Oral Health and Access to Dental Care for Ohioans, 2007
Dental Care Remains the No. 1 Unmet Health Care Need for Children and Low-Income Adults

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Summary

Oral diseases such as tooth decay and gum infections still affect a large proportion of Ohioans. Unnecessary dental disease and oral infections are costly problems for families, employers and government. Severe dental problems can result in poor performance or absence from school or work. Oral disease has been associated with other serious health problems including heart and lung diseases, stroke, diabetes, low birth weight and premature births.

Access to dental care means that people can get the dental care they need when they want it. To get that care, a person must have two things: availability of a private dental office or safety net clinic (operated by local governments, hospitals and community agencies) and a means to pay for the care. Lacking such means is the most common barrier to accessing dental care. Low-income families who rely on Medicaid to pay for dental care face a special barrier because their means of payment is not accepted by most dental offices.

This brief updates previous reports on access to dental care, by highlighting findings from four recent surveys: the 2004 Ohio Family Health Survey, the 2004 Behavioral Risk Factor Survey and the Ohio Third Grade (2004-05) and Head Start (2002-03) Oral Health Surveys.

The Bottom Line

Uninsured: While approximately 1.2 million (10.7 percent) Ohioans have no health insurance, 4.25 million (38 percent) lack dental coverage.

Children’s Oral Health: Ohio falls short of national objectives for children’s oral health. The proportion of third grade children with untreated cavities was unchanged between 1998-99 and 2004-05. Children living in low-income households, and those who are black or live in Appalachian counties are most likely to have untreated cavities and toothaches.

Children’s Access to Dental Care: Dental care remains the No. 1 unmet health care need for Ohio children. Racial and ethnic minority children, those from low-income households and those without private dental insurance are less likely to have a recent dental visit than others, and more likely to have an unmet need for dental care.

Adults’ Oral Health: Oral cancer and loss of teeth in adults are significant problems. Dental problems for those who are poor, non-white and/or reside in Appalachian counties remain a particular concern.

Adults’ Access to Dental Care: Dental care and prescription drug needs (prior to the implementation of the Medicare drug benefit) are greater than other health needs for Ohio adults. Dental care remains the No. 1 unmet health care need for low-income Ohio adults. Racial and ethnic minority adults, those from low-income households and those without private dental insurance are less likely to have a recent dental visit than others.
### Oral Health:
- **Cavities:** 26 percent of children in third grade and 28 percent of 3-5-year-old Head Start children have untreated cavities.
- **Toothaches:** One in 10 children has had a recent toothache.
- **Disparities:** Disease rates are significantly higher among children from low-income families and those from Appalachia.

### Access to Care:
- Dental care is the No. 1 unmet health care need for children.
- Disparities: The children most likely to have untreated cavities are poor, non-white and/or reside in Appalachian counties.
- **Uninsured:** 23 percent of Ohio children (about 670,000) are uninsured for dental care.
- **Medicaid:** Only 5 percent of Ohio Medicaid consumers under age 3, and 44 percent of those ages 3-18 years had a dental visit in 2005.

### Adults
- **Oral Health:**
  - Loss of Teeth: In 2004, 46 percent of adults have had at least one tooth removed due to tooth decay or gum disease (improved from 50 percent in 2000).
    - Including 6 percent who had all of their teeth removed (versus 9 percent in 2000).

### Access to Care:
- Dental care is the No. 1 unmet health care need for low-income adults and is second to prescription needs for adults overall.
- Disparities: The adults most likely to have dental problems are poor, non-white, and/or reside in Appalachian counties.
- **Uninsured:** 43 percent of Ohio adults (about 3.6 million) are uninsured for dental care.
  - 38 percent uninsured among adults aged 18-64.
  - 66 percent uninsured among adults aged 65+.
- **Medicaid:** Only approximately one-third of Ohio Medicaid consumers ages 19 through 64 years, and one-fourth of those aged 65 and over had a dental visit in 2005.

### Ohio Infrastructure
- **Dentist Shortage Areas:** Ohio has more than 50 federally designated dental health professional shortage areas (HPSAs), mostly due to inadequate numbers of dentists who serve low-income patients. There may be additional potential dentist shortage areas that have not applied for designation.
- **Safety Net:** There are approximately 100 safety net dental clinics in Ohio (increased from 75 in 1999).
- **Medicaid Providers:** 26 percent of Ohio dentists submitted at least one claim for a Medicaid patient in 2005.
  - 19 percent of Ohio dentists treated at least 50 Medicaid consumers.
- **Fluoridation:** Approximately 91 percent of Ohioans on public water systems have access to fluoridated water.
Oral Health Status of Ohio Children

- Approximately 55 percent of Ohio children have had dental caries (tooth decay or “cavities”) by the third grade and almost half of those children (26 percent overall) have untreated cavities.\(^5\)

- Ten percent of third grade children have had a toothache in the past six months, according to their caregivers. Children who were black (17 percent) or from low-income families (16 percent) were much more likely to have toothaches than their racial and economic counterparts.\(^5\)

**Figure 1: Oral Health of Ohio Third Grade Children by Family Income (% of Federal Poverty Level) 2004-05.**

![Bar chart showing oral health status by family income](image)

- Low-Income (<185% FPL)
  - Untreated Cavities: 35%
  - Toothache in Past 6 Months: 16%
- Middle-Upper Income (>185% FPL)
  - Untreated Cavities: 19%
  - Toothache in Past 6 Months: 6%
- All 3rd Grade Children
  - Untreated Cavities: 26%
  - Toothache in Past 6 Months: 10%

Source: Ohio Third Grade Oral Health Survey, 2004-2005
• The percentage of third graders with untreated cavities was unchanged between 1998-99 and 2004-05.5

• Third grade children from low-income families have untreated cavities at almost twice the rate of children whose families earn at least 185 percent of the poverty level [$34,875/year for a family of four in 2004] (35 percent vs. 19 percent).5

• Third grade children from Appalachian counties have untreated cavities at almost twice the rate of children from suburban counties (35 percent vs. 20 percent).5

• Approximately 38 percent of 3-through-5-year-old Ohio children in Head Start programs (predominantly low-income) have had dental caries and three-fourths of those children (28 percent overall) have untreated cavities.6

• Because management of children of this age group in a dental office may be difficult, a number of children require treatment in an operating room.

Figure 2: Oral Health and Access to Care for 3-5-Year-Old Ohio Head Start Children, 2002-03.

Source: Ohio Family Health Survey, 2003-2004
Access to Dental Care for Ohio Children

Access to dental care typically is assessed by measuring the number of people with dental visits, the number who are uninsured and those who identify dental care as an unmet need. Self-reported insurance data, however, tend to overestimate dental visits and insurance coverage.

- Dental care was the most commonly identified unmet health care need for Ohio children in 2003-04.
- While 156,000 Ohio children (5 percent) are uninsured for health care, approximately 670,000 (23 percent) do not have coverage for dental care.

In 1998-99, 33 percent had no dental coverage. The increase in coverage is most likely due to expanded Medicaid eligibility that began in 2000.

- Children below 150 percent of the poverty level are more likely to have dental coverage than those in all higher income groups. Most of their coverage, however, is through Medicaid, while most of the higher income groups is private insurance.

![Figure 3: Unmet Health Care Needs of Ohio Children (0-17 Years), According to Insurance Status, 2003-2004.](source: Ohio Family Health Survey, 2003-2004)
• Seventy percent of Ohio 0-17-year-old children had a recent dental visit (within one year).  
• Only 7 percent of Ohio children under age 3 years had a recent dental visit.  
  – The American Dental Association, the American Academy of Pediatric Dentistry and the American Academy of Pediatrics recommend at least an annual dental examination beginning as early as the eruption of the first tooth or no later than 12 months of age.  
• Children with private insurance (78 percent) were more likely to have a recent dental visit than uninsured children (65 percent) or those with Medicaid (65 percent).  
• Unmet need for dental care was greatest among Ohio children from vulnerable populations (i.e., below poverty level, black or Hispanic, or lived in Appalachia).  
• Among third grade Ohio children from low-income families, 19 percent could not get the dental care their parents felt they needed, more than three times the rate for non-poor. Financial issues (lack of money or insurance) accounted for 56 percent of the reasons given for not getting needed care.
Oral diseases in adults negatively impact their ability to eat healthy food, their overall health and ultimately their employability. Tooth decay and advanced gum diseases ultimately lead to loss of some or all teeth. Despite advances in surgery, radiation and chemotherapy, the five-year survival rate for oral cancer has not improved significantly over the past several decades.

- Almost half of adults (46 percent) have had at least one tooth removed due to tooth decay or gum disease including 6 percent who had all of their teeth removed.⁴
- Low-income adults are much more likely than middle-and upper-income adults to have all of their teeth removed.⁴
- Appalachian and non-white Ohio adults are more likely than others to have had one or more teeth removed.⁴
- Life-threatening cancers of the mouth and throat are detected in three Ohioans every day, accounting for 1.9 percent of the newly diagnosed cancers reported from 1998 through 2002.⁸
  - Black males have the highest rate of new mouth and throat cancers in Ohio (16.8 per 100,000 people).⁸
- Alcohol and tobacco use are the major risk factors for oral cancer, accounting for 75 percent of all oral cancers.
Access to Dental Care for Ohio Adults

- Prescription drugs and dental care were the two most commonly identified unmet health care needs for all Ohio adults.³
- Dental care was the No. 1 unmet need for Ohio’s low-income adults and those who were Hispanic/Latino.³
- While approximately 1 million Ohio adults (13 percent) were uninsured for health care, 42.7 percent (about 3.6 million) do not have coverage for dental care. Self-reported insurance data tends to overestimate insurance coverage.⁷
- Two-thirds of Ohio seniors (65 years and older) had no dental insurance and were less likely to have a recent dental visit than 18-64-year-old adults (54 percent vs. 65 percent).³
- 63 percent of Ohio adults had a recent dental visit (within one year).³
- Income was strongly associated with a recent dental visit by Ohio adults.³

Figure 5: Ohio Adults with Dental Visits Within Past Year, According to Income (% of Federal Poverty Level), 2003-04.
• Adults with private insurance were much more likely to have a recent dental visit (76 percent) than those with Medicaid (57 percent) or no dental coverage (50 percent).³

• Black (53 percent) and Hispanic (56 percent) adults were less likely to have dental visits than those who were white (65 percent) and Asian (68 percent).³

• Appalachian (56 percent) and other rural Ohioans (61 percent) were less likely to have a recent dental visit than suburban and metropolitan county residents (65-66 percent).³

• Eighty percent of Ohio adults with a college degree, but only 41 percent of those with no high school diploma, had a recent dental visit.³

Figure 6: Ohio Adults with Dental Visits Within Past Year, According to Insurance Status, 2003-04.

Source: Ohio Family Health Survey, 2003-2004
Medicaid deserves special consideration because it targets the most vulnerable Ohioans, those who have higher disease rates and lower dental care utilization rates than others. Utilization is an access indicator. Actual Medicaid data show considerably lower utilization rates than the 65 percent of children and 57 percent of adults that were self-reported in the Ohio Family Health Survey. The Ohio General Assembly directed that Medicaid managed care expand to the entire state. During State Fiscal Year (SFY) 2007, the Medicaid program will continue to transition from a mix of fee-for-service and managed care to almost entirely managed care for service delivery. The following data reflect the mix of fee-for-service and managed care that was in place in SFY 2005.

- Figure 7 shows that in SFY 2005, dental claims were submitted for only 32 percent of Ohio’s Medicaid-eligible individuals, up from 24 percent in 1999.
  - When only those who were enrolled in Medicaid for at least 11 months of the year are considered, the percentage increases to 39 percent, up from 32 percent in 1999.
- Children: Only approximately 5 percent of Ohio Medicaid consumers under age 3, and 44 percent of those ages 3-18 years had a dental visit in 2005 (average of both methods in Figure 7).
- Adults: Approximately one-third of Ohio Medicaid consumers ages 19 through 64 years and one-fourth of those over age 65 had a dental visit in 2005.
Dentist Participation in Medicaid

Dentist participation in the Medicaid program is an important element of access to care for low-income Ohioans. The majority of dentists who submit Medicaid claims limit the number of patients for whom they provide care, most often by treating only patients of record but not new patients.

- Three out of four Ohio dentists did not participate in the Medicaid program in 2005.
- In 2005, the year preceding a reduction of the Medicaid adult dental services budget, 26 percent of dentists submitted claims for at least one patient to the state Medicaid program or a Medicaid managed care plan, and 19 percent served more than 50 patients. When compared to 1999, this represents essentially no change in the proportion of dentists treating individuals whose care is paid for through Medicaid but a significant increase in the percent treating higher numbers of patients (12 percent treated 50 patients or more in 1999).

**Figure 8: Ohio Dentist Participation in Medicaid (Fee-For-Service and Managed Care), 2005.**

Source: Ohio Department of Health Analysis of Medicaid Data
Availability of Dental Care

In 2005, Ohio’s dental care delivery system consisted of more than 6,200 dentists, mostly solo and two-dentist private practices, and approximately 100 safety net clinics operated by local governments, hospitals and community agencies. Safety net dental clinics serve people who lack access to the private system, usually for reasons relating to cost of care.

Figure 9 illustrates Ohio’s federally designated dental HPSAs and its safety net clinics. Other areas that have not gone through the designation process also may have dentist shortages.

More than half of Ohio general dentists and two-thirds of pediatric dentists practice in urbanized areas that are not in central cities, roughly equivalent to “suburbs,” and only 3-7 percent practice in rural areas (<2,500 population). In contrast, programs that serve low-income populations (e.g., Head Start Centers and safety net dental clinics) primarily are located in central cities, smaller towns and rural areas. Most of Ohio’s more than 50 federally designated dental HPSAs are in inner cities and rural, particularly Appalachian, areas and they are more likely to result from a shortage of dentists who treat Medicaid consumers rather than too few dentists for the total population.
Figure 9: Ohio Safety Net Dental Clinics and Dental Health Professional Shortage Areas (HPSAs), 2006.
Methodologies

The Ohio Family Health Survey is a complex designed telephone survey of the Ohio population addressing health care access, health care system use, health services needs, insurance status, employment trends, health status, behavior risk participation and demographics. Using a random-digit dialing method, data were collected in 2003 and 2004, and obtained a sample consisting of 39,953 adults (18 years and older) and 15,447 children. The survey sampling was stratified to represent the community-dwelling population within Ohio's 88 counties.

The Oral Health Survey was an open-mouth survey of 14,029 children at 374 randomly selected schools. The survey was conducted by the Ohio Department of Health’s Bureau of Oral Health Services during the 2004-2005 school year. The Head Start survey of 2555 children was conducted at 50 randomly selected sites in 2002-2003.

The Behavioral Risk Factor Surveillance System uses a cross sectional telephone survey of health-related behavior among adults 18 years and older. In 2004, 7304 Ohioans were surveyed.

Medicaid utilization data were calculated using two different methods: 1) for all those eligible at any point during the year, and 2) for only those eligible for at least 11 months during the year. Summary estimates are presented as rounded averages of the two methods.

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