



A Costly Dental Destination

Hospital Care Means States Pay Dearly

Each year, many Americans seek dental care in hospital emergency rooms (ERs). The Pew Center on the States estimates that preventable dental conditions were the primary diagnosis in 830,590 visits to ERs nationwide in 2009—a 16 percent increase from 2006.¹ For many low-income children, emergency rooms are the first and last resort because their families struggle to find a dentist who either practices in their area or accepts Medicaid patients.

Earlier this year, Dr. Alan Sorkey, an emergency-room physician in Louisiana, told a reporter, “It is a very rare event when I do not see one dental complaint during a (12-hour) shift.”² The fact that so many people are turning to hospitals to address oral health needs is another sign that the U.S. dental system is failing to reach many who need care.

These ER trips add to the financial burdens confronting states. A study of decay-related ER visits in 2006 found that treating about 330,000 cases cost nearly \$110 million.³ States are saddled with some of these expenses through Medicaid and other public programs.⁴

Especially large bills result when severe decay-related problems require hospitals to use general anesthesia.⁵ The problem is serious enough that Michigan Governor Rick Snyder (R) told legislators last year that poor oral health is a reason for “inappropriate use of emergency rooms.”⁶

In Arizona, taxpayers have borne a major portion of dental-related ER costs. In 2005, roughly 46 percent of the state’s ER visits for dental reasons were made by Medicaid enrollees.⁷ Roughly one-third of Florida’s hospital emergency-room dental visits in 2010 were paid by taxpayers through the Medicaid program.⁸



 In New York State, the average charge per emergency visit for young children with dental ailments increased 30 percent during a recent five-year span.⁹

This problem is not new. In the late 1990s, data from various states revealed that significant numbers of people were showing up at hospital ERs with toothaches or other dental disorders.¹⁰ In 1997, there were about 62,000 emergency dental visits by Medicaid enrollees in North Carolina that could have been avoided if these patients had received preventive care from a dentist.¹¹

By working to increase access to preventive dental care in more cost-effective settings, policy makers can spare many children the pain and lifelong impact of poor oral health while saving taxpayer dollars.

What is the cause?

In 2009, more than 16 million Medicaid-enrolled children (56 percent) received no dental care—not even a routine exam.¹² This has serious consequences. Although oral health generally has improved in recent decades, many kids have untreated decay.¹³ In 2008, nearly one out of seven children ages 6 to 12 in the U.S. had suffered a toothache in the previous six months.¹⁴ A recent

study showed that children with poor oral health were more likely to have pain, miss school, and experience poor academic performance.¹⁵

A major driver of dental-related hospital visits is a failure by states to ensure that disadvantaged people have access to routine preventive care from dentists and other providers.

A dentist shortage exacerbates this access problem. Roughly 47 million Americans live in areas that are federally designated as having a shortage of dentists.¹⁶ This is a key reason why dental care remains the greatest unmet health need of children.¹⁷ One study projects that by 2019, there could be 7,000 fewer dentists practicing in the United States compared with the number working in 2009.¹⁸

Even in states with a less severe shortage, many people live far from the nearest dentist.¹⁹ The Walsh Center for Rural Health Analysis has cited “[p]ersistent and worsening shortages of oral health care providers in rural areas” as one factor driving people to ERs “for problems that might have been prevented.”²⁰

Many families face a different kind of shortage as they struggle to find dentists to care for their Medicaid-enrolled children. In 2008, fewer than half of the dentists in 25 states treated any Medicaid patients.²¹

Many Americans face access challenges because they lack dental insurance and cannot afford care or because they do not live near a community health center offering affordable dental services. A recent national survey showed that 45 percent of Hispanics lack dental insurance.²² A 2011 poll revealed that three out of 10 Maine residents had put off a dental appointment because of the cost.²³

Hospitals, therefore, frequently serve as the provider of first and last resort when an oral health condition develops.²⁴

→ A study in Washington State revealed that a trip to the ER was the first “dental visit” for one in four children overall, and for roughly half the children younger than 3 and a half years.²⁵

States need to do more to ensure that preventive dental services are available to all children, especially the most vulnerable. Once a child has a decayed tooth, delays in treatment are highly likely to make the experience more painful and costly. An untreated cavity is not like a cold or flu, which go away with time and bed rest. As the August 2010 death of a young Ohio man revealed, a cavity that goes untreated can become a serious and potentially life-threatening problem. Improved access must be coupled with more prevention.

Why does this matter?

Both patients and policy makers face serious consequences when oral health problems are addressed in hospitals.

For states, the costs of emergency-room visits place added pressure on already squeezed budgets. Research shows the average cost of a Medicaid enrollee’s inpatient hospital treatment for dental problems is nearly 10 times more expensive than the cost of preventive care delivered in a dentist’s office.²⁶

For patients, ERs are an expensive source for treatment, and care from these facilities is unlikely to provide lasting relief. Hospitals generally are unable to treat toothaches and dental abscesses effectively. Most emergency rooms are not staffed with dentists, and their physicians and other staff are not trained to treat underlying oral health problems.²⁷

“ERs are not the place to go for dental care,” said John Sattenspiel, chief medical officer of a physicians group in Oregon.²⁸ Generally, hospitals can provide only short-term relief, such as medication to treat an infection or temporarily relieve pain.²⁹ A study of low-income patients with toothaches found that among those who went to an emergency room, 80 percent needed subsequent care from a dentist.³⁰

For these reasons, it is no surprise that patients who take their dental problems to hospitals have a high rate of repeat visits.³¹ A study in Minnesota examined 10,325 dental-related trips to hospital emergency facilities and found that almost 20 percent of them were made by people who had previously sought ER care.³²

In addition, the significant numbers of Americans seeking dental care in hospitals are an added burden on ERs, which are already overcrowded in many areas of the country.³³ In 2009, the American College of Emergency Physicians reported that hospital ERs “are increasingly crowded, over capacity, and overwhelmed,” leading to “increasing delays in care, even when [patients] are in pain or experiencing a heart attack.”³⁴

How widespread is the problem?

The full scope of the problem is unknown for two reasons. First, not all of the 50 states mandate that hospitals submit their discharge records. Second, some states do not interpret and report the ER data they have collected.³⁵ However, data from a number of states reveal that hospitals are a frequent

destination for many people who have dental problems:

California's ERs received more than 83,000 visits in 2007 resulting from preventable dental problems.³⁶

In 2009, **Tennessee** hospitals had more than 55,000 emergency visits due primarily to teeth or jaw disorders. These conditions were responsible for roughly five times as many ER trips as were burns.³⁷

From 2008 to 2011, **Illinois** hospitals in the Chicago metropolitan area had nearly 77,000 emergency or other types of patient visits for non-injury, dental-related ailments.³⁸

Utah hospitals received more than 8,700 emergency visits in 2009 from patients with dental or jaw disorders.³⁹

In 2010, **Florida** had more than 115,000 hospital ER visits for dental problems.⁴⁰

The nine hospitals in **Ohio's** second-most-populated county received 8,760 emergency visits in 2009 from Medicaid-enrolled or uninsured patients suffering from dental ailments.⁴¹

Kansas hospitals reported more than 17,500 visits to emergency facilities due to dental-related problems in the 2010

fiscal year. The actual number of ER trips could be significantly higher because more than 20 percent of hospitals in Kansas did not disclose such data.⁴²

In 2009, there were more than 69,000 ER visits to **North Carolina** hospitals due primarily to disorders of the teeth or jaw. These conditions were the 10th most common reason for emergency trips in the state.⁴³

Nevada health officials estimated that the state's hospitals received 6,431 emergency or in-patient visits in 2005 due to decay, gum disease, or abscessed teeth. The charges associated with these patients were projected at nearly \$4 million.⁴⁴

In 2006, dental disease was the leading reason for ER visits to **Maine's** hospitals by Medicaid enrollees and uninsured young people (ages 15 to 24). That year,

abscesses or other dental problems were responsible for 3,400 emergency room visits. A report on Maine's ER visits cited poor access to both preventive and acute dental care as a driving factor.⁴⁵

In one 12 month period (2004-05), seven **Minnesota** hospitals received more than 10,000 emergency room visits for dental ailments, including toothaches and abscesses.⁴⁶

In **Rhode Island**, 864 people under 21 were treated, on average, at an ER for a primary dental-related condition each year between 2005 and 2009.⁴⁷

A **Washington state** survey of 53 hospitals found that during an 18-month period in 2008-09, residents made more than 23,000 visits to ERs for toothaches or other dental problems. Among the uninsured, patients with dental disorders were the most frequent ER visitors.⁴⁸

Dental → Facts

A decade
of rising
dental-related
emergency
room visits



Costs

- \$88 million FL** More than 115,000 hospital ER visits for dental problems produced charges exceeding \$88 million (2010).ⁱ
- \$23 million GA** The approximately 60,000 emergency hospital visits for non-traumatic dental problems or other oral health issues cost more than \$23 million (2007).ⁱⁱ
- \$5 million IA** More than 10,000 visits to hospital ERs for dental reasons cost Medicaid or other public programs almost \$5 million (2007).ⁱⁱⁱ
- \$4.7 million MN** The 10,000-plus dental-related ER visits to seven hospitals in the state's largest urban area cost more than \$4.7 million (2005).^{iv}
- \$6.9 million MO** ER charges for dental-related visits to Kansas City hospitals totaled about \$6.9 million (2001–2006).^v
- \$4 million NV** The cost of dental visits to hospitals was estimated at nearly \$4 million (2005).^{vi}
- \$31 million NY** The cost of treating young children for decay-related ailments in hospital emergency rooms or ambulatory surgery centers jumped from \$18.5 million to more than \$31 million (2004–2008).^{vii}
- \$7 million WI** More than 32,000 emergency room visits resulting from dental ailments cost nearly \$7 million (2009).^{viii}



Roughly one-third of Florida's ER dental visits (2010) were made by Medicaid patients.

Nearly half of Arizona's dental-related ER visits (2005) were from Medicaid enrollees, meaning taxpayers covered much of the cost.





Trends

2010

FL In **Florida**, the number of Medicaid-enrolled residents who sought care at a hospital ER for dental reasons jumped **40 percent** from the number two years earlier.^{ix}

OR

The number of dental-related emergency visits by **Oregon's** Medicaid enrollees during this year was **31 percent higher** than the number recorded two years before.^x

NY

In **New York** state, the number of young children with decay-related problems who visited hospital ERs or ambulatory surgery facilities was **32 percent higher** than the figure four years earlier.^{xiii}

2008

It is a very rare event when I do not see one dental complaint during a (12-hour) shift.

Dr. Alan Sorkey,
ER physician in Louisiana

2009

SC In **South Carolina**, emergency-room visits primarily for teeth or jaw disorders **increased 59 percent** from four years earlier.^{xi}

VT

This year's visits to **Vermont** ER facilities for dental-related problems revealed a **9 percent increase** in a three-year span.^{xii}

2007

HI The number of ER visits to **Hawaii's** hospitals for teeth or jaw ailments **jumped 74 percent** from the number recorded in 2004.^{xiv}

2005

NH The rate of hospital emergency-room visits for dental ailments in **New Hampshire** climbed **45 percent** from four years earlier. A state report tracked ER visits for eight health conditions and found the "most notable increase" occurred in dental-related problems.^{xv}

16%
2006–2009

Increase in the percentage of ER visits across the United States in which preventable dental conditions were the primary diagnosis.

*Based on research conducted by the Pew Center on the States, 2012.

What can states do?

This issue brief underscores the need for states to save Medicaid dollars and other public funds by ensuring that more children have access to basic, preventive services in dental offices, pediatricians' offices, schools, or settings other than hospitals.

In a North Carolina study, 70 percent of the children who required dental-related treatments in a hospital operating room before age five had never received routine, preventive dental care.⁴⁹

 **By increasing the likelihood that more young children see a dentist, states can reduce costs from future decay or related problems.**

Research shows that providing early preventive care for children most at risk for decay can reduce the need for restorative treatment (such as fillings) and emergency services, significantly cutting the cost of care.⁵⁰ Some forms of preventive care also can be delivered by dental hygienists through school-based programs.

States cannot expect community health centers to fulfill this unmet need for dental care. Although these safety-net clinics play an important role, they cannot serve all who need care. One study estimates there are 82 million underserved Americans—a need far exceeding the capacity of

clinics, which provide dental services to approximately 3.7 million people annually.⁵¹

State policies can significantly affect—for better or worse—the frequency of dental-related hospital trips:

1. Focus more on preventing decay

The best strategy is preventing tooth decay before it becomes more serious and prompts a hospital visit for emergency care. There are cost-effective approaches that states can use or expand to focus more on prevention. Several cost-effective approaches can help reduce ER visits:

Dental sealants are clear plastic coatings applied to the chewing surfaces of children's molars—the most cavity-prone teeth—that prevent 60 percent of decay at one-third the cost of filling a cavity.⁵² Sealants also impede the growth of cavities, heading off the need for expensive fillings.⁵³ Sealant programs targeting schools with many high-risk children have been recommended by the U.S. Task Force on Community Preventive Services.⁵⁴

Data from 2010 showed that seven states had no school-based sealant programs to reach vulnerable kids: Hawaii, Missouri, Montana, New Jersey, Oklahoma, South Dakota, and Wyoming.⁵⁵ Still, 21 states and the District of Columbia imposed unnecessary hurdles on sealant programs for low-income children.⁵⁶ These states

require that children be examined by a dentist before sealants can be applied by dental hygienists, who are the primary practitioners in school-based sealant programs.

 **Requiring a prior exam makes it more difficult and expensive for sealant programs to reach those in need.**

Such laws or regulations are at odds with the scientific consensus that X-rays and other advanced diagnostic tools are unnecessary to determine the need for sealants.⁵⁷ Hygienists can apply sealants, and ensure that children are referred to a dentist for follow-up care.

Community water fluoridation is another effective vehicle. Fluoridation occurs when the level of fluoride in a public water system is adjusted to the optimal level proven to reduce tooth decay. This practice is endorsed by the American Academy of Pediatrics, the Centers for Disease Control and Prevention, the Institute of Medicine, and other leading health authorities.⁵⁸

Research shows that fluoridated water reduces decay rates for children and adults, avoiding the need for costly, sometimes painful, corrective treatments.⁵⁹ This is why most communities save \$38 for every \$1 invested in fluoridation.⁶⁰ Studies in Texas and New York also have shown that fluoridation saves state Medicaid dollars by lowering treatment costs.⁶¹

According to the most recent federal data, fluoridated water reaches 72 percent of Americans served by community water systems. Yet fluoridated water reaches less than half of the population in nine states: Hawaii, Idaho, Kansas, Louisiana, Montana, New Hampshire, New Jersey, Oregon, and Wyoming.⁶²

Although most states can do more to expand fluoridation, these nine states should make it a priority to ensure that many more residents benefit from this proven intervention. State health administrators should work more closely with local officials to counter misleading information by sharing the significant body of scientific evidence that fluoridated water is safe and effective.^{63,64}

Medical professionals should play more of a role in prevention. Pediatricians, nurse practitioners, and other personnel can provide basic services, including oral health screening and the application of fluoride varnish, a gel that reduces tooth decay. Physicians can also refer parents to a dental office when their kids need additional care. Involving medical providers is important because young children see them earlier and more frequently than they see dentists.

Forty-four states encourage this by reimbursing physicians through Medicaid for providing early dental screenings and care to low-income kids.⁶⁵

2. Expand the dental workforce

Although Medicaid programs are required to provide dental coverage for children, millions of low-income kids struggle to find care because most dentists do not participate in Medicaid. A 2009 survey revealed that in nearly two-thirds of the 39 states reporting data, most dentists treated no Medicaid patients during the previous year.⁶⁶

 **Even for children not enrolled in Medicaid, getting care can be difficult because many areas have relatively few dentists.**

As noted earlier, almost 47 million Americans live in areas with a shortage of dentists.⁶⁷

To close this gap, a number of states—including California, Kansas, Maine, New Hampshire, and Washington—are exploring new types of practitioners to provide quality, routine dental care. These professionals would be supervised by dentists and play a role similar to that performed by nurse practitioners in the medical field. Under federal law, dental therapists are serving the needs of Alaska Native Tribes, and similar professionals will soon be licensed in Minnesota, the only state with a law authorizing them. Dental therapists work in dozens of countries, and have been deployed successfully in Canada, Britain, Australia, and New Zealand for more than 30 years.⁶⁸

These or other kinds of alternative practitioners could perform some services offered by dentists, including both preventive and restorative (e.g., filling cavities) care. A 2010 evaluation of Alaska's dental therapists determined that they were providing safe, competent care that earned high levels of patient satisfaction.⁶⁹

Another approach is additional training for dental assistants or hygienists, so they can perform more services. By licensing new types of dental practitioners or expanding the scope of existing professionals, states can ensure access to care for more children in underserved communities.

3. Maintain reasonable Medicaid policies

Research shows a link between Medicaid reimbursement rates and access to dental care.⁷⁰ States committed to serving more low-income people should ensure their Medicaid reimbursement rates are high enough to cover the cost of care. Doing so will encourage broader Medicaid participation by dentists.

Dental-related hospital visits can spike when states allow Medicaid reimbursement rates to fall below the cost of delivering care, or when states eliminate benefits. Dental professionals in Michigan reported that emergency room visits increased by more than 10 percent after a two-year period during which the state reduced Medicaid dental coverage for adults.⁷¹

A 2002 study found that the rate of ER dental visits by Medicaid patients in Maryland rose by about 12 percent after the state stopped reimbursing private-practice dentists who treated adult emergencies.⁷²

States that cut reimbursement rates during tough budgetary times might save Medicaid dollars in the short run, but they are likely to pay considerably more later by inadvertently encouraging more people to take their dental problems to hospitals.

Conclusion

States are paying a high price for the significant numbers of children and adults who turn to hospital emergency rooms for dental problems that should have been prevented or treated more effectively elsewhere. Moreover, given the trend in several states, the overall number of ER trips could be rising. Many patients return to hospitals because the treatment they received only addressed pain or other symptoms—not the underlying oral health issue.

States can reduce or contain these costs by making better use of proven forms of prevention, improving access by expanding the number of dental practitioners, and paying reasonable Medicaid rates for dental services.



When so many people seek care at hospitals for preventable dental problems, it wastes taxpayer dollars. This impact is particularly troubling for states at a time when their budgets are severely strained. Investing more in prevention and ensuring access to treatment could save money by reducing the incidence of untreated decay and other dental ailments.

For more information on how states are performing on oral health, see Pew's *The State of Dental Health: Making Coverage Matter*.

For more information on how new types of dental professionals could improve access to care, see Pew's *It Takes a Team: How New Dental Providers Can Benefit Patients and Practices*.

ENDNOTES

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The Pew Children's Dental Campaign works to promote policies that will help millions of children maintain healthy teeth, get the care they need, and come to school ready to learn.

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