work full time and others part time with more than 50 grantee providers or agencies registered under PA 161 guidelines.

The Seal! Michigan program was cited as successful because of the efforts of PA 161 dental hygienists. The state-sponsored initiative pays for sealants that are placed on children's teeth in the first or second or sixth or seventh grades in schools where 50% of the students qualify for free or reduced-price lunch. Dental hygienists in the PA 161 Program use portable equipment to provide sealants and fluoride treatments. The Seal! Michigan program bills for sealants when there is available insurance coverage; otherwise, sealants are supplied free of charge. In some cases, commercial dental insurance will not pay for sealants in dental offices, so even commercially insured children can get them free if they attend an eligible school. Community dentists have few objections to children getting sealant services at school because they are familiar with the limited nature of the program and are not concerned about interruptions to the dental home. PA 161 dental hygienists have placed sealants on between 20,000 and

25,000 children in Michigan as a result of the program.

Recent regulatory change in Michigan governing mobile dental programs was the subject of discussion among informants because both van programs and portable programs, including those permitted under PA 161, must now meet referral guidelines for patients served. Informants commented that many of the existing programs were already referring patients when appropriate. The standard protocol under the new regulation calls for mobile programs to either document completion of treatment plans or to expedite and document referrals to community providers for needed treatment services.

School-based oral health programs have been in existence for 40 years and were widely touted as being successful. According to informants, however, there appears to be limited downstream effects in the adult population who received services as children. Many young adults have poor oral health behaviors and less than desirable outcomes once they age out of school programs. There is a need to link school-based oral health programs with improvements in the care-seeking behaviors of adults to establish the efficacy of early intervention.

When PA 161 was conceived, it was envisioned to address the preventive oral health needs of low-income populations. However, in the opinion of informants, the program has never grown as large as expected because of some structural inefficiencies. Although the program provides for appropriate latitude in supervision requirements, the dental hygienist must still have a supervising dentist, and dentists have been reluctant to participate. Another problem cited by informants was a limited list of services that can be provided by the PA 161 Program. In the opinion of some, a public health dental hygienist model might provide more opportunity to reach the underserved and make dental hygiene interventions more effective.

Student Dental and Dental Hygiene Clinics, Residency Clinics, and Community Externships

Michigan benefits from having 2 dental schools, one at the University of Michigan (U-M) and the other at the University of Detroit Mercy (UDM), and from 12 dental hygiene education programs at 13 locations across the state. Students in these professional education programs participate in student externships in community dental clinics and FQHCs and also provide services in student dental or dental hygiene clinics sponsored by the education program on or near the program's campus.

Student clinics offer oral health services to the public at low cost, so they are especially attractive to safety-net populations. Services generally take longer to complete because they are precepted services, which must be monitored. As a result of the clinical services provided in these settings, dental, dental hygiene, and dental assisting students make substantial contributions to safety-net service delivery.

The student dental and dental residency clinics at the dental schools are a robust part of the safety net as well. Prior to the Healthy Kids Dental Program, these clinics were among the only resources for pediatric dental services. Children in Wayne County, which does not yet have access to this program, still access these clinics to see pediatric specialists. The dental clinics provide a range of general dentistry and specialty services, including endodontics and oral surgery as well as emergency dental services.

The dental student clinics, the specialty residency clinics, and the faculty practices at the dental schools participate with the Michigan Medicaid program. Informants suggested that because service completion may take longer in these clinics than in private practice, there is a time barrier for some patients. People in low-paying hourly jobs find it difficult to take extensive time from work or to schedule 2 or 3 visits to complete a dental treatment that might be finished in a single visit elsewhere. Informants noted that there has been some shift in the patient base in student clinics after the Medicaid expansion. The Healthy Michigan program provided some clinic patients with access to dentists in the private sector, which was a less time-consuming option.

Multiple informants commented on the singular value of the specialty clinics at the dental schools (including both the faculty practices and the residency clinics) that offer an array of high-level dental services that are generally unavailable in the primary safety net. Stakeholders cited specialty clinics as important resources for patients in need of complicated dental treatment services. However, informants also cited distance to these clinics and long wait times for appointments due to high demand as common barriers that patients encounter.

In the UDM student dental clinic, approximately 35% to 40% of patients have Medicaid and 28% to 30% have private insurance. The remainder pay cash on a sliding fee scale. A denture supplied through the clinic costs substantially less than prevailing fees in private practices. UDM dental students are also involved in external community outreach, which is completed in 4- to 6-week rotations and targeted to underserved rural communities throughout the state. Students also participate in a motor coach program with portable equipment and with the Seal! Michigan program in 6 schools.

Community externships for dental, dental hygiene, and dental assisting students were viewed by informants as valuable from a number of perspectives. Externships in safety-net clinics increase the clinical proficiency and practice readiness of students who rotate through the programs. Patients in the safety net provide different and generally more challenging clinical experiences for students because of the high volume of restorative care and extractions not generally seen in private-practice settings.

The U-M Dental School has instituted a community-based clinical education program for fourth-year dental students that places students in externships and clinical rotations in 37 locations throughout Michigan. Since 2004 students have completed more than 1,200 clinical weeks in FQHCs, community

health clinics including tribal clinics, and donated service programs for vulnerable veterans and victims of human trafficking, among others. Students have treated more than 200,000 patients and provided more than 400,000 procedures valued at $30 million. The program engages 113 precepting dentists and dental hygienists and uses a revenue-sharing model to support the costs of transportation and housing for the students.

The program has been beneficial for patients, the sponsoring organizations, and the students. Many students gain a greater understanding of practice in the safety net when they experience the complex needs of patients. A high percentage of dentists currently practicing in the safety net in Michigan are U-M Dental School graduates and a significant percentage are graduates of the community clinical education program.

These clinical rotations are important experiences because they provide students with a view of practice opportunities in safety-net systems and a greater awareness of cultural and socioeconomic diversity. Student externs are better able to understand patient viewpoints and to interact with them in a manner that promotes compliance. It is difficult to fully evaluate the economic impact of community outreach programs, but it is acknowledged to be substantial.

There are dental residency programs across the state that also supplement safety-net services. St. Joseph Mercy Health System hosts one of the few general practice dental residency programs in Michigan. The hospital built a state-of-the-art teaching center to enable residents and precepting dentists to provide a range of dental procedures. The program began at the hospital in 2011 and is one of only 3 general practice residencies not administered by the 2 dental schools available in the state. Mercy Dental Center has 2 dental operatories, a dental hygiene operatory, and a dental laboratory located in the hospital near the ED, which is equipped with panoramic imaging equipment.

Theme 9:
Local Initiatives have been successful in addressing the unmet need for oral health services in their communities.

Informants commented that reducing barriers to oral health services requires program design that appropriately addresses local gaps in care and also engages and empowers community participants. Interview participants also indicated that local solutions can sometimes be replicated in whole or in part by other communities with some reengineering of program delivery to accommodate variation in population need and provider capacity.

Battle Creek, Michigan, is a factory town in Calhoun County with a depressed economy after local companies including Kellogg outsourced production from local manufacturing facilities to overseas

plants. There are approximately 146,000 people in the county, many of whom are from lower socioeconomic groups. In 2007 a community coalition was assembled to discuss concerns about inappropriate use of the ED at the local hospital. One area of special concern was dental disease. Hospital representatives remarked that people were repeatedly arriving at the ED seeking care for dental pain and infection. This was attributed to an inability to access treatment services in the community. A subcommittee on dental access was appointed to examine the underlying issues with access.

The Calhoun County Health Partnership (CCHP) was an existing nonprofit community agency with myriad resources to help low-income populations navigate both the social service and health care systems and to bridge gaps in care. With the leadership of CCHP and the participation of several community agencies, the local hospital, health clinics in the area, the community college, and especially private-practice dentists and with funding from a local donor, the Calhoun County Dentist Partnership initiative was established.

Members of the dental access task force for the project spoke individually with local dentists to understand their reluctance to treat underserved populations. There was consensus that high no-show rates, poor patient behaviors, and a perceived lack of appreciation for the services provided were prominent reasons for lack of dental participation in care. Although low public financing for oral health services was expected to be the principal barrier, dentists were clear that it was more than financial concerns that drove provider behavior. Patients who were unable to receive oral health services in local dental practices were also interviewed. Patients generally expressed that they did not want charity from dental practices. Dentists wanted their work valued, and patients did not want handouts.

The confluence of this provider and patient input resulted in the current pay-it-forward program design. Uninsured persons in need of dental services in the county are required to volunteer at any nonprofit agency or provider in the area to earn credits toward a menu of oral health care services. The value of the volunteer services, if paid, determines the required number of volunteer hours for each dental service. For example, a prophylaxis might be valued at 4 hours of volunteer service. Dentists also make significant contributions of time, material, and professional services. Participating dentists are offered $1,000 annually to help pay for staff time, equipment, and costs, but many do not request the funds. As a result, patients contribute volunteer hours to their community, and dentists contribute services and supplies to program patients. Many clients continue to volunteer after their obligation is complete to accrue hours in anticipation of needing future services.

Some program participants need extensive dental work that requires significant volunteer time. Urgent problems are given priority. If there is a call from the hospital ED concerning a patient in need of urgent dental treatment services, the program will slot that patient into the first available opening. The patient must perform community service, but conditions in need of immediate attention may be treated before all necessary volunteer hours are accrued.

Program participants have made considerable contributions to their community. Clients of the program select the volunteer work they wish to perform, and everyone receiving services is asked to do something. As an example, a woman who was an amputee with diabetes and very limited mobility knitted all the hats for newborns in the hospital nursery. In 2013, 3,024 patients contributed 43,293 volunteer hours to receive dental services. There was a calculated return on investment for the program of 297%, with a reduction in visits to the hospital ED for dental or jaw pain from an average of 111 per month in 2006 to 22 per month in 2013. The program also reduced the number of drug seekers in the ED because ED personnel were able to refer to community dental providers for immediate treatment. Patients are given a brochure about the program and an appointment card at the ED.

One important feature of the program that has contributed to its success is ongoing communication with individual dentists and dental office staff to provide a current understanding of what is happening in the program and with individual clients. Everything is handled on a case-by-case basis. Dentists decide what their contributions will be. Some choose to do only diagnosis and treatment planning; some elect to do restorations or extractions; and others are willing to offer a full spectrum of services.

As a result, a patient may need to see more than one community dentist to complete a treatment plan. Patients do not object when there is a need for acute care, and dentists are also very accommodating. Some dentists keep spots open for program patients, and others double book at the end of the day or extend work hours to accommodate emergencies. Front office staff in participating dental offices are also very helpful. In addition, dentists are legally protected from liability under the Good Samaritan provisions for volunteers in Michigan law.

All patients in the program must first meet with a dental hygienist for an assessment and education about oral hygiene and appropriate dental office behaviors. Each patient signs an agreement that describes behaviors that are not tolerated in the program. This behavioral agreement also helps with recruiting dentists because it assures providers that patients are aware of behavior standards.

There is a strict no-show policy for the program, and this, along with patients' investments in volunteer work, has resulted in a 2% no-show rate for dental appointments. Patients are required to give the dentist at least a day's notice if they cannot keep a scheduled appointment. If the patient does not show for an appointment, the program pays the dentist $35 for the missed appointment. When requesting a return to the program, a patient is given one chance and is required to reimburse the program for this payment.

After Medicaid expansion in the ACA, many consumers in the program became eligible for insurance, which enabled them to directly connect with dentists that accepted Healthy Michigan insurance plans. As a result, the number of people accessing the program has declined. In 2014, 379 clients participated and contributed 4,852 volunteer hours. Documented and undocumented immigrants still use the program

because they are excluded from eligibility for public insurance programs.

Many program participants are now the working poor with incomes in excess of 138% of the federal poverty level and have low-wage jobs with no dental insurance benefits. They are described as county residents who were laid off from or have permanently lost high-paying jobs that provided access to an array of health care services. Many have worked all their lives but are now employed at lower-skilled jobs and are struggling financially. One problem that has arisen now that the working poor constitute the majority of participants is that people who are working do not have as much time to volunteer, so program organizers are concerned that some aspects of the program may need to change to accommodate these time limitations.

Other communities have replicated parts of this program to meet the needs of the locally uninsured for dental services. As an example, Muskegon Volunteer for Dental Care, in Muskegon, Michigan, requires patients to volunteer in the community to earn credits for dental services and to attend a dental health education class. The program is available as a dental home for people who qualify and participate.

Informants also commented on the necessity of ongoing community oral health planning with local stakeholders to:

- improve access,
- link children to dental homes,
- teach people to value oral health services,
- educate providers about treating patients from special population groups including the developmentally disabled, and
- engender a better understanding that there is value in the public health model for delivering services.

Theme 10:
Oral health services payment policy in public insurance programs is sometimes inconsistent with goals for improvements in population oral health.

To build oral health policy that improves access to services, it is important to have an understanding of the populations that remain underserved, the factors that continue to compromise access, and the design of already successful programs that improve service delivery. Oral health stakeholders in Michigan have implemented a variety of interventions that have both separately and together improved opportunities for access for safety-net populations. Michigan policymakers have also been proactive with policies that improve access, but some provisions of those policies may negatively impact outcomes.

Informants spoke eloquently about oral health policy and the effect of policy inconsistencies on the oral health status of the population. One informant described current health policy as cutting people off at the head with eye health, oral health, and mental and behavioral health viewed as separate and apart from health care generally. Delivery systems are siloed by discipline in reflection of this attitude. In the health insurance arena, "comprehensive" medical insurance, including Medicare and many private commercial plans, have historically excluded vision, oral, or mental health care services. Even inclusive benefit plans "carve" these benefits out of the health insurance contract and execute separate contracts with specialized carriers for dental, vision, and mental health services. Thus, service delivery is segmented and delivery of integrated health care is challenged. As one informant stated, a healthy nation cannot exclude one organ of the body and still be healthy.

Although there is a professed understanding among many stakeholders of the need to integrate all care to achieve holistic health, according to some informants, supportive policy is absent, fragmented, and remedial at best. Constraints in policy impact quality of care, limit patient options, and affect long-term oral health outcomes.

For instance, interview participants commented on Medicaid dental policy that excludes payment for final restoration of a tooth with a root canal. An informant commented that "dentists don't like not to do whatever can be done to preserve teeth" and maintain the integrity of the mouth. Medicaid will not reimburse for final tooth preservation, and most Medicaid-eligible patients cannot afford to pay for crowns and bridges. As a result, dental treatment plans for people on public insurance more often include extraction of a diseased tooth than do care plans for privately insured individuals. Although extraction is a rational solution for a patient suffering from pain and/or infection, it is inconsistent with population oral health goals in Healthy People 2020 that encourage maintenance of teeth. In addition, public insurance programs generally cover only limited periodontal services, which further compromises outcomes.

Informants also expressed concern that public dental benefits in most states are considered dispensable when fiscal problems arise. The refrain "when in doubt, dental's out" explained the frustration of oral health stakeholders in Michigan with the vagaries of state budget processes and changing political mandates that impact the most vulnerable in the population. One informant commented that Michigan spends $15 billion on the Medicaid program, only $250 million of which is spent on dental services.

The importance of educating legislators about the impacts of oral health policy on population oral health and the importance of providing adults with dental coverage were repeated themes in the interviews for this project. The ACA, which describes essential benefits for children, including oral health care, was considered a beginning in bridging existing gaps. Also, mental health parity policy was identified as a start in restoring the head to the rest of the body.

Those who participated in the interviews also regretted the limitations on services for children. Orthodonture for children with public insurance in Michigan is covered only in cases of severe need, such as jaw deformity or cleft palate. In contrast, children with substantial overbites or pain when chewing cannot get coverage for orthodonture from any of the Medicaid-funded insurance programs. Medicaid will also not pay for sedation of children, so if parents cannot pay, it is problematic to provide quadrant or whole-mouth dental services.

According to informants, these restrictions, when overlaid with low FFS reimbursement, make participation in the Medicaid program unappealing for many dental providers. Informants remarked that there is a triple-tier effect for Medicaid-eligible populations in the state. Children insured through the Healthy Kids Dental Program have many opportunities for care from a broad panel of dentists. Dental participation falls off with the various managed care companies in the Healthy Michigan Plan that insure the Medicaid-expansion population. However, there is still relatively good access to oral health services for adults and children who are insured through that program. For those in the "third tier" of publicly insured people—the FFS population—it is very difficult to access services because a limited number of dentists participate, and many do not accept new patients. According to informants, even dentists who are mission driven find it difficult to carry a caseload that consists mainly of FFS Medicaid patients.

Funding from IHS for health services to the Native American population was offered as an example of how policy works against goal fulfillment. National appropriations for health care services for Native Americans, while over $2 billion annually, is actually quite limited, amounting to only about $200 per person per year to cover medical, pharmacy, ancillary services, and dental. Funding is not determined by the number of tribal members nationally but is a cost-based calculation based on the number of tribal members who used IHS clinics in a previous year. Funding levels barely support existing capacity and as a result are often inadequate to enable expansion to address significant need in the population.

PROVIDERS OF ORAL HEALTH

Theme 11:
A well-distributed oral health workforce is a critical component of efforts to increase access in safety-net settings in Michigan.

Informants discussed the sufficiency of the supply of dentists in Michigan, which was viewed as apparently generally adequate on a per population basis. Informants also commented on dentists' preference to practice in metropolitan areas of the state, a pattern that mirrors what is observed nationally. Put simply, dentists across the United States are less inclined to establish a practice in more sparsely populated regions. Many informants agreed that while the overall supply of dentists might appear adequate to meet demand, there are many people in Michigan who are still unable to obtain dental treatment services, partly because of the uneven distribution of professionals.

Informants surmised that workforce staffing needs in the safety net differed from typical staffing in private practices because patient presentation in the safety net varied from that of patients in the private sector. Safety-net patients were described as more likely than patients in private practice to seek services only when experiencing emergent or acute dental problems and less likely to accept the ongoing need for preventive services to establish and maintain good oral health. Typical private dental practices were described as functioning with 1 or 2 dentists overseeing the work of multiple dental hygienists and dental assistants. Staffing in the safety net might comprise more dentists than dental auxiliaries or an equivalent number of dentists and others because of the high quantity of restorative, surgical, and extraction services not generally in demand from primary care dentists in the private sector.

Recruiting and Retaining Dental Workforce

Recruiting and retaining oral health professionals to practice in the safety net is challenging for several reasons. Many dental students graduate with high debt encumbrance because of the cost of professional education and seek employment opportunities that offer sufficient income to service their debt. Loan repayment programs offered by safety-net organizations were considered an excellent vehicle for encouraging dentists to practice in those organizations. However, according to informants, large corporate practices are now competing with safety-net clinics for new graduates in Michigan. These employers can assure new dentists a decent flow of income almost immediately at hire.

Safety-net providers indicated that recruitment and retention of dentists is ongoing. Several indicated that although there is some turnover of dental professionals in the safety net it is generally manageable. Some indicated that dental professionals recruited with loan repayment had remained after completion

of the obligated service period because they enjoyed their work in the clinic, finding it challenging and satisfying. Some also indicated that even when dentists left for private practice, many continued to work part time at the clinic.

Dental student externships and dental residency programs in safety-net clinics were considered valuable to both the students and the clinics. Clinical rotations in the safety net introduce new professionals to practice with underserved populations and give them considerable experience with restorative and extraction services because of disproportionately high demand for those services in the safety net. Informants commented that students who complete these rotations are more experienced and prepared for practice than those who do not spend time in community settings. In addition, safety-net employers are given an opportunity to evaluate the competencies of new professionals and to recruit from the graduating students for clinic staffing.

Difficulties With Finding Dental Specialists

Informants spoke not only about addressing the need for more general practice dentists to participate with the care of safety-net patients but also about the need for dental specialists to address complicated mouths with extensive decay as a result of long-term neglect and poor oral hygiene. Many commented on the difficulty with obtaining oral surgery, endodontic, and periodontic services for adults and with finding pediatric dentists or oral surgeons to provide services to children.

Difficulty in accessing specialty services was attributed in part to low reimbursement for these services in public benefit programs. However, the limited supply and the mainly metropolitan location of dental specialists was a significant concern. One informant commented that for a time there was no pediatric dentist in a 7-county region in the state. A pediatric dentist had recently located in Marquette, but the drive was still very distant for many. People accessing safety-net services often have cars that do not work well or do not have a car at all, and they struggle with affording the cost of gas. Some general dentists were known to give patients money to purchase gas to get themselves or their children to specialty care. One informant observed that there had been a rise in the number of pediatric dentists in a few areas of the state, but many acknowledged that the supply was still quite low.

Expanded Workforce Models

Interview participants were asked to express their views on using expanded workforce models for dental hygienists and dental assistants to extend access to oral health services. They were also asked about the

pros and cons of enabling new oral health workforce, including midlevel provider models. Informants varied in their views about the utility of either expanded practice or new workforce to deliver oral health services.

Some informants thought the emphasis in workforce discussions should be on using oral health professionals to the full extent of their existing competencies. Dental hygienists were described as expert at education, prevention, and primary periodontal therapy and treatment. They were viewed as vehicles to increased access to primary services and as conduits to treatment services through referrals. One interview participant commented that if every dental hygienist was employed to capacity to treat periodontal disease in the early stages, there would be significant reduction in advanced periodontal disease in the population. This was considered a reasonable possibility in Michigan because dental hygienists were permitted to provide local anesthesia for scaling and root planning.

According to some informants, workforce innovation should not necessarily include allowing auxiliaries with extra training to perform irreversible procedures. These informants suggested that using workforce appropriately and to its full scope of practice would "go a long way" to improving oral health outcomes. Others expressed that new workforce models might be especially useful for subpopulations that experience particularly difficult challenges with obtaining oral health services because of geographic, transportation, or mobility barriers.

Informants discussed the pros and cons of a midlevel model in oral health. Those who reasoned that mid-level providers would make a contribution to access cited the practice of physician assistants and nurse practitioners in medicine who are known to be competent and capable providers of quality health care services. Midlevel models were described as successful in medicine, often acting as the glue in comprehensive health care service delivery. A dental hygienist with 4 years of training and additional clinical competencies could therefore make similar contributions in oral health. Interview participants discussed the current surplus of dental hygienists in Michigan that could be engaged to improve access. Underemployment for many working dental hygienists was also considered an issue because part-time dental hygienists wanting full-time work represents untapped, available workforce capacity.

Some cited the benefits of a midlevel model as expanded access accompanied by reductions in costs of providing basic restorative services. Others questioned the financial sustainability of midlevel provider practice when public insurance reimbursement was so low that it inhibited cost recovery regardless of who provided the service. Another objection was that restoration is a surgery and as such is more than a technical skill that is taught through repetition. Informants indicated that providing restorative services requires complex preparation in diagnosis and treatment planning that may be beyond the scope of time-limited education programs for midlevel professionals.

The topic of midlevel providers in oral health was described as controversial. There was uncertainty about how the workforce would be perceived by patients and other professionals in practice. Informants commented that the dental community was predictably split on the issue. Some dentists, especially those in private practice, lack direct experience with the extensive need in the safety net, and many do not see the necessity for new workforce models. However, those in the safety net often recognize there are just not enough dentists to do everything that is needed to achieve sustained improvements in population oral health. Allowing dental hygienists with extra training to do some irreversible procedures might be helpful and would improve oral health outcomes for some.

Several informants discussed a past proposed project in Michigan that had ultimately not been funded. A conceptual model was designed for a curriculum pathway at UDM to enable dental hygienists to receive basic education in restorative care to the same standard of competency as dental students. The proposed model described how the training would be positioned in the student clinics, the expected productivity standards, and the comparability of training for the various professions. The curriculum was designed to create only minimal disruption to existing professional training programs. A model curriculum was written and the regional testing board had agreed to do the competency assessment. Legal implications for the scope of practice were also considered. The didactic and clinical training was to be conducted under the educational exemptions in the state licensing laws.

One major roadblock to project implementation was that the proposed project required funding for stipends for dental hygiene students during training, and no sponsoring agent was found. The other significant roadblock was that after training and competency testing, the newly trained dental hygienist had no avenue for licensure in the state to practice restorative care. The project was designed with the collaboration and agreement of many stakeholders, and its goals were transparent. A demonstration project was viewed as the perfect way to test a midlevel model in Michigan because it was carefully structured to show the efficacy of the innovation. It would also expose dentists to the innovation and show them how to effectively use the workforce.

Theme 12:
The integration of oral health with primary health care is an important aspect of improving oral health status for underserved populations in Michigan. Engaging primary care providers, especially pediatricians, is essential to early intervention in the disease process.

Another workforce strategy put forth by informants was to engage medical professionals with oral health screening and referral. The integration of oral health assessments with primary care services was viewed by many as a vehicle for improved access. An informant commented that one missing link in the access chain is a medical provider installing a dental chair and hiring a dental hygienist to work in a family

practice or an obstetrical practice. In the informant's opinion, this would manifest actual integration of oral with systemic health.

Informants discussed separate but congruous initiatives to encourage oral health screening and assessment by primary care medical providers, especially for children. In 2014 the Altarum Institute received an innovation grant award from CMS. Project activities included devising strategies to improve children's oral health, with a special focus on the more than 1 million publicly insured children in Michigan. Altarum was working with a variety of partners, including U-M, Delta Dental, and the Michigan Department of Community Health, to increase access to oral health service for children, especially the very young (aged 3 years and under). The strategies chosen for reducing the burden of oral disease in this population were multidimensional.

Altarum was instrumental in technology innovation, including leading efforts to build health exchanges and developing public health system technology. Much of the innovation grant was to be used for building sustainable electronic systems and providing electronic tools to improve referral pathways from medical providers to oral health providers. Platforms to enable the project objectives would leverage the current information technology infrastructure and enhance existing applications. One useful electronic tool was the state surveillance system portal that was routinely accessed by medical providers to track immunizations and communicable disease in the population.

Project staff hoped to build a supplemental interface to the existing system to allow pediatricians to identify, in real time, dentists that were accepting new patients and were also willing to treat young children. The proposed tool would likely be a web application populated by Medicaid claims data. The pediatrician would access the web to identify dentists within a reasonable travel distance who are accepting children insured by Medicaid or the Healthy Kids Dental Program. This tool would provide the pediatrician with confidence that a referral was transmitted to a dentist with the capacity to treat the child. The model was still in the theoretical stage, but it was hoped that it would update in real time and create minimal administrative burden for physicians and dentists.

According to informants, one important limitation of efforts to increase access to oral health services for young children was workforce related. Just over 100 pediatric dentists practiced in Michigan where there were about 2.5 million children under age 19. Approximately a quarter of children in the state lived below the poverty level. Attracting general dentists to treat young children was therefore an important feature of project design.

One deterrent for general dentists to treat small children was thought to be the general lack of right-sized equipment for the population. Grant partners in the Altarum consortium were considering offering equipment incentives to general dentists who were willing to treat infants and toddlers. Reimbursement rates

for services to publicly insured children in Michigan were known to be insufficient to cover the cost of purchasing extra equipment, including pediatric mouth props and x-ray bites. Other deterrents to general dentists treating young children included lack of knowledge of behavioral management techniques for squirming infants. This was a concern because dentists use sharp instruments in young children's mouths.

Another goal of the grant was to implement a dental quality system with a focus on process-oriented quality metrics (eg, the number of completed referrals) and building peer-to-peer referrals. Project goals were limited to what was measurable over the 3-year grant period, although the project partners expected to seek continuation funding to do a longitudinal study to aggregate individual patient data to demonstrate shifts in caries rates in the population over the long term.

The grant activities also included technical assistance to physician practices. A pilot demonstration was slated to begin shortly after the interviews for this project at a clinic in Michigan. A project staff member would train physicians at a primary care clinic to screen patients for oral disease and apply fluoride. The field staff member conducting the training was not an oral health professional but had attended class with dental students to gain the necessary competencies. There was a dental hygienist on the team leading the physician engagement piece of the project. Pediatricians were to be trained in risk assessment, providing anticipatory guidance to parents, and counseling. Grant partners were considering the advantages of leveraging the training as continuing education for physicians and dentists to increase participation and interest in the program.

On-site practical trainings were to use the Smiles for Life curriculum, which employs a Web based instructional format. The trainings would allow for feedback from pilot participants about best practices for dissemination to other pediatricians and primary care providers. The project benefited from a physician education advisory committee that included 6 pediatricians and 1 family physician who also served as champions to promote the program. The project was expecting to engage school health and oral health programs, WIC programs, and IHS clinics.

Another initiative in Michigan had similar goals to the Altarum project. Points of Light was conceived by a pediatric dentist with an objective of engaging dentists, pediatric dentists, and pediatricians in local communities to care for young children, especially those who were disadvantaged by poverty or special needs, and to empower parents to connect with oral health service providers for their children. The program began as a local initiative in Livingston County and has extended not only to other areas in Michigan but also to other states. The project encourages primary care providers, including pediatricians and family practice physicians, to complete a dental risk assessment on their young patients and to effect referrals to dentists.

The program was transparent with a website that was easily accessed by parents searching for providers. The website contained information about dentists in the local area who were willing to treat young children. It also contained educational information for both providers and parents, including instructional videos on techniques for examining very young children. The Points of Light initiative was also promoting access to oral health services for pregnant women to improve birth outcomes.

Points of Light was designed to follow the innovation curve, to reach a tipping point when access to oral health services was easily achieved and to sunset when children have established dental homes within a local system. The program originator hoped that as more dentists participated, other dentists would be persuaded to help young children and parents in their communities to establish a regular source of oral health care. Points of Light was recognized by numerous state and national professional groups with corresponding projects feeding into the overarching mission of increased access.

A number of initiatives in Michigan are focused on encouraging oral health screening and assessment services for very young children by clinical health and oral health providers in both private and public settings. These include the Washtenaw Success by 6 Great Start Collaborative and the Wayne Children's Health Care Access Program.

Appendix A

INTERVIEW QUESTIONS FOR ORAL HEALTH STAKEHOLDERS IN MICHIGAN

Conducted by:
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This interview is being conducted to inform a review of oral health workforce in Michigan to describe barriers to access to oral health services, and to recommend pathways to increased access to dental care. The research is conducted by the Center for Health Workforce Studies at the University at Albany in partnership with Pew Charitable Trusts. This interview is voluntary and with your consent and will take approximately 45 minutes to 1 hour to complete. Please tell me at any point if you wish to or must discontinue this interview.

Although the following questions are meant to guide the interview process, only some of the questions may be asked depending on the time allotted. Any information provided during the interview will be confidential. A report on the interviews will be compiled when all interviews are complete. The report will provide no information that could be specifically linked to you. The name of your organization and its location will be listed in the report to provide information about the geographic and organizational diversity of those interviewed. The report will generally identify common themes from the interviews and describe novel or innovative solutions that are related to increased access to dental services. If benchmark programs in your organization are identified, they may be specifically described in the report with your consent.

Do you have any questions or concerns about this interview before we begin to talk?

Questions:

1. Describe your personal or professional interest in oral health in Michigan.

2. What do you perceive to be the major barriers to universal access to oral health care in the state?

3. Do you have concerns about lack of access to oral health care for certain populations? Who is at risk for not receiving dental care? What geographic areas in the state experience limited access

to oral health care?

4. Are you aware of any successful initiatives or collaborations that have addressed the need for increased access to oral health services in the state? What strategies were employed by those initiatives to improve access to care?

5. Can you describe the coalitions that implemented these projects, their funding sources, and the patients served by these initiatives? What kinds of oral health workforce were employed to achieve the project objectives?

6. How do current regulatory limitations on scope of practice for dental auxiliaries impede access to care for those at risk for not receiving oral health services? Are there particular examples of regulatory barriers to care?

7. How have past initiatives in the state to expand the scope of practice of dental auxiliaries (including dental hygienists and dental assistants) or to decrease incumbent levels of supervision for these professionals affected access to oral health care? Have these initiatives had appreciable impacts on increasing access to oral health care? If not, why not?

8. Describe your perceptions of stakeholders' concerns about efforts to expand access to oral health care through workforce initiatives? How have oral health professionals historically responded to proposed legislation to elevate the scope of practice for either dental hygienists or dental assistants or to decrease supervision requirements for these personnel or to institute separate regulatory boards? What are the main concerns expressed by oral health professionals about such regulatory change?

9. What is your perception of the sufficiency of supply of oral health workforce in the state? Is there a need to recruit more dentists, dental hygienists, or dental assistants to work in specific locations in the state?

10. What educational programs in the state or out of state might be engaged to train new oral health professionals? Are partnerships among educational programs easily achieved?

11. What could be done by government stakeholders from a policy perspective to encourage increased access to oral health care in the state? How does funding for oral health care affect

access to dental services in Michigan?

12. Are there any issues that we have not discussed today that you feel are relevant to this discussion?

Thank you for talking with me today. If you have any questions about this interview at any time, please contact me (Margaret Langelier) at margaret.langelier@health.ny.gov or by phone at (518) 402-0250. If you have questions about your participation as a research subject, you may contact Tony Watson, New York State Department of Health, Institutional Review Board, (519) 474-8539 or at tony.watson@health.ny.gov.

Appendix B

ORGANIZATIONS WITH WHICH INTERVIEW PARTICIPANTS WERE ASSOCIATED

Altarum Institute
Ann Arbor, MI

American Indian Health and Family Services
Detroit, MI

Calhoun County Dentists' Partnership
Battle Creek, MI

Cherry Health
Grand Rapids, MI

Elderly Oral Health Care
Detroit, MI

Kalamazoo County Dental Program
Kalamazoo, MI

Kent County Oral Health Coalition
Grand Rapids, MI

Michigan Community Dental Clinic
Boyne City, MI

Michigan Dental Association
Okemos, MI

Michigan Dental Hygienists' Association
Okemos, MI

Michigan League for Public Policy
Lansing, MI

Molina Healthcare of Michigan
Troy, MI

Ottawa Department of Public Health
Holland, MI

Points of Light
Brighton, MI

Private Dental Practice
Detroit, MI

Private Dental Practice
Wayne County, MI

The Sault Ste. Marie Tribe of Chippewa Indians Health Clinics
Sault Ste. Marie, MI

University of Detroit Mercy Dental School
Detroit, MI

University of Michigan Dental School
Ann Arbor, MI

Washtenaw Health Plan
Ypsilanti, MI

Washtenaw Success by 6 Great Start Collaboration
Ann Arbor, MI

Wayne Children's Health Care Access Program
Detroit, MI

Wayne County Community College
Detroit, MI

Wayne State University School of Medicine
Detroit, MI

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