background

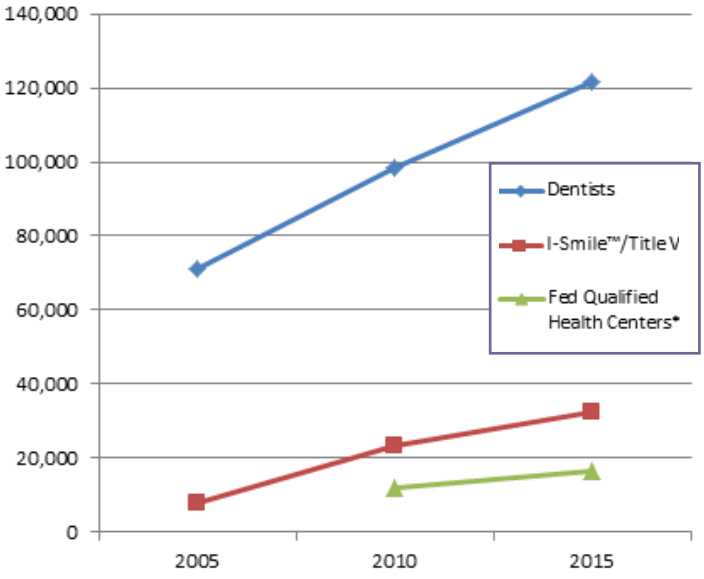
The I-Smile™ Dental Home Initiative is a statewide program focused on preventing dental disease and increasing access to oral health care for Iowa children. In collaboration with the Iowa Department of Human Services, I-Smile™ is administered by the Iowa Department of Public Health through contracts with 22 public and private non-profit organizations covering all 99 counties as part of the state Title V maternal and child health program[1].

Each contracted service area maintains an Iowa-licensed dental hygienist who is the I-Smile™ coordinator for local communities. Coordinators are responsible for the I-Smile™ strategies of:

- developing local partnerships to increase awareness about the importance of oral health,
- participating in health planning and needs assessments,
- promoting oral health,
- establishing dental referral networks,
- working with local boards of health, including assuring local systems are in place to meet the state's school dental screening requirements,
- providing education and training for health care professionals about oral health,
- ensuring care coordination services are provided, and
- assuring completion of risk assessments, oral screenings, and gap-filling preventive services such as fluoride varnish and sealant applications.

I-Smile™ continues to positively impact the number of children who receive dental services in Iowa.

Figure 1: Number of Medicaid-enrolled children who received dental services (2005, 2010, and 2015)



**Federally Qualified Health Center data is unavailable for 2005*

results

More Children are Receiving Dental Services

I-Smile™ continues to positively impact the number of children who receive dental services. During SFY[2] 2015, 71 percent more Medicaid-enrolled (ME) children 0-12 years old saw a dentist than in SFY2005, which was the year prior to the start of the I-Smile™ program. During the past year, there were 8,077 more children who received care from dentists than in SFY2014, a 7 percent increase.

More than four times as many children saw an I-Smile™ dental hygienist or nurse in a public health setting for preventive care in SFY2015 than in SFY2005, with a 14 percent increase from SFY2014. Children also continue to be seen within Federally Qualified Health Center dental clinics, an important safety net for Iowa families.

[1] Title V is a federal-state paernship to improve the health of mothers and children. www.mchb.hrsa.gov/programs/titlevgrants/
[2] Iowa's state fiscal year (SFY) is July 1- June 30.

More Dentists are Seeing Medicaid-enrolled Children and Providing More Services

Compared to SFY2005, more dentists billed Medicaid for care provided to enrolled children in SFY2015 (1,018 in SFY2005 and 1,178 in SFY2015). Also, the number of dentists billing Medicaid for $10,000 or more of services in SFY2015 is more than double the number in SFY2005. Twenty-eight more dentists provided over $10,000 of services than in SFY2014.

Figure 2: Number of enrolled dentists* and amount billed to Medicaid (2005, 2015)

	Total Number of Dentists Enrolled with Medicaid	Amount Billed		
		$0	$1-$9,999	≥$10,000
Year: 2005	1,613	595	775	243
Year: 2015	2,184	1,006	640	538
Change	+571	+441	-135	+295

**includes out of state dentists*

The ability of I-Smile™ to include provision of preventive services to Medicaid-enrolled children at an early age may be impacting the reduced average cost per year for children ages 10-12.

Medicaid Costs are Stable

Although many more children are receiving dental services each year, the average annual cost per Medicaid-enrolled (ME) child ages 0-12 years has risen by just $6.35 over the past 10 years. During that time, there has been one increase in Medicaid reimbursement rates, 1 percent in 2014.

Increases since SFY2005 in the average cost per year per enrolled child ages 0-5 years ($17.88) may be related to the increases each year in the number of children seen by dentists and in public health settings. Seventy-two percent more children through age 5 saw a dentist in SFY2015 than in SFY2005. Over four times as many children through age 5 received screenings and fluoride applications from dental hygienists and nurses working for I-Smile™ in WIC[3] clinics, preschools, Head Start centers, and child care centers in SFY2015 than in SFY2005. The increases have been occurring each year since I-Smile™ began.

The average cost per year for children ages 6-9 years has decreased by $1.52 over the past 10 years. Yet in FY2015, twice as many children saw a dentist and more than 5 times as many received preventive services through I-Smile™@ School, the state school-based sealant program, than in SFY2005.

Of particular interest is the lower average cost per year for Medicaid-enrolled 10-12 year olds compared to SFY2005 (down $38.48). The ability of I-Smile™ to increase provision of preventive services to ME children at an early age may be impacting the reduced average cost per year as those children age. Although more 10-12 year-old children are getting services from dentists than in the past, the lower average cost may indicate less need for restorative care to treat tooth decay. It is possible that this is the result of preventive care received when these children were younger through I-Smile™ and in dental offices following referral and care coordination services.

[3] WIC is the Special Supplemental Nutrition Program for Women, Infants, and Children which ensures supplemental foods, health care referrals, and nutrition education for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, and to infants and children up to age 5 who are found to be at nutritional risk.

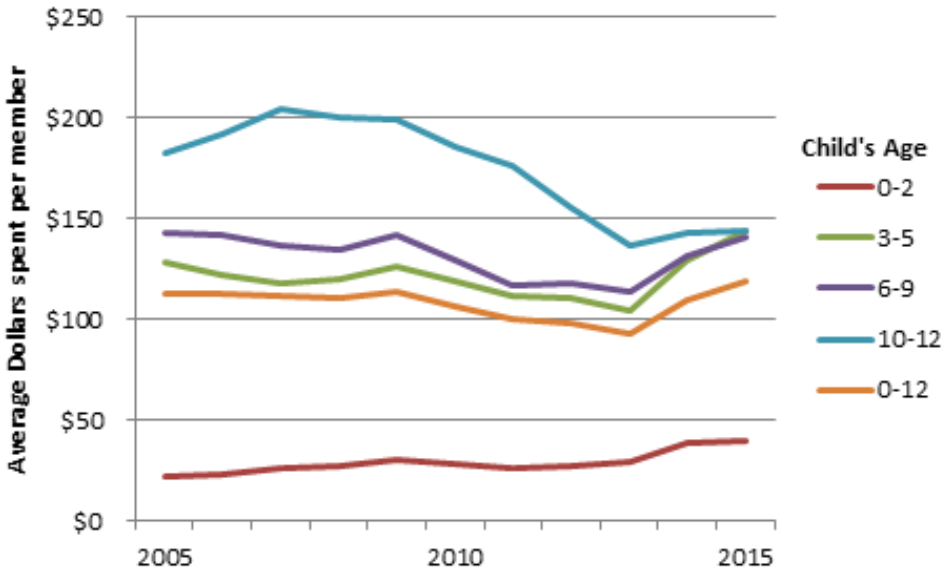
Challenges to Address

Just 18 percent of children younger than age 3 saw a dentist in SFY2015, compared to 57 percent of children 3-12 years old. More children ages 0-2 years are being seen by I-Smile™ in public health settings (12,768) than are seen by dentists (12,496). The number of very young children receiving dental services has risen dramatically since 2005, but with more than half of those in public health settings, it is evident that I-Smile™ must continue to provide early preventive gap-filling services, including screenings, education, and fluoride varnish applications, as well as to work with dentists to encourage them to begin seeing children by the first birthday.

Although more children are being seen by dentists than in the years prior to I-Smile™ and more dentists are providing a greater amount of billable services than prior to I-Smile™, nearly the same number of dentists saw Medicaid-enrolled children in SFY2015 (1,178) as in SFY2014 (1,168). Over 1,000 dentists enrolled with Medicaid did not bill for any services provided to children, a higher number than in SFY2014.

The I-Smile™ strategies of developing relationships with dental providers, coordinating care, informing and educating partners and the public about oral health, and providing preventive care are improving children's ability to have good oral health.

Figure 3: Average dollars spent per Medicaid-enrolled child per year



Discussion

I-Smile™ continues its success with helping Iowa children access oral health care. The I-Smile™ strategies of developing relationships with dental providers, coordinating care, informing and educating partners and the public about oral health, and providing preventive care are improving children's ability to have good oral health. Even as more children receive dental services, the annual average cost to Medicaid per child has increased by just over $6, indicating that the combination of support services for families and access to prevention are keeping the costs to Medicaid in check rather than increasing due to treatment needs.

Data from the American Dental Association's Health Policy Institute shows that 64 percent of privately insured Iowa children ages 0-20 had a dental visit in 2013. The report also shows that the rates of Medicaid-enrolled children in this age group who had a dental visit, 54 percent, are approaching that of the children covered by private insurance[4]. The SFY2015 data for this report is indicative of the same trend, particularly for children age 3 and older (57% of 3-12 year olds saw a dentist in SFY2015). An ongoing challenge for the I-Smile™ program will be to achieve a rate of access for Medicaid-enrolled children equal to that for privately insured children.

[4] www.ada.org/statefacts

The growing number of dentists who do not provide care for Medicaid-enrolled children is a present and future concern. Administrative complexities, low reimbursement, and a high number of missed appointments are often cited as reasons that dentists do not see Medicaid-enrolled individuals. One approach Iowa is taking to address provider participation is through Iowa's pursuit of managed care privatization for Medicaid. A component of Iowa's Medicaid expansion plan, the Dental Wellness Plan is a promising model for dental delivery. It has been implemented the past 18 months for a select population of Medicaid beneficiaries. The plan includes higher reimbursement rates and patient accountability components. This model, or something similar, may be needed for other Medicaid-enrolled individuals in order to encourage greater participation of dentists.

The I-Smile™ dental home model recognizes that the services children need may be provided in different settings, which include medical and dental offices as well as public health sites. This "virtual" dental home incorporates important preventive care that may be provided by dental hygienists and medical practitioners, as well as the diagnostic and restorative care provided by dentists. In the end, children have more opportunities to receive all of the services necessary in order to have good oral health.

In addition to continued oversight and quality assurance of the I-Smile™ program, the Iowa Department of Public Health (IDPH) will seek additional ways to further increase the number of very young children receiving dental services. Innovative models in other states will be considered, as well as collaboration with nurse practitioners and physician assistants, rural health clinics, and pediatric dentists in the state.

I-Smile™ will continue working to achieve the health care system triple aim by improving the health of Iowa's at-risk child population, improving patient outcomes through disease prevention and facilitated access to regular care, and limiting costs of care. The I-Smile™ strategies may be considered by IDPH and other stakeholders to achieve similar accomplishments for other populations, such as the I-Smile™ Silver pilot project for older Iowans, as part of a life course approach to overall health.

Table 1: Number of Medicaid-enrolled children ages 0-12 receiving a dental service from dentists

	Ages 0-2		Ages 3-5		Ages 6-9		Ages 10-12		**Ages 0-12**	
	Baseline	Current	Baseline	Current	Baseline	Current	Baseline	Current	**Baseline**	**Current**
	2005	2015	2005	2015	2005	2015	2005	2015	**2005**	**2015**
Number of children receiving a service	4,901	12,496	21,832	33,532	26,994	47,051	17,466	28,415	**71,193**	**121,494**
Total enrolled	48,573	68,718	40,396	62,020	43,981	79,320	30,726	49,316	**163,676**	**259,374**
Increase in number	7,595		11,700		20,057		20,057		**50,301**	
Percent increase	155%		54%		74%		63%		**71%**	

Table 2: Number of Medicaid-enrolled children ages 0-12 receiving a dental service from I-Smile (Title V) dental hygienists and nurses in public health settings

	Ages 0-2		Ages 3-5		Ages 6-9		Ages 10-12		**Ages 0-12**	
	Baseline	Current	Baseline	Current	Baseline	Current	Baseline	Current	**Baseline**	**Current**
	2005	2015	2005	2015	2005	2015	2005	2015	**2005**	**2015**
Number of children receiving a service	3,104	12,768	3,246	13,296	1,010	5,141	503	1,356	**7,863**	**32,561**
Total enrolled	48,573	68,718	40,396	62,020	43,981	79,320	30,726	49,316	**163,676**	**259,374**
Increase in number	9,664		10,050		4,131		853		**24,698**	
Percent increase	311%		310%		409%		170%		**114%**	