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# Issue Brief

KANSAS HEALTH INSTITUTE

## The Declining Supply of Dental Services in Kansas: Implications for Access and Options for Reform

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*The supply of dentists and the way in which dental practices operate significantly affect the level of care that Kansans receive. A study of the dental workforce commissioned by the United Methodist Health Ministry Fund shows that a persistent disparity in the supply of dentists between rural and urban areas and the manner in which services are delivered are adversely affecting the oral health of rural Kansans. Further, the oral health of poor Kansans is suffering because of a lack of access to dental care. The major findings of the study are summarized below:*

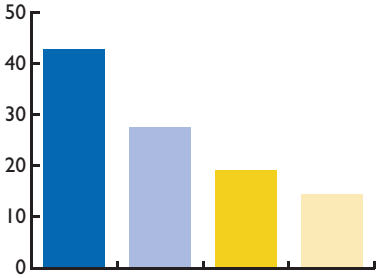
### More information

This Issue Brief summarizes the key findings from a detailed study of oral health needs and the dental workforce commissioned by the United Methodist Health Ministry Fund. The full report, as well as other KHI studies, can be found online at *www.khi.org*.

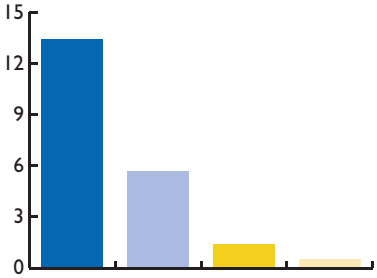
## Major Findings

- Many poor and rural Kansans lag significantly behind an accepted standard for dental care and oral health.
- These gaps in services and care are caused in part by a limited supply of dentists—especially in rural areas.
- Without policy intervention, these service gaps and resulting oral health problems will grow as the supply of dentists declines.
- State policies and workforce regulations help determine the supply of dentists and the contributions of other dental professionals to the overall supply of services.
- To improve access to dental services, policymakers could attempt to increase the supply of dentists by establishing a dental school or an in-state extension of an existing dental school, expanding education subsidy programs, or requiring more students who receive subsidies to practice in underserved areas.
- Policymakers also could target services towards underserved populations of the state, and/or support the development of new dental practice models, including expanding the types of services that hygienists or other allied professionals can provide.
- Dental workforce needs are difficult to predict and can take many years to address, suggesting the need for policymakers to monitor the dental workforce and update policies on an ongoing basis.

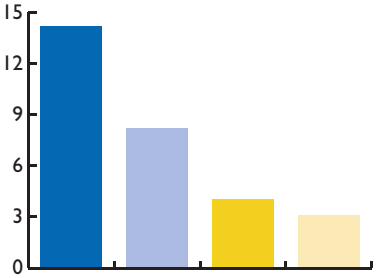
## Low-Income Kansans Have More Dental Problems




Percentage of adults in Kansas whose most recent dental visit was more than one year ago




Percentage of adults in Kansas who have lost all permanent teeth




Percentage of adults in Kansas who had any unmet dental needs in the past year

FAMILY INCOME

Less than $25,000 | $25,000 to $50,000 | $50,000 to $75,000 | $75,000 or more

The availability of dental services in the state of Kansas as a whole, especially in rural areas, and the number and distribution of dentists available to serve the poor and uninsured are reasons for concern. To inform these concerns, the Kansas Health Institute completed a study of the dental workforce in Kansas to determine if there was a shortage of providers and to explore policy options for managing the supply of dental workforce professionals. Sources for the study included the complete licensure records from the Kansas Dental Board; statewide survey data on health status and dental needs; dental claims from the State Children's Health Insurance Program (SCHIP, or HealthWave); industry data on dental supply, pricing, and utilization; and a comprehensive review of the literature.

## Rising Standards, Persistent Needs

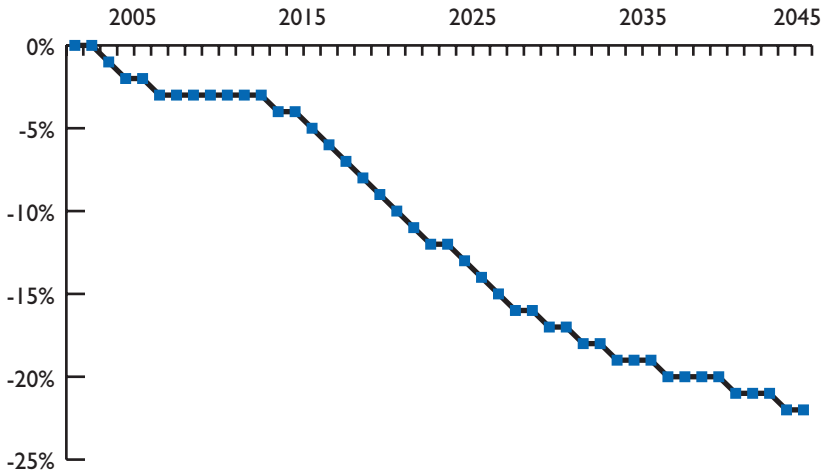
Oral health has improved significantly in the U.S. over the last several decades for children, adults, and the elderly. These improvements are generally attributed to widespread and sustained fluoridation of public water supplies, to increased utilization of preventive dental care, and to a rising public expectation of healthy teeth. According to an analysis of survey data undertaken for this study, levels of access in Kansas are slightly higher than the national average and are right in line with other states in this region of the country—such as Iowa, Missouri, and Nebraska. However, this study also revealed sizeable gaps in access and dental outcomes for low-income and rural populations. In addition, analyses of HealthWave claims data confirms earlier reports of low participation rates for dentists serving low-income children in the Medicaid and SCHIP programs. Poor access to dental care can have a profound impact on overall health and well-being. Poor oral health can reduce productivity, diminish physical function, and impede social interaction. The pain of an untreated dental problem can lead to the loss of sleep, depression, and other psychological conditions.

## The Impact of Supply on Dental Needs

The price of dental services and dentists' profits have increased significantly in recent decades, while per-capita utilization of dental services has declined. Taken together, these changes cannot be explained solely by changes in consumer preference and need for dental services. The most likely explanation for observed market trends is some sort of supply constraint, which may occur as a natural byproduct of dentists' market control. Supply limitations may also be reflected in dentists' reallocation of their practices' time and resources to meet rising demand for preventive and cosmetic services, and diminishing need—on average—for restorative services. Whether it is market power, market shifts, or both that are to blame for observed increases in prices and limited levels of supply, the impact on those who live in rural areas and those who are poor is the same. This study suggests that the current dental workforce in Kansas is both insufficient in number and inappropriately distributed geographically to meet the dental needs of the population, and that these shortcomings are likely to deepen as population growth strains an already tight supply of dentists.

Analysis of the dental workforce indicates that access problems in the state derive significantly, though not solely, from the limited and unevenly distributed supply of services available. Access gaps and unmet needs for dental services are concentrated among populations least able to compete financially for the limited number of practice hours offered by dentists, and those who live in rural areas where supply is even tighter. It was not surprising to find that the supply of dentists is significantly greater in more urban areas of the state than in rural areas, but one of the most striking findings in the study is that these differences have not been growing. The dentist-to-population ratio in the most rural counties of the state is below 40 dentists per 100,000 residents, while the ratio in metropolitan counties is above 50. These differences have changed little over the last 13 years, which suggests that dentists are making location decisions based partially on an understanding that traditional rural practices are inherently less profitable.

### Projected Decrease in the Supply of Dentists




Note: This is a measure of change in the number of FTE dentists per 100,000 people. In 2002, the number was 38.

## Projected Decline in Supply

To facilitate discussion about possible changes in dental workforce policy, this study provides detailed baseline projections of the dentist workforce in Kansas. These projections indicate that if state policies and market conditions remain essentially unchanged, the total number of full-time-equivalent dentists practicing in the state will increase somewhat for the next decade and then fall gradually to just below current levels. However, due to population growth, the ratio of dentists to the total population—a more direct measure of the supply of

**" ... The extent and severity of untreated dental disease—especially among underserved children—is unacceptable."**

*American Dental Association White Paper on Access, October 2004*

KANSAS HEALTH INSTITUTE

The Kansas Health Institute is an independent, nonprofit health policy and research organization based in Topeka, Kansas. Established in 1995 with a multi-year grant from the Kansas Health Foundation, the Kansas Health Institute conducts research and policy analysis on issues that affect the health of Kansans.

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dental services—is projected to fall steadily and significantly through at least the year 2045.

The natural uncertainty that underlies projections of this type, coupled with the long lead time required to train dentists, suggests that policymakers should keep a close watch on the number and distribution of dentists so that they can effectively monitor progress in meeting policy goals. Shortages may take many years to correct, and factors contributing to them may change in the meantime. These difficulties suggest that policymakers need to remain engaged in ongoing review and update of policies.

## Potential Solutions

State policies help determine dental workforce supply by providing educational subsidies and dental training slots at the University of Missouri-Kansas City; establishing the manner in which dental professionals are licensed and allowed to practice; and determining the scope and autonomy with which each of the dental professions can practice. Policymakers might consider a range of options in order to address the declining supply of dentists in the state and improve access to dental services for underserved populations, including:

- Establish a dental school or an in-state extension of an existing dental school.
- Use advanced dental students to meet needs in underserved areas as a part of their training.
- Expand loan repayment programs and/or educational subsidies.
- Require more subsidized Kansas dental students to locate in underserved areas.
- Recruit foreign dentists on provisional or educational licenses.
- Enable changes in the dental business model by expanding the types of services that hygienists or other allied dental professionals can provide and/or allowing allied professionals to bill patients directly.
- Improve data collection, monitoring, and reporting of oral health and workforce issues.
- Increase dentists' participation in Medicaid with better and simpler reimbursement.
- Consider Medicaid expansions, especially for poor adults.
- Advocate for national policies that enhance the dental workforce.

While each of these options could be designed to increase access to dental services, many come with significant public or private financial costs, most yield uncertain benefits, and some may bring with them unintended consequences. Thus, it may be difficult to obtain public consensus to support a package of policy reforms. Nevertheless, there appears to be widespread agreement that disparities in access to care among poor and rural populations merit the attention of policymakers.

This Issue Brief and a full report on the topic were produced under contract with the United Methodist Health Ministry Fund. The contents of this brief are solely the responsibility of the author and do not necessarily represent the views of the funding organization and other contributors to the project.