

Utilization of Oral Health Services by Medicaid-Insured Adults in New York, 2012-2013

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Introduction/Background

The Medicaid dental benefit for adults varies widely across states. Some states narrowly cover treatment of dental pain and infection for adults, while other states offer more comprehensive adult benefits. Adult Medicaid beneficiaries in New York have an extensive dental benefit that includes preventive services, restorative services, periodontal services, dentures, and oral surgery. This coverage has the potential to reduce the need for dental services in hospital emergency departments.

In addition to the coverage provided by the adult Medicaid benefit, other factors such as socioeconomic characteristics, geography, and availability of private dental practices or safety net oral health providers may affect the utilization of oral health services by Medicaid-insured adults. The objective of this research was to understand the impact of Medicaid dental benefits and availability of providers on utilization of oral health services.

Methods

This research study is based on an analysis of Medicaid enrollment and dental claims data for adult New Yorkers in the period between January 1, 2012, and December 31, 2013. The study sample included all adults aged 21 years and older who were eligible for Medicaid benefits during the study period. The Medicaid data aggregate, by demographics and geography, was extracted using the Salient Interactive Miner software tool.

Enrollment rates were calculated using the demographic distribution of all New Yorkers 21 years of age and older. The population data source was the 2009-2013 American Community Survey, from the US Census Bureau.

New York counties were classified as urban, rural, or mixed urban-rural based on the percentage of the population living in urban census tracts in the county, according to the Rural-Urban Commuting Area.

Utilization rates were calculated separately for dental services provided in a dental office or clinic, or in a hospital emergency department. Multivariable Poisson regression models with robust variance estimation were used to determine adjusted utilization rate ratios (RR) and 95% confidence intervals (CI) for associations between oral health service utilization in emergency departments and patients' gender, age, race/ethnicity, rural status of county of residence, and ratio of dentists providing services to Medicaid enrollees, accounting for clustering by county. Statistical significance was defined as $P < .05$ using two-tailed tests. Analyses were conducted using SAS v.9.4.

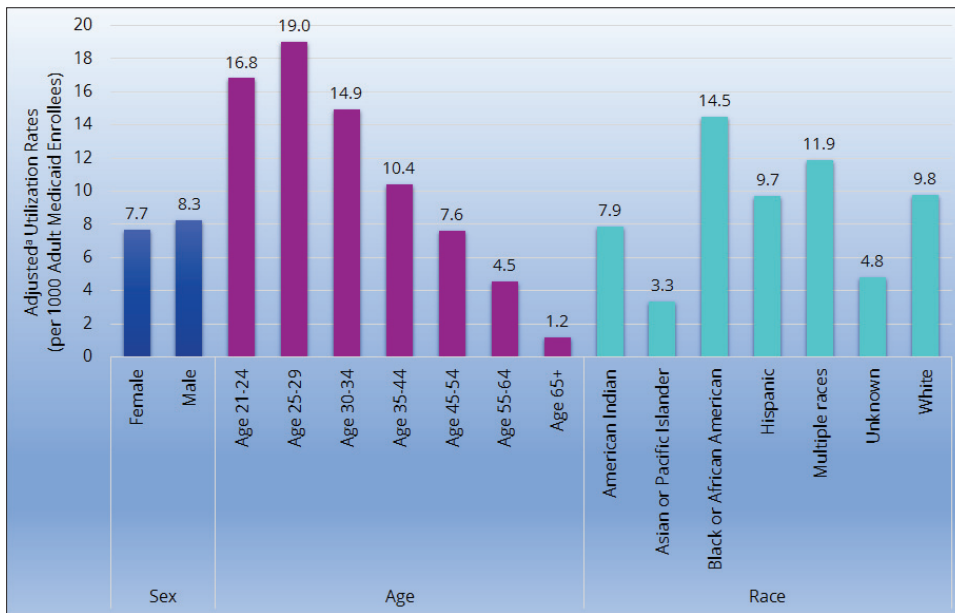
Conclusions and Policy Implications

- 1) Only about one-third of Medicaid beneficiaries received any oral health service in the 2-year period examined for this study.
- 2) People living in rural or mixed rural urban areas in New York had higher rates of hospital emergency departments use than those in urban areas, as did men, underrepresented minorities, and younger adults.
- 3) Medicaid enrollees would benefit from improved oral health literacy about the importance of maintaining their oral health and appropriate care seeking behaviors.
- 4) Variations in rates of oral health services utilization suggest that oral health delivery systems differ by locale, even in rural areas of New York, and thus strategies to increase access to oral health services should consider characteristics of local communities and their specific needs.
- 5) Greater engagement of oral health professionals with the Medicaid program should be encouraged.

Approximately 21.9% of the adult population in New York were insured by Medicaid during all or part of the 2-year study period, 2012-2013. Enrollment rates among adults in New York Medicaid in 2012-2013 were the highest among women, adults aged 21 to 44 years, Hispanics, and Non-Hispanic Asians, Native Hawaiians and other Pacific Islanders, or other races in 2012-2013. The vast majority of adult enrollees in New York Medicaid resided in 9 urban counties during the 2-year study period.

Nearly one-third (30.2%) of adult New York Medicaid enrollees received at least one oral health service in a dental office or clinic in 2012-2013. Men, adults 65 years and older, and Non-Hispanic American Indians who were enrolled in Medicaid had the lowest utilization rates of dental services in dental offices or clinics during the 2-year study period. Only a small percentage of dentists (24.4%) provided services to Medicaid enrollees in rural and mixed urban-rural counties. It is, therefore, not surprising that Medicaid-enrolled adults living in these counties had the lowest utilization rates of oral health services in dental offices or clinics.

Figure 1. Adjusted Utilization Rates for Oral Health Services in Hospital Emergency Departments Among Adult Medicaid Enrollees by Demographic Characteristics in New York, 2012-2013



The utilization rate of dental services in hospital emergency departments among adult Medicaid enrollees, adjusted for patients' demographics and county characteristics, was 8.0 per 1,000 enrollees during the 2-year study period. Men, young adults, Non-Hispanic Blacks or African Americans, and adults residing in rural and mixed urban-rural counties had significantly higher adjusted utilization rates compared with women, older adults, Non-Hispanic Whites, and adults residing in urban counties, respectively (Figure 1).

The ratio of dental office and clinic dentists who provided dental services to adult Medicaid enrollees per 1,000 enrollees in 2012-2013 ranged from 0 to 7.1 dentists in rural counties, from 1.7 to 17.1 dentists in mixed urban-rural counties, and from 2.3 to 6.0 dentists in urban counties. Five rural counties had less than 1 dentist per 1,000 Medicaid enrollees.

^a Rates were adjusted for patients' gender, age, race/ethnicity, rural status of county of residence, ratio of dentists providing services to Medicaid enrollees, and year of service, accounting for clustering by county.

Conclusions

New York is among the states with the most generous dental benefits for Medicaid-enrolled adults in the nation. Nevertheless, only about one-third of Medicaid beneficiaries received any oral health service in the 2-year period assessed in this study. People living in rural or mixed rural urban areas, men, underrepresented minorities, and younger adults had higher rates of hospital emergency department use for oral conditions. This suggests that the population would benefit from improved oral health literacy and education, and also that greater engagement of oral health professionals with the Medicaid program should be encouraged.

Rural areas generally have fewer dentists per population than more populous counties, which limits the availability of dental services in private dental practices, especially for the Medicaid-insured. Differences among the small number of dentists in rural areas willing to treat Medicaid-insured adults can have a substantial impact on the local population and the availability of oral health services. Thus, strategies selected to address the barriers to accessible oral health services for Medicaid enrollees must consider the characteristics of local communities and the specific needs of the population.