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*Annual Report on Iowa's Dental Home Initiative for Children
Iowa Department of Public Health • Oral Health Bureau • 2010*



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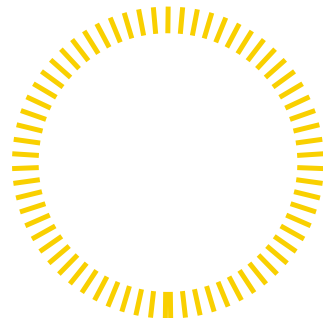
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Foreword by *Dr. Bob Russell*, State Public Health Dental Director

Welcome to the third annual edition of ***Inside I-Smile™***.

We enter the year 2011 knowing that a new direction is possible for both state and national government – but the certainty that the need for good oral health remains. There are some within Iowa that question if a dental shortage exists since most dental practices remain busy despite the economic changes seen in many other areas. However, even the University of Iowa College of Dentistry confirms that, indeed, Iowa faces a coming crisis due to an impending shortage of practicing dentists due to the rapidly aging dental workforce. In 2009, 40 percent of practicing Iowa dentists were age 55 or older, and in 10 Iowa counties, 50 percent or more of practicing dentists were age 60 or older.

We face a pressing issue to improve oral health and the oral health care system for all Iowans. I-Smile™ has given us an important tool for addressing this critical need. Linking Iowans and their families to the limited resources that are available is the first step, along with preventing the ravages of dental disease from occurring.

In this edition of ***Inside I-Smile™***, you will see that we continue to make excellent progress in a number of areas, but still much needs to be done. Our goal is to build I-Smile™ from its current pilot program scale into a permanent resource with robust multi-dimensional dental prevention and referral linkages within the state's overarching health care system. Such an enhanced system would position Iowa to more effectively provide support, information, and resources to Iowans needing dental services both for themselves and their families.

Bob Russell DDS, MPH





I-Smile™ Background

This report is an update on the progress and impact of the I-Smile™ Dental Home Initiative being implemented within Iowa's public health system.

In Iowa, a dental home means a network of individualized care based on risk assessment. This includes oral health education, dental screenings, preventive services, diagnostic services, treatment services, and emergency services.ⁱ

I-Smile™ was created to ensure that Medicaid-enrolled children have a dental home. Multiple health care providers are part of the I-Smile™ dental home. Also, services are provided in locations or settings where at-risk families are found. This includes physicians' offices during well-child exams, at WICⁱⁱ clinics, and in preschools. Dentists are relied upon for definitive diagnosis and restorative care as needed.

At the heart of I-Smile™ are 24 dental hygienists, working as community-based I-Smile™ Coordinators within Title V child health agencies.ⁱⁱⁱ The coordinators are responsible for:

- building partnerships within communities;
- linking with local boards of health;
- providing education and training for health care providers about children's oral health;
- developing oral health protocols;
- ensuring care coordination services and assisting with referrals to dentists; and
- assuring completion of screenings, risk assessments, and gap-filling preventive services.



Additions to the I-Smile™ initiative in the past two years include increased health promotion efforts, a state requirement for children enrolling in elementary and high school to have proof of a dental exam or screening, and capturing baseline measurements of the oral health status of young children through open mouth surveillance.

The goals of the health promotion activities are to improve the public's understanding of the importance of children's oral health and the need for early and regular care and to, ultimately, influence positive behavior changes. The Iowa Department of Public Health (IDPH) has partnered with the Health Resources and Services Administration (HRSA) and Delta Dental of Iowa Foundation to fund development and distribution of public service announcements and outreach materials, and I-Smile™ Coordinators have increased outreach to families and medical and dental practitioners.

The school screening requirement is another means to improve children's oral health by facilitating early detection and referral for treatment of disease. The requirement promotes the I-Smile™ dental home concepts of prevention, education, care coordination and treatment to close the gap in access to care for underserved, at-risk children.

Through its partnership with HRSA, IDPH is also learning more about the oral health status of children ages 0-5. Open mouth surveys have been organized through I-Smile™ Coordinators the past two years, and baseline measurements of indicators such as the number of children with untreated decay are being collected. The results provide IDPH with even better understanding of the oral health of Iowa children and policy and program implications.

The following report sections, ***I-Smile™ Data and Discussion*** and ***Summary***, illustrate the impact of the I-Smile™ project on access to a dental home for Medicaid-enrolled children.



I-Smile™ Data and Discussion

Review of the data is coordinated into three areas of focus.

1.	Medicaid-Enrolled Children Ages 0-12	These are the specific ages that were included in state legislation requiring a dental home for Medicaid-enrolled children. Available data will assist in determining successes in achieving this requirement.
2.	Medicaid-Enrolled Children Ages 0-5	Early and regular care is an important focus of I-Smile™. A review of data specific to this age group helps to reveal if behavior changes are occurring by health care providers and families to ensure that very young children are receiving dental services.
3.	Workforce	Part of the uniqueness of I-Smile™ is the non-traditional use of dental and medical providers. A review of data will examine some trends of the health care workforce participating in the initiative as well as look at the responsibilities and services provided by I-Smile™ Coordinators and their colleagues.

1. Medicaid-Enrolled Children Ages 0-12

Iowa Medicaid Enterprise (IME) provides paid claims data to IDPH each year to assist in the review of children's access to dental services. The IME data is based on the state fiscal year^{iv} (SFY). The baseline measures are from the last SFY before I-Smile™ began (2005), and the current measures are from the most recent full fiscal year, SFY2010.

The IME data is categorized by provider type: dentists, community health center dental clinics (CHC), and “screening centers” – which refers to Title V child health agencies.

Table 1 includes information on Medicaid-enrolled (ME) children receiving any dental service, and **Table 2** looks solely at preventive services (fluoride applications, sealant applications, and prophylaxes). This is the first year that paid claims data is available for CHC, so no baseline data is included from 2005.

Table 1: Number of Medicaid-enrolled children ages 0-12 receiving a dental service by provider type

Measure	Year	Provider	Number of children receiving a service	Total enrolled	Percent receiving a service (N/T)
Baseline	SFY2005	Dentist	59,390	189,484	31.3%
Current	SFY2010	Dentist	91,823	213,716	43.0%
Baseline	SFY2005	Community Health Center	Unavailable		
Current	SFY2010	Community Health Center	11,027	213,716	5.2%
Baseline	SFY2005	Screening Center	7,861	189,484	4.1%
Current	SFY2010	Screening Center	22,779	213,716	10.7%

Since I-Smile™ began, 55% more children are receiving care from dentists. Title V child health agencies are providing care to nearly 3 times more children than prior to the initiative.



Table 2: Number of Medicaid-enrolled children ages 0-12 receiving preventive dental services* by provider type

Measure	Year	Provider	Number of children receiving a service	Total enrolled	Percent receiving a service (N/T)
Baseline	SFY2005	Dentist	51,411	189,484	27.1%
Current	SFY2010	Dentist	80,994	213,716	37.9%
Baseline	SFY2005	Community Health Center	Unavailable		
Current	SFY2010	Community Health Center	8,490	213,716	4.0%
Baseline	SFY2005	Screening Center	6,019	189,484	3.2%
Current	SFY2010	Screening Center	21,522	213,716	10.1%

*Includes prophylaxes, sealant and fluoride applications

Since I-Smile™ began, 58% more children receive preventive care from dentists. Title V child health agencies provide care to 3½ times more children than prior to the initiative.



Discussion of Tables 1 and 2

Increases in the number of children receiving services are promising, and the increases in preventive care are particularly encouraging. Over time, the more prevention that is provided should result in not only less decay but also less restorative care, which is also more costly.

A survey of Iowa third-graders in 2009 found 22 percent with untreated decay.^v This rate was even higher for children in low-income families (27%).^{vi} Application of dental sealants and, at a minimum, biannual topical fluoride treatments are effective means of primary prevention for children. In order to truly impact the increasing rate of tooth decay for children, the number receiving these services must continue to rise.

The following focus areas of **Medicaid-enrolled Children Ages 0-5** and **Workforce** provide information that also pertains to the age 0-12 focus area.





2. Medicaid-Enrolled Children Ages 0-5

Several organizations, including the American Dental Association and the American Association of Pediatric Dentistry, recognize the importance of a child receiving care by his or her first birthday. The following data and discussion that follows is focused on children age 5 and younger, to help ascertain accessibility for early and regular care.

Table 3 includes data compiled by the Centers for Medicare and Medicaid Services (CMS) regarding ME children ages 0-5 receiving a dental service. The baseline data is the last federal fiscal year^{vii} (FFY) before I-Smile™ began (2005), and the current data is from the most recent CMS report available, FFY2009.

The CMS data uses totals for children receiving a service as those provided by both dental offices and also “screening centers” – which refers to Title V child health agencies. Services provided within CHC are not included in these totals.

Table 3: Number of Medicaid-enrolled children ages 0-5 receiving a dental service

Measure	Year	Number of children receiving a service	Total enrolled	Percent receiving a service (N/T)
Baseline	FFY2005	28,806	93,311	30.9%
Current	FFY2009	47,635	108,932	43.7%

Since I-Smile™ began, more children are receiving early dental care – there has been a 65% increase since 2005 for children age 5 and younger.



Information within **Table 4** and **Table 5** is from paid claims data provided by IME. Baseline data is from SFY2005, prior to the implementation of I-Smile™; current data is from SFY2010, the most recent available data for comparison. Data is categorized by provider type.

Table 4: Number of Medicaid-enrolled children receiving a dental service before the age of 2 by provider type

Measure	Year	Provider	Number of children receiving a service	Total Enrolled	Percent receiving a service (N/T)
Baseline	SFY2005	Dentist	1,690	33,725	5.0%
Current	SFY2010	Dentist	4,500	44,649	10.1%
Baseline	SFY2005	Community Health Center	Unavailable		
Current	SFY2010	Community Health Center	1,131	44,649	2.5%
Baseline	SFY2005	Screening Center	1,958	33,725	5.8%
Current	SFY2010	Screening Center	6,616	44,649	14.8%

Table 5: Number of Medicaid-enrolled children receiving an initial exam (dentist, CHC) or initial screening (screening center) before the age of 1

Measure	Year	Provider	Number of children receiving a service	Total Enrolled	Percent receiving a service (N/T)
Baseline	SFY2005	Dentist	99	18,193	0.5%
Current	SFY2010	Dentist	156	23,461	0.7%
Baseline	SFY2005	Community Health Center	Unavailable		
Current	SFY2010	Community Health Center	7	23,461	0.03%
Baseline	SFY2005	Screening Center	369	18,193	2.0%
Current	SFY2010	Screening Center	1,493	23,461	6.4%

Since I-Smile™ began, more children are receiving dental care before turning 2. Even so, most children younger than age 2 do not receive any services.

Discussion of Tables 3, 4, and 5:

Four times more children receive a screening within public health before turning 1 than prior to I-Smile™. The numbers are even better regarding children receiving dental services before turning 2 – dentists are seeing over two and a half times more children, and Title V agency staff sees over three times more children than prior to I-Smile™.

Although there are improvements for very young children receiving early care, much more must be done to ensure appropriate care and prevention.

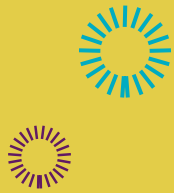
Findings from open mouth surveillance of Iowa children in the past two years justify the importance of increasing efforts at reaching very young children with preventive services. A 2010 survey of Iowa children at WIC found that just over one in ten children (ages 6 months to 5 years) have untreated decay.^{viii} This rate is even higher for the 3 and 4 year old children specifically – over one in five.^{ix} A similar survey in 2009 of Iowa children in Early Head Start and Head Start found 14 percent with untreated decay.^x

If children receive screenings and topical fluoride applications within public health settings or during well-child exams, and if dentists are willing to provide care prior to children turning 3 years of age, the number with untreated decay should begin to decrease. This increased investment in prevention will then result in a decrease in restorative costs over a lifetime.

Figure 1 is a worksheet to estimate potential lifetime savings if tooth decay is prevented in very young children. The calculation methodology used was developed by the state of Washington.

Figure 1: Estimate of lifetime savings if early care can prevent tooth decay

FACTOR	INDICATOR	DETAILS
Number of Children	9,531	If 75% of Medicaid-enrolled children ages 0-4 were to receive screenings (63,542), 15% would likely have decay experience ^{xi}
X Average Restorations per Child	3.4	The average number of restorations done per Iowa Medicaid-enrolled child ages 0-4 in SFY2010 ^{xii}
X Lifetime Cost per Cavity	\$2,187	The average cost by age 79 to maintain a child's restored cavity ^{xiii}
X Reduction in Costs Due to Early Treatment	38%	The reduction in average dental costs when children have their first dental visit between age 1 and 2 compared to between age 4 and 5 ^{xiv}
= Potential Lifetime Savings	\$26,930,832	If 75% of Medicaid-enrolled children receive early preventive services, potentially more than \$26.9 million in treatment costs could be saved over the lifetime of those children.





Discussion of Figure 1:

Based on an estimate of trying to ensure that at least 75 percent of ME children receive screenings and preventive care, and the assumption that 15 percent of those will have restorative dental needs, that means that 9,531 children ages 0-4 would need restorative treatment. The total restorations anticipated for these children would be 32,405. If the average lifetime cost per restoration is \$2,187, that leads to eventual costs of \$70,869,735 for these children. However, if dental costs can be reduced by 38 percent when dental care begins by the age of 2, there is the potential to save nearly \$27 million over the lifetime of these children because of early care.

While this is merely an estimated calculation, it provides support that prevention is not only critical to ensure healthy children but that it also benefits the health of adults and can lower costs for programs like Medicaid over time. This life course perspective should be developed even more, including considerations of oral health as it pertains to economics, such as hiring potential and workforce readiness, as well as the long-term costs of restorative dental treatment.

Lack of any dental care brings even greater overall costs, most often in the form of emergency room expenses. In 2002, the Iowa Medicaid program eliminated adult coverage for root canals, crowns, and periodontal treatment for gum disease. From SFY2001 to SFY2008, Medicaid expenditures for hospital emergency room services for diseases of the oral cavity, salivary glands and jaws increased by over 300 percent. As a result of the increased costs for emergency room care related to oral health, in 2008 IME reinstated coverage for the previously eliminated dental services.^{xv}

Costs for oral health care via hospital emergency departments are much higher than care through dental offices and clinics. In 2005, the median expense per person in the Midwest for care within dental offices was \$1,338. The median expense for oral health-related care within hospital emergency departments in Iowa was \$4,626 per person.^{xvi} Regular care and prevention is crucial for cost containment in addition to overall health and wellness.



3. Workforce

I-Smile™ Coordinators work diligently to build referral networks in order to reach as many at-risk children as possible. For example, physicians and nurse practitioners are more likely to see at-risk families more frequently than dentists - for well-child exams, immunizations, and sick care. Their function in the dental home may be early identification of possible disease, provision of fluoride varnish applications to prevent decay, and referral to local I-Smile™ Coordinators to help link families with dentists.



Table 6 includes paid claims information from IME, regarding the number of physicians and nurse practitioners that billed Medicaid for a fluoride varnish application in SFY2010 as compared to SFY2005. The number of children who received a fluoride varnish application is also shown.

Table 6: Number of medical practitioners billing Medicaid and the number of Medicaid-enrolled children ages 0-2* receiving a fluoride varnish application

Measure	Year	Number of medical practitioners who billed	Number of children receiving a service
Baseline	SFY2005	3	13
Current	SFY2010	35	639

* Medical practitioners are allowed to bill Medicaid for fluoride varnish applications provided to children up to 36 months of age.



Discussion of Table 6:

Although the participation of medical practitioners in I-Smile™ is not particularly robust, the number of providers is growing, as is the number of children benefiting from their provision of preventive services (up from 72 in SFY2009).

These increases are likely related to the organized efforts of the Iowa chapter of the American Academy of Pediatrics (IAP) to raise awareness of the responsibilities of physicians in children's oral health, as well as the efforts of I-Smile™ Coordinators to work with local medical offices. Coordinators encourage physicians to include preventive dental care within well-child examinations, offer training and billing assistance, and assist families referred to them to seek further care from dentists. One example of the IAP partnership is the incorporation of I-Smile™ process and outcome measures (children screened and referrals to I-Smile™ Coordinators) within the IAP patient-centered medical home model.



Table 7 shows the number of dentists who billed Medicaid in SFY2010 for services provided to children, compared to SFY2005. The number of children who received a service is also shown. Data is paid claims information from IME.

Table 7: Number of dentists billing Medicaid and the number of Medicaid-enrolled children ages 0-12 receiving a dental service*

Measure	Year	Number of dentists who billed	Number of children receiving a service
Baseline	SFY2005	1,022	59,390
Current	SFY2010	1,122	91,823

*Totals include out-of-state dentists (42 in SFY2005 and 67 in SFY2010).

Discussion of Table 7:

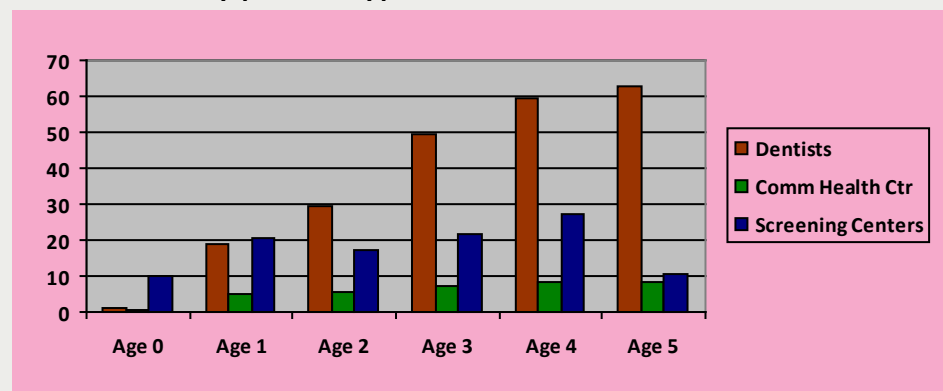
The number of children receiving services from dentists continues to improve, and more dentists are billing Medicaid for services provided to children. These increases are likely due in part to the work of I-Smile™ Coordinators in building referral networks and strengthening relationships with dental office staff, as well as enhanced efforts providing care coordination to families.

The overall improvements demonstrate the effectiveness of community-based concepts within I-Smile™. However, although there are more dentists seeing ME children and more children receiving care from dentists, 57 percent of ME children ages 0-12 did not receive any dental services in SFY2010. I-Smile™ Coordinators will be relied upon to continue developing local support to ensure services for even more children.

SFY2010 is the first year that IME has begun to collect specific dental claims information from community health center dental clinics (CHC). In SFY2010, 11 CHC billed Medicaid for services provided to a total of 12,039 ME children ages 0-12.

In order to further clarify where ME children receive care, Medicaid paid claims data can be reviewed based upon the number of children by age that receive care from different provider types. **Figure 2** illustrates the percent of ME children ages 0-5 receiving services from dentists, within CHC, or through Title V child health agencies (screening centers) during SFY2010.

Figure 2: Percent of Medicaid-enrolled children ages 0-5 receiving a dental service by provider type



Discussion of Figure 2:

One way to improve the health of vulnerable populations is to offer services in easily accessible locations at times that are convenient for families to receive care. The benefit of this public health approach is reflected in the numbers of children receiving services from Title V child health agency staff (screening centers). Prior to the age of 2, most services received are within public health settings. The providers are dental hygienists or trained registered nurses, and the most common settings are WIC clinics, Head Start/ Early Head Start centers, preschools, and child care centers.

The number of children receiving care from dentists rises steadily from the age of 3 and older. Dentists appear more willing to see children once they are 3, and parents/guardians may also think the age of 3 is the appropriate age to begin scheduling dental appointments. Although the rising number of children receiving care after the age of 3 is encouraging, it further emphasizes the need for targeted efforts to persuade dental offices to see children younger than 3 and to educate families of the need to begin regular care prior to that age as well.

A very limited number of services are being provided to very young children in CHC. This newly available data offers an opportunity for the I-Smile™ initiative to enhance its collaboration with those clinics and the Iowa-Nebraska Primary Care Association to incorporate care for children ages 0-5 within the dental clinics as well as the primary care component of health centers.

I-Smile™ Coordinators, public health dental hygienists, public health nurses, and many other staff working within the state's Title V child health agencies play unique roles in the I-Smile™ dental home. All services provided to children through Title V agencies are entered into the Child and Adolescent Reporting System (CAREs). Two of the most common preventive services provided to low-income children are oral screenings and fluoride varnish applications.

Table 8 outlines the number of oral screenings and fluoride varnish applications provided by Title V agency staff to children ages 0-21. Children served include Medicaid-enrolled as well as others that are not eligible for Medicaid. The table compares total services provided in FFY2005 to FFY2010, based upon CARES data.

Table 8: Services provided to children by Title V child health agency (screening center) staff

Service	Year	Total provided
Fluoride varnish application	FFY2005	10,090
	FFY2010	40,926
Oral screening	FFY2005	14,437
	FFY2010	49,050

Discussion of Table 8:

Reflected in these numbers alone, it is evident that employees in 24 community-based Title V child health agencies are critical to implementing I-Smile™ strategies across the state. This strong public health network is reaching families to not only provide primary preventive care but also to offer assistance in accessing dental services and to provide oral health education and instruction.

In addition to the gap-filling direct dental services that are provided through Title V child health agencies, I-Smile™ Coordinators are responsible for building and strengthening public health infrastructure to highlight the importance of oral health. **Figure 3** includes examples of coordinator activities in FFY2010.

Figure 3: Examples of activities undertaken by I-Smile™ Coordinators in FFY2010

- Developing and distributing quarterly oral health information to local stakeholders, such as dentists, school nurses, and local board of health members
- Collaborating with civic organizations and fraternal societies (e.g. United Way and Modern Woodmen) to seek funding for children's oral health initiatives and gain support to assist local children with dental needs
- Writing a column on oral health topics for a local newspaper
- Developing curriculum and providing instruction for community college nursing program students about oral health
- Facilitating community-based oral health coalitions, including organization of local Give Kids a Smile Day^{xvii} activities
- Serving on regional Head Start Health Advisory Board
- Advocating for community water fluoridation
- Providing training for area school nurses about children's oral health, including how to do a screening and basic response for dental emergencies



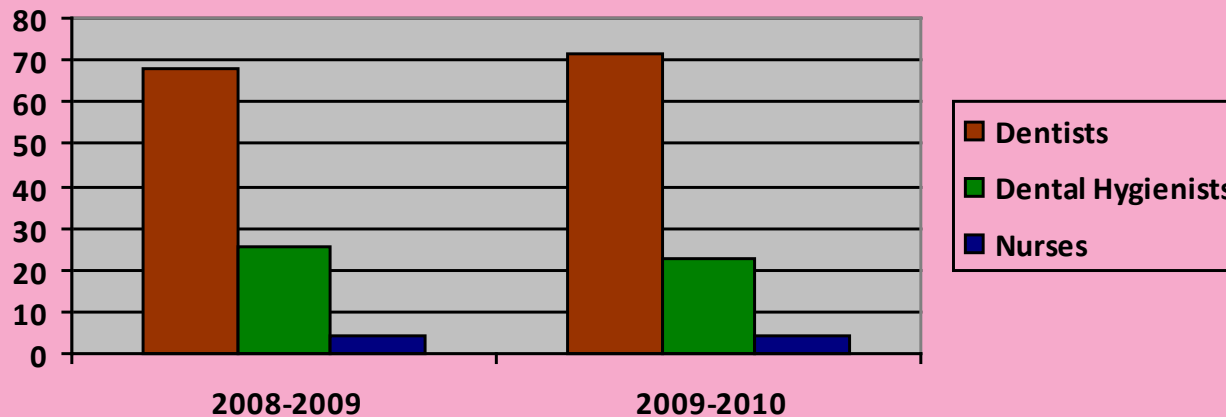
Since 2008, Iowa children newly enrolling in elementary and high school must provide evidence of having a dental screening or exam. Children entering kindergarten may be screened by physicians, physician assistants, nurses, dental hygienists, or dentists. Children entering ninth grade may be screened by dental hygienists or dentists. **Table 9** and **Figure 4** include data from the state's school screening requirement.

Table 9: Number of children identified with dental treatment needs as part of state school screening requirement

School Year	Grade	Number of children with dental treatment needs	Total children with valid screening certificate	Percent with a dental treatment need (N/T)
2008-2009	Kindergarten	3,042	20,615	14.8%
2009-2010	Kindergarten	4,488	26,399	17.0%
2008-2009	9th Grade	2,748	19,776	13.9%
2009-2010	9th Grade	2,896	20,509	14.1%



Figure 4: Percent of screenings completed for state school screening requirement by provider type



Discussion of Table 9 and Figure 4:

In addition to helping assure children have good oral health and are ready to learn, the screening requirement helps to identify children in need of dental care, and also provides information about the accessibility of dental workforce.

The average rate of children screened that needed additional dental care was 14 percent in 2008-2009 and 16 percent in 2009-2010. The definitions for “requires dental care (or urgent dental care)” on the screening forms for both school years was that tooth decay or demineralization was suspected or obvious decay was present, the child was in pain, or there was evidence of infection or injury. As I-Smile™ grows, and as efforts to reach children with preventive care increase, IDPH anticipates a reduction in future years in the number of children requiring dental care.

Dentists provided more screenings in the second year (71%), up from 68 percent the first year. In both the first and second year of the requirement, dental hygienists and nurses provided a substantial number of children’s screenings. As with the overall I-Smile™ initiative, this demonstrates the importance for multiple providers to be part of the dental home. The school screening requirement, through close collaboration and support from I-Smile™ Coordinators, may also be linked to the growing number of children receiving care from dentists prior to the age of 5 (Figure 2).



Summary

I-Smile™ is improving access to dental care for children and ensuring at-risk children have a dental home.

With increasing enrollments in Iowa's Medicaid program, the development of dental delivery systems that include public-private partnerships has been essential to the success of I-Smile™. Basing I-Smile™ within the state's Title V child health system offers disease prevention strategies of public education, health promotion, and provision of direct primary preventive care – all essential public health services. Definitive diagnosis and restorative treatment through referrals to private dental providers as well as preventive care from medical practitioners are also critical components.

The impact of the national health reform movement on dental services is not yet clear. At this time, there is little change foreseen that would ensure availability of oral health care and methods to pay for that care, as compared to medical care and coverage. Through I-Smile™, more lowans are becoming aware of the importance of oral health and are seeking out services. Improved access to medical care through health reform, and improved awareness about oral health through I-Smile™, could result in an even greater demand for dental services regardless of whether changes are made to the dental delivery system and payment structure. Iowa policymakers must investigate options that would allow all lowans to have accessible dental care. Other states have begun training new dental provider types to increase availability of services. Initial reports support the improvements made through these additional providers to vulnerable populations, as well as the general public.^{xviii}

Other policy recommendations that would enhance the I-Smile™ initiative include making changes to the existing Medicaid reimbursement structure. Adding dental hygienists as specific Medicaid provider types, particularly if done using I-Smile™ “best practice” methodology, offers the potential to impact more vulnerable populations with gap-filling preventive services, such as low-income pregnant women and elderly lowans. At this time, Medicaid is restricted to reimbursing Title V agencies or dental offices and clinics where dental hygienists may be employed. Also, paying medical practitioners for oral screenings could increase the likelihood that more pediatric and family practice providers participate in the I-Smile™ dental home, further increasing preventive care for children and decreasing future restorative costs.

The data reviewed within this report indicate the need for:

1. more public education and oral health promotion;
2. more outreach to physicians and dentists regarding the oral health needs of very young and at-risk children; and
3. continued provision of gap-filling services within public health.



These efforts will be undertaken by the IDPH Oral Health Bureau and through work done by the 24 regional I-Smile™ Coordinators and their colleagues. Funding for I-Smile™ is critical in order to sustain and expand the current activities focused on improving children's oral health.

Tooth decay affects children in the U.S. more than any other chronic infectious disease. Traditionally, the dental health care system has focused more on treating the disease once it occurs rather than preventing disease in the first place.^{xix} The achievements made in the past 3 years demonstrate the capability of the I-Smile™ system to improve children's oral health by focusing on prevention. Ultimately, this will result in long-term savings in dental care costs and improved overall health of Iowa children and adults.^{xx}

ⁱ Iowa Administrative Code 641—50.2(135)

ⁱⁱ WIC is a special supplemental nutrition program for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, and to infants and children up to age five who are found to be at nutritional risk.

ⁱⁱⁱ Iowa's Title V child health agencies include private nonprofit and public agencies, working to promote the development of community-based systems of preventive health care for pregnant women and children.

^{iv} State fiscal year is July 1 through June 30.

^v Iowa Department of Public Health. 2009 Third Grade Open Mouth Survey Report.

^{vi} Ibid.

^{vii} Federal fiscal year is October 1 through September 30.

^{viii} Iowa Department of Public Health. 2010 Oral Health Survey Report, Infants and Toddlers in Iowa's WIC Program

^{ix} Ibid.

^x Iowa Department of Public Health. 2009 Head Start Oral Health Survey Report.

^{xi} Iowa Department of Public Health. 2010 Oral Health Survey Report, Infants and Toddlers in Iowa's WIC Program

^{xii} Iowa Department of Human Services, paid claims, SFY2010.

^{xiii} Delta Dental Data and Analysis Center, 2004.

^{xiv} Matthew F. Savage et al., "Early Preventive Dental Visits: Effects on Subsequent Utilization and Costs," *Pediatrics* 114, no. 4 (Oct. 2004): e418-e423.

^{xv} Iowa Department of Human Services, 2008.

^{xvi} Office of Statewide Clinical Education Programs, Carver College of Medicine.

^{xvii} Give Kids a Smile is sponsored by the American Dental Association. Typically held on a day in February, dentists provide free care for low-income children.

^{xviii} Evaluation of the Dental Health Aide Therapist Workforce Model in Alaska, Final Report. W.K.Kellogg Foundation. October 2010.

^{xix} It Takes a Team: How New Dental Providers Can Benefit Patients and Practices. Pew Center on the States. December 2010.

^{xx} Oral Health in America: A Report of the Surgeon General. U.S. Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health, 2000.



i-smileTM ● stories

From I-SmileTM Coordinators Around Iowa

Story #1

At a pre-school visit in Southeast Iowa, an I-SmileTM Coordinator met 5-year-old Timmy. The coordinator learned that Timmy had been missing school and crying often in class due to his terrible dental pain. After her initial screening, the coordinator discovered Timmy had multiple teeth with severe decay. The family had an unpaid bill at their local pediatric dentist's office and therefore, was unable to take Timmy there for treatment. The Community Health Center attempted treatment, but Timmy's condition was too severe and needed a specialist. With help from the school nurse and Hetta Gilbert Foundation funds, the family was able to pay off the balance with the pediatric dentist. The I-SmileTM Coordinator helped arrange an appointment for Timmy's initial consultation and followed-up with the office on the day of his appointment. Upon phoning the office to make sure the family had made the scheduled appointment, the I-SmileTM Coordinator was more than excited to learn that Timmy not only came in early, but his treatment had also already been successfully completed. **Timmy was soon able to return to his class free from dental pain!**



Story #2

Hello, my name is Robert. I am an 8th grader in Iowa. A few weeks ago, I started feeling sick at school because of my teeth, so I went to the nurse's office.

My mom and I had moved across the state to our new town, and we didn't have a dentist yet. I'd been lucky enough to have braces put on my teeth, but we moved before the orthodontist could finish my treatment. So I had braces on my teeth for several months without being adjusted. Cavities started to form around the braces and my teeth hurt all the time.

Since it's just me and my mom, we have a hard time getting to appointments because if my mom misses work she doesn't get paid.

We live in a small town, so we have to drive 40 miles each way to get to the city where a dentist is. The gas for the long trip is expensive. My mom only makes \$7 an hour – it takes a long time to make enough money to fill the car up with gas for extra trips to the city.

When I was in the nurse's office, I met my I-Smile™ Coordinator. She looked in my mouth and said she could help me find a dentist - AND - an orthodontist to help me with my painful teeth. Wow, I was having a lucky day! Mom was really glad, too, when she heard about how I-Smile™ could help us. She talked to the coordinator about how hard it is to afford gas for the trip to the city and how it's hard to miss work. The I-Smile™ Coordinator helped us find a way to pay for gas, she found me a dentist to fix my braces, and most importantly, she got me an appointment to fix my cavities! Now, my braces are taken off, all the fillings are done, my teeth don't hurt anymore, and I'm not embarrassed to smile!!

I-Smile™ helped me find a dentist when I didn't have one, and it helps kids and their parents in ways I didn't even know they could. I-Smile™ makes me smile!





Story #3

While providing dental screenings and fluoride varnish applications at a Head Start program in South Central Iowa, the local I-Smile™ Coordinator met a 3-year-old girl with extensive decay. Even though she spoke little English and had obvious severe dental pain, the young girl was eager to open her mouth wide.

The I-Smile™ Coordinator saw that her four front teeth were abscessed and those, as well as several others, were broken off at the gumline

from decay. The child had visited a dentist previously for her required dental exam through Head Start and had been referred to a Central Iowa pediatric dental office for further treatment. However, the family's first language is Chinese, and they were unaware of the severity of the problem due to the language barrier. The I-Smile™ Coordinator utilized a foreign language phone line for translation services to inform the family of the child's infection and need for immediate treatment.

The child was seen by a pediatric dentist the next day for evaluation and to start on antibiotics for the infections in her mouth. Extensive restorative treatment with sedation was completed within the next week. The family had Medicaid, which covered the costs. **Because of the initial screening, the care coordination by the I-Smile™ Coordinator, the treatment provided by the pediatric office, and the Medicaid program to pay for the care – the child is now decay free!**

Story #4

In meeting with a mother of a 5-month-old, the I-Smile™ Coordinator learned the mother also had a 6-year-old who had never seen the dentist. The family had medical insurance but no dental insurance. The coordinator informed the mother about the **hawk-i** dental-only option, helped her apply for coverage, and then set up an appointment for the 6-year-old with a local dentist.

The child was very apprehensive, so the dentist suggested the child see a pediatric dentist. The I-Smile™ Coordinator helped the family schedule an appointment for the child with a pediatric dentist in a neighboring county. The child had extensive decay so severe that the treatment needed to be done under sedation at a hospital.

Even though the child had **hawk-i** coverage, the total treatment costs were more than the annual maximum, leaving the family with out-of-pocket expenses. Through coordination by the I-Smile™ Coordinator, the Title V agency, and the dental office, the additional costs were taken care of and the child had the procedures done in one visit at the hospital.

Without a program like I-Smile™, the family would not have access to dental care, and the child would have continued to be in pain and at risk for infections. **The family really appreciates all the assistance I-Smile™ provided to their child!**



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