

FrameWorks Research on Children's Oral Health: Details

To determine how Americans understand the issue of children's oral health, the FrameWorks Institute invested in a series of complementary research projects. These projects combined methods from the cognitive and social sciences, blending traditional public opinion analysis with more academically-based and experimental research techniques, and the findings were translated by communications experts into a coherent approach to communicating about children's oral health. This process of research and translation has been ongoing since 1999, with funding from a number of private foundations.

While other studies have figured in the research, the core communications recommendations are based on three bodies of work:

- (1) *Qualitative Interviews and Content Analysis*. Cognitive linguist Pamela Sue Morgan analyzed the conceptual frameworks that ordinary people use to reason about children's oral health, based on a series of 20 in-depth interviews, and compared these frames to those evident in a sample of news coverage drawn from local and national news outlets and in professional material provided by children's oral health professionals.
- (2) Focus Groups. FrameWorks then tested the recommendations that came out of this earlier research in a series of six focus groups with parents of children of various ages conducted in February and March 2000 in Baltimore, Md., Richmond, Calif., and Riverside, Calif.
- (3) *Survey Research*. A new national survey of 1,000 adults was conducted by FrameWorks collaborator Meg Bostrom on April 24–26, 2000. Three subsequent opinion surveys have been conducted in Washington State to measure the impact on public opinion of a statewide advertising campaign based on the FrameWorks research.

Each of these studies is described in greater detail below. This research was supported by the National Institute of Dental and Craniofacial Research at NIH, the David and Lucile Packard Foundation, the Annie E. Casey Foundation, the Benton Foundation, and Washington Dental Service.

I. Findings from the Cognitive Interviews

Cognitive linguist Pamela Sue Morgan interviewed and recorded 20 informants in California, using a semi-structured interview format designed to elicit people's hidden reasoning about children's oral health. The transcripts were then subjected to secondary analysis, looking for patterns of reasoning and less obvious assumptions about what causes, consequences and core

beliefs exist. This qualitative research technique, common to the cognitive and social sciences, helps identify the models available to people in considering a social problem. While it is limited by sample size, the frames identified are often tested in subsequent surveys and focus groups, as was done in this project.

Of primary importance is the fact that Morgan found only a very skeletal model of children's oral health available to most people. Indeed, Morgan had a hard time getting her informants to discuss the issue and had to probe repeatedly. To say that this issue has not emerged in public discourse is to greatly understate it; at the time of this investigation, children's oral health was virtually invisible as a health problem.

At the same time, this oversight may prove a blessing in disguise, in that those who wish to open this conversation with the public are unlikely to find strongly held or highly developed negative associations to overcome. And, while there may be no overall model to impede public support for children's oral health, there are a number of assumptions people make about the topic which nevertheless pose some sobering obstacles.

Morgan outlined the way most people think about children's oral health as comprised of five interrelated assumptions, which we expand upon in the following sections:

- 1. Cavities are the primary effect.
- 2. The primary responsibility lies with parents.
- 3. There is an expectation that schools will be involved.
- 4. This is part of a larger health picture.
- 5. This is part of a wider community concern.

1. Cavities are the primary effect.

The public demonstrates little understanding of the consequences of ignoring children's oral health. This is a very large obstacle to public discussion and prioritization. Morgan's respondents did not view ignoring children's oral health as life-threatening, but rather saw the consequences as largely cosmetic, affecting only children's appearance and self-esteem. As such, children's oral health was seen as analogous to diet, nutrition and meal programs, but not to the severity of child hunger. Few discussed children's oral health in terms of illness or disease, and when they did it was largely confined to gum disease. In reasoning about "what's at stake" in children's oral health, respondents automatically compared this issue to those they perceived to be more serious health concerns, e.g., cancer, and found oral health wanting. Thus, they forcefully rejected the idea that we should mount "a war" on children's oral health diseases, and were uncomfortable assigning a role for this issue among other, seemingly more pressing, social needs.

In an attempt to locate the source of these frames on children's oral health, Morgan examined both news reporting and materials from health professionals. Here, Morgan found largely fear-based approaches ("plaque attack") focused on cavities, with little attention paid to the long-term health consequences resulting from lack of care. These materials highlight the importance of teeth for chewing, talking and appearance, and of cavities and gum disease. While some materials acknowledged the importance of the mouth, they did not go on to explain why it was important. Similarly, a LEXIS search of news reports yielded only news stories focusing on cavity-fighting, dental visits or sports injuries to teeth. It appears that both news media and other published sources have adopted a "news you can use" episodic frame for children's oral health

that fails to connect the dots to causes and consequences of poor oral care. The public's misunderstanding is, then, at least partially the result of failed communications practices on the part of the dental profession and the media.

2. The primary responsibility lies with parents.

The reliance on parental responsibility as the exclusive solution for children's oral health is arguably the greatest challenge for public health experts. Most Americans have been given few alternatives to the parental responsibility model, due to (1) the episodic nature of news coverage, which tends to reinforce individual responsibility, and (2) the confinement of this issue to the literature of parent education. While this problem is not unique to this particular children's issue, left unbalanced by community solutions, it can undermine support for public policies.

The best way to change these attitudes is not to take them on directly, says Morgan. Indeed, the goal is not to displace parents from the solution, but rather to balance their responsibility with a broader community-wide approach. To achieve this, Morgan suggests acknowledging the parents' role but bridging "to the role of the community, government, and business in helping parents do their job in setting the child on a path to health and achievement. All the other participants in the frame — dental professionals and professional organizations — must therefore be presented as acting in a *supplementary* and *assisting* role, not in a primary one.

There was widespread recognition among the informants "that many people cannot afford dental care, and even those who have *health* insurance lack *dental* insurance." By universalizing the situation, children's oral health advocates can help Americans understand the barriers to dental care that stand in the way of many parents. At the same time, this finding would suggest that children's oral health advocates need to eschew the easy news stories about how to ease your child's visit to the dentist, in favor of stories that teach people the systemic barriers that prevent children from getting the care they need. Accountability must be placed on public institutions to support parents in their role as protectors of their child's health. The question that should be elicited by reframes must be: "How well is our community, our country, doing in supporting the clinics and the coverage parents need to keep their children free of dental diseases?", NOT merely "How well are parents doing in getting their children to brush their teeth?"

3. There is an expectation that schools will be involved.

Morgan's informants seemed to move toward the schools as they assessed those community institutions that might play a role in assuring children's access to oral health care. Should public health advocates wish to locate screening and referral in the local schools, they are likely to find a receptive public. As Morgan points out, "Education ... has always been seen as an important part of democratization." The schools are where equity is addressed, where the level playing field is established so that, ideally, all children have a fair chance to achieve. To the extent that children's oral health care is associated with education and achievement, it helps underscore for Americans that there are real consequences to lack of care, and these consequences are likely to further exacerbate the gap between poor children and their peers, conclusions that are supported by the Surgeon General's report on oral health.

There are also important child health precedents that can be used as part of the education frame on children's oral health. For example, vision screening and immunizations successfully moved into the schools in the late twentieth century; public health experts can take advantage of these

success stories to make the schools the locus for identifying and mainstreaming children with dental disease as part of our progress in the 21st century.

On the negative side, if used by advocates to lend credence to the opinion that the actions necessary to ensure that children have proper oral health care are educational in nature, they run the risk of creating demand for services that are in short supply. In effect, if the problem is framed as educational in this sense, the result will be to create the false impression that *information* is the solution to the problem, not services or policies to enhance *access*. The result of this kind of framing is likely to be free toothbrushes and pamphlets sent home with the schoolage child, and not the kind of community-wide commitment to improving access that public health experts have endorsed.

4. Oral health is part of a larger health picture.

Americans want to see oral health and children's oral health as a part of overall health and total health care. Indeed, many of Morgan's respondents were moved to reconsider children's oral health when it was positioned this way, commenting that they had never thought of it as a health issue.

The advantages of framing children's oral health in this way are numerous. First, Americans are keenly aware of problems in the health care system, according to numerous public opinion polls. To the extent that oral health is perceived as part of overall health, it gains salience as a national problem the public already recognizes.

Second, use of the health frame enhances the universality of the message. Most Americans do not have dental insurance themselves, let alone for their children. Most Americans also know that the first coverage to go when insurance companies retract is dependent coverage. This situation is both personally relevant and socially unacceptable, eroding a worker's ability to protect his or her family and conflicting powerfully with Americans' belief that "things should get better in the future."

Finally, the health frame goes directly to the vulnerability of the child oral health issue. Public health communicators and experts have an important role to play in keeping the public identification of this as a "health" and not a "dental" issue, by using appropriate visuals, metaphors and other frame elements. By unifying these two issues, one can avoid oral health's marginalization as a second-tier issue, which is clearly a potential outcome based on Morgan's research on the relative importance of solving children's oral health compared to other pressing social concerns.

Thus, situating children's oral health squarely within a larger health frame constitutes one of the actionable recommendations emerging from this research.

5. Children's oral health is part of a wider community concern.

While this element is somewhat weaker than others, it is an important theme for advocates to consider, and to use appropriately. Too often, public health experts and children's advocates alike assume that children's issues can be easily positioned as community concerns, and fail to think strategically about how to make this link visible to private citizens. Morgan's research suggests that ideas of community responsibility cut both ways on this issue: For some people,

this core belief allowed them to prioritize children's oral health because of the "obligations of ... citizens to one another," while for others this core belief forced a comparison between children's oral health and other pressing social issues, with the result that they refused "to allocate it this way, because there are so many interrelated social problems, and they are all related."

Thus, if experts are not careful, they run the risk of alienating a prime constituency that is predisposed to care about, and carry, this issue: aware and informed citizens who understand the pressing need to pay attention to children's issues, but who might prioritize child hunger, child health, child poverty or early childhood education above children's oral health. This is precisely the group that is likely to be turned off by the "war" metaphor, overstating the "crisis," or positioning children's oral health as "abuse or neglect," whether by society or by parents.

Framing children's oral health as part of Americans' sense of stewardship and concern for the future has promise in conveying what's at stake and community responsibility, while avoiding the fragmentation of, and comparison between, issues, says Morgan. "Some of the strongest affect was produced with respondents' comments about the idea that 'the children are our future," with "our" being the wider community. People very often hold this view with passion. Morgan identifies both social contract and child care themes as part of this model, and concludes that the future orientation must be combined with "fact-based approaches designed to increase people's knowledge about the real potential of poor dental care for very serious, even in some cases life-threatening, illnesses in the future. Increased knowledge of this sort would undercut the main objection to spending on children's oral health as expressed by several respondents: that oral health effects are not really serious."

In this context, children's oral health spokespersons should call attention to major improvements in children's health achieved in the last century, largely through government intervention, and challenge Americans to get on with the task of eliminating the barriers to getting children off to a good start in life. The idea of leaving a legacy has been shown in other opinion research to connect powerfully to people's concerns about children. Moreover, the fact that this problem is soluble, and at relatively little cost compared to other social problems, can position it as a "can do, must do" issue.

Specific Recommendations for Reframing from the Cognitive Interviews:

Metaphors: Overall health is the sum of its parts. Children's oral health is an important and overlooked component of overall health and well-being. If oral disease is not treated early, a child's health and achievement are placed at risk.

These problems begin very early. As the seed is sown, so grows the tree. We must provide an environment in which children are cared for, and sealants and fluorides are just as important in protecting against disease as immunizations.

Fortunately, the last decade of medical research has given us ways to protect children: new ways to seal their teeth and enrich our water supply so they won't have to see dentists as frequently.

Unfortunately, these solutions languish because many people and policymakers don't understand the connection between children's oral health and their overall health. We have laws on the books, but we are not using them fully (CHIP) nor funding them once they pass (fluoridation). What will Americans do to make childhood disease a thing of the past?

The above paragraphs show how to use the metaphorical language suggested by the research and to demonstrate the logic of these interrelated concepts.

Messengers: Use school nurses, physicians/pediatricians, physicians/pediatricians with adult dentists/pediatric dentists, and seniors.

Visuals and Symbols: Avoid cavities and toothbrushes. Emphasize scientific authority through health settings. Suggest public nature of problem through public, health and community settings such as children's hospitals, schools, water treatment plants, senior centers.

Numbers: Link current data and message to long-term trends in children's and adult health. Interpret the data, tell the public what is at stake, what it means to neglect this problem. Translate all "news you can use" into examinations of how well the community/state is doing in addressing this problem, not how well individual parents are doing in getting their children to brush their teeth. Use social math to connect oral health to overall, long-term health, education, job performance and achievement.

II. Findings from the Focus Groups

With the availability of funds to support further research, FrameWorks was able to further test the research and recommendations that emerged from this earlier work in a series of focus groups. Six focus groups were conducted, two each in Baltimore, Md., Richmond, Calif., and Riverside, Calif., between February 2 and March 2, 2000. Meg Bostrom, an experienced, professional focus group leader, conducted all groups and designed the focus group guide, with input from the FrameWorks Institute. Participants were recruited by professional marketing research firms in each locale. While groups were segregated by gender, all groups were screened to capture a mix of educational levels, party affiliation, race and ethnicity, and occupations. In addition, each group shared certain characteristics associated with the age of their children, in order to focus the discussion.

In Baltimore, one group was composed of women whose youngest child was already out of high school, and another of men whose oldest child was in elementary school. In Richmond, one group was composed of women whose eldest child was in elementary school, and another of men whose eldest child was in middle school or high school. In Riverside, one group was composed of women whose eldest child was in middle school or high school, and another of men whose youngest child was already out of high school. While all groups were composed of parents, the intent was not to discuss their child or their own parenting, but their view on social issues as parents.

Each group contained a segment of inquiry devoted to children's oral health, although the order of the segment varied. In Baltimore and Richmond, discussion of children's oral health came late in the two-hour group discussion, preceded by a wide range of children's issues primarily focused on adolescents. In Riverside, to avoid order effects, children's oral health opened the discussion.

There are advantages and disadvantages to both placements, as discussed below. In brief, the long discussion of the status of teens, with its emphasis on community involvement and social policy, may have served to prime certain groups to connect any given children's problem to more

collective solutions. At the same time, it may have produced exactly the opposite effect in some groups, forcing people to rank which children's problem was most pressing for social policy resolution, rejecting less salient topics. In some groups, the discussion of social solutions clearly engendered a backlash among those who rejected the government's role in family life as intrusive.

By contrast, opening the discussion with children's oral health, a relatively unfamiliar topic, tended to stop people cold and require them to think hard about children's issues — also a relatively invisible topic — as well as oral health. Without the advance priming on children's issues, it was difficult for many adults, even those artificially "focused" on this topic, to conjure an image without prompting. So, while the latter placement clearly evoked a fresh and untainted response, the very foreignness of the topic did not provide as much richness of discussion as in earlier groups.

What Was Tested

The segment of the focus group guide devoted to children's oral health probed three specific aspects of public awareness. First, it attempted to document associations the participants had with "oral health" in general and "children's oral health" in particular. In addition, the moderator probed their understanding of the causes and consequences of poor oral health among children, to determine what information informed their opinions.

Second, focus group participants were asked to react to a series of summary statements about children's health that were derived from the previous research. This provided an opportunity to understand the power of different appeals, to weigh them against one another, and to judge any vulnerabilities of the various positions. Participants were asked to underline those portions of the statements that "stood out for them." These statements, in the order presented and discussed, were as follows:

- 1) DISEASE AND PREVENTION FRAME. Dental disease is the most prevalent chronic childhood disease and it is entirely preventable. But brushing and flossing are not enough. Regular dental visits, optimal fluoride levels in the water, new scientific breakthroughs like sealants, are critical to good oral health. And without these actions that we all know will prevent dental problems, children are more susceptible to all kinds of disease, such as infection, poor speech, diminished growth, and cardiac and obstetric problems in adulthood.
- 2) INSURANCE AND FRAGMENTATION FRAME. More than half of all children do not have dental insurance. This results in almost one third of children's health expenditures being spent against oral health. We've allowed insurance companies to fragment coverage so that arms and legs are insured, but our eyes and mouths are not. That's a crazy approach to health care, with a direct impact on every family's checkbook.
- 3) MISPLACED PRIORITIES FRAME. We are way behind in our water fluoridation program nationwide. Even in a health-conscious, progressive state like California, only 16 percent of the people served by community water supplies have optimal levels of fluoride. The laws were enacted to upgrade the water, but the program was never funded. This is a prime example of misplaced political priorities.
- 4) PAIN AND CONSEQUENCES FRAME. Poor oral health is the hidden health care problem,

because we think the only consequence is cosmetic. The reality is that children with poor oral health experience significant pain, which can affect their eating habits and growth, even their ability to concentrate in school. To raise happy and healthy children for the future, we need to treat the health of the whole child.

5) CAN-DO FRAME. Look what we've done in the 20th century. We put breakfasts and lunches in the schools to bolster kids' nutrition and help them learn. We put nurses in the schools to guard the public health of all children. We immunize kids and provide flu shots. We check their vision. Now we need to put dental screening and early detection in the schools too.

And finally, focus group participants were asked to volunteer what kind of spokesperson they would trust on this issue.

Findings

First, with respect to people's initial associations with oral health and children's health, the focus groups perfectly validated the cognitive interviews. People appear to have very little information about the topic, and it prompts few immediate associations. When people do think of "oral health," they think of teeth, toothbrushes, smiles and dentists, in that order. When asked to weigh the causes of poor oral health, people cite personal, consumer behavior: inadequate brushing and flossing, and consumption of junk food. When asked to consider the consequences of poor oral health, they are most likely to mention cosmetic beauty and the resulting poor self-esteem. A minority mention discomfort or pain. There are few instances in the groups of people who link oral health to overall health.

When children's oral health is specifically discussed, the issue conflates with parenting issues, discipline, and the importance of habits learned early. In sum, there is virtually no automatic linkage between children's oral health and adult physical health, between children's oral health and related social or environmental conditions, or between children's oral health and achievement in school or ability to thrive. In this respect, the focus groups also confirm the effects of the shallow media and professional attention given to early oral health: The public has too little information about causes and consequences to allow it to prioritize this public health concern. In light of this information vacuum, the default frame is one that focuses on personal responsibility and individual consumer behavior.

Moderator: In what ways does poor oral health affect a child?

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"Self esteem, peer pressure."
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- Fathers of Teenagers, Richmond

Moderator: Do most children have good oral health or not?

"I say no because I see little kids coming out of school and they have bags of candy and cookies, and they don't take toothbrushes. You have to tell them take your toothbrush and then they forget ... They don't spend a lot of time brushing and flossing."

[&]quot;Just physical discomfort."

[&]quot;Eating disorders."

[&]quot;You can't get a date with anyone."

"I think it depends on the parents."
"The parents don't make them brush."

- Mothers of Teenagers, Riverside

Dental visits were seen as important, but expendable. This line of reasoning included the notion that, if money were scarce, dental care is easy to postpone and that, as one Baltimore father articulated, "If you have the habits and you have everything else, [a dental visit is] a luxury."

At the same time, in virtually every group, one or two people would spontaneously offer that poor oral health was caused by not visiting the dentist, and that this was often the result of not having dental insurance. Before the moderator introduced the idea of solutions to the problem, some participants in each group would point to dental insurance as a solution.

The initial reaction to the statements presented was uniform across all groups. People underscored and wanted to discuss the phrases "most prevalent chronic childhood disease" and "cardiac and obstetric problems in adulthood." They readily admitted they had not known about the severity of consequences resulting from poor oral health, nor that these related to adult disease. As a direct response to this new information, the issue of "children's oral health" transformed into a mainstream adult health issue, and increased in salience as a result.

"I wonder what percent of teeth problems is in children — it really doesn't become extensive until they are adults. I've heard my colleagues say that dentists have never said, "Well your problem started in your early childhood."

"You just didn't learn about them. In other words, it didn't really affect them as children, but it affects them now."

- Fathers of Teenagers, Richmond

Moderator: What popped out at you from this statement?

- Mothers of Teenagers, Riverside

The most dramatic impact, however, occurred in response to the second statement, which linked children's lack of access to a whole health model. The folksy explanation that "our arms and legs are insured, but our eyes and mouths are not" immediately connected for many to insurance industry practices which they judged to be unjust.

"I remember when my children were in school and they would send things home every year for the insurance. You got \$5,000 for an arm that fell off ... but they never said ... vision screening."

- Older Woman, Baltimore

[&]quot;That dental care is important."

[&]quot;Not only when you are little but as you grow older."

[&]quot;I didn't realize that they were more susceptible to cardiac problems."

[&]quot;I didn't either. And diminished growth."

[&]quot;I didn't relate it to dental health. Infections and poor speech I did."

[&]quot;The most compelling thing is insurance companies need to start making it more affordable for people to have the dental health care."

- Mothers of Teenagers, Riverside

There are a number of cautions associated with these two statements. First, in all focus groups the order of the statements was uniform. Therefore, we do not know if ire at insurers is predicated upon an understanding of the severity of consequences resulting from poor oral health. Another caution about this statement in particular is that it was read by some as a call for health care reform and rejected out of hand by those who do not see a role for legislation in fixing the health care system.

And, with respect to the first statement, we are aware that there is considerable debate within the scientific community on whether these conditions are causally linked or merely associated. It is unclear whether the public will be as ready to prioritize children's oral health if the medical consequences are presented in a less compelling way.

"These new scientific breakthroughs are critical. There has been dental disease since the beginning of time and then all of a sudden we've got this thing that it is so critical."

- Father of Teenager, Richmond

Despite these cautions, it is clear that these statements had the advantage of immediately connecting children's oral health to systemic solutions. By making clear that dental problems are diseases — not cosmetic — and chronic, the first statement overrides the natural tendency to assign responsibility to the family and, instead, elicits the community's responsibility to safeguard citizens from disease. It moves the issue from a personal to a public health responsibility. The second statement, by evoking a whole health model, aligns children's oral health with other aspects of children's health for which we already assume responsibility as a society, through insurance pooling. Both of these statements accomplish the goal of taking children's oral health out of the public's default frame — teeth, brushing, cosmetics, parents — and into a social policy frame that opens the door to collective resolution.

The third and fourth statements, by contrast, did not receive the universal acclamation that met the first two, but both had something to offer. The issue of fluoridation was familiar to many, and some even volunteered that their pediatricians had prescribed fluoride tablets to counteract local water deficiencies. While many felt that the state should uphold its laws and fluoridate the water, public cynicism runs deep, and the fact that it is not delivering on this issue seemed trivial compared to, say, the state of public schools, juvenile crime, etc.

In response to the phrase "misplaced political priorities":

[&]quot;So many people can't afford to [take their child to the dentist]."

[&]quot;Have the insurance companies pay for the sealants."

[&]quot;That would cut down the cavities so much on kids today."

[&]quot;My insurance doesn't even cover it."

[&]quot;Now this new insurance that I have through my husband covers it 100 percent."

[&]quot;Oh yes. One of many."

[&]quot;That [fluoridation] should be done. That's one thing they can do."

[&]quot;That's an easy thing to do and it has such benefits."

At the same time, it should be noted that we did not see any outright opposition to fluoridation, either as a public priority or a health enhancement. It was merely less compelling than the other statements. And it often proved a distraction, in that it engendered a conversation about fluoridated water vs. pills and debates over optimal levels. In some respects, this statement appeared trivial to people compared to the more powerful messages presented earlier.

The fourth statement was complex in its formulation, and therefore challenges precise analysis. It began by deflecting the public's default frame ("We think the only consequence is cosmetic").

"It is mostly put forth in a cosmetic sort of way. And obviously no, we all know it isn't but that's the way it's shown to the nation in their commercials, the cosmetics of it. And, like you said, that's when children start to do something because they want to look nice and pearly white. All cosmetics. They need education."

- Older Woman, Baltimore

It then introduced the notion of child pain as a call-to-action for community intervention; a "good" community does not allow children to suffer in pain. Finally, it explained the consequences, linked to learning and growth, and concluded with a whole health appeal. Of all the ideas presented in the statement, the idea of the impact of children's oral health on school performance proved especially compelling and, while it did not engender a great deal of immediate discussion, it was brought up again and again later in the discussion as one of the most compelling statements. While this statement clearly appealed to participants, it did not have the impact of the literal first statement with its list of chronic diseases, nor did it provide a solution, as did the second statement. Thus, while people were moved by parts of the message, they didn't know exactly what to do in response to it. While they were troubled by the idea of lost attention in school, they lacked a way to intervene.

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"I'm interested in how it affects their growth."
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- Older Men. Riverside

Evidence that this statement proved less powerful than others came in the way participants kept returning to the earlier information.

[&]quot;Their teeth hurt so much they don't eat."

[&]quot;It's hard to believe."

[&]quot;It's hard to chew. You will go get something real soft and mushy."

[&]quot;But we're not talking about occasionally cavity every two years, we're talking about..."

[&]quot;Bad health."

[&]quot;So you're talking gum disease and everything."

[&]quot;I had no idea that was a real problem."

[&]quot;I'm like you, I'm sitting here going geesh, I didn't realize it was all this bad."

[&]quot;If it is that bad, I don't understand why. I know a toothbrush lasts for a long time..."

[&]quot;I agree with the statement. That it's the hidden problem. I don't think that parents or anybody really pays enough attention to the problem on the whole."

[&]quot;Well, I like how it says treat the health of the whole child, because I don't think people really ever look at it that way."

- Mothers of Teenagers, Riverside

The fifth statement also achieved mixed results. In the four groups where it followed discussions about how to get better services to kids through the schools, it was clear that children's oral health was not as important to people as basic skills, safety, even mental health counseling. There is a danger that, among those very constituencies most aware of the status of children, and of poor children in particular, the mandate to fix this problem will be deemed trivial in comparison to other, more pressing, issues. Second, there is a growing public awareness that the schools are being looked to for a host of interventions in children's and families' lives, while they are unable to meet even the most basic goals of teaching and learning. To the extent that the mandate to screen for oral health is placed in the schools, we run the possibility of a backlash against the solution. It is important to emphasize that, while schools may be the place where this happens, the education budget is not the funding source.

"They are taking other things out of the schools, things that are needed such as certain classrooms. Are we putting this into the school budget and taking something else out? Can it be funded through something else than the school?"

- Older Woman, Baltimore

"I suggest that the schools that have the resources have parents who have resources. The kids who need the help, their schools also have other more pressing issues."

— Father of Young Children, Baltimore

However, in those two groups where the oral health discussion preceded the discussion of other children's issues, this statement fared somewhat better. It provided hope and a sense of progress, allaying the default assessment that we can't improve children's status without parental cooperation. Advocates need to be careful not to overstate the accomplishments, and to localize these for their own communities. Perhaps because of media attention paid to school cutbacks and declining services, participants often disputed whether, in fact, we were continuing our commitment to immunizations, etc. Many participants were quick to dispute the statement.

The final section of the focus groups devoted to this topic attempted to identify trusted messengers. Again, the responses confirmed the earlier cognitive research. Physicians, especially pediatricians, were highly credible. They also serve the purpose of linking the mouth to a whole health model. Dentists were rarely named as trusted sources, and often explicitly discounted as having too much self-interest in the topic, including benefiting financially from either delayed attention or prevention (see below). This finding corroborates the earlier research, which suggested, moreover, that people do not automatically connect the dentist with the medical profession. Thus, to use a dentist as a spokesperson is to compound the problem of making the connection to a whole health context, and to confuse the public with suggestions of motive. The media was looked to for substantiation of the importance of oral health to whole health in general, and the severity of delayed attention to oral health in particular. The Surgeon General was often volunteered, and so were teachers and school nurses. These suggestions echo the earlier research. In sum, the message is the messenger. To make the point that this is a health problem, you need to involve a physician. To underscore the importance of the problem, you

[&]quot;Yes, back to health insurance."

[&]quot;That your mouth is part of your health."

[&]quot;Separate. People separate it. Your teeth are your teeth and the rest of your body is something different."

need the "top doc." To root the issue in other aspects of a child's development and achievement, you need to connect children's oral health to the schools.

Moderator: Who would you believe on this issue?

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"A medical person."
"A doctor."
"The Surgeon General."
"Health alerts."
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"Katie Couric."

- Older Women, Baltimore

"If you put sealants on the younger kids today when they get their adult teeth, that really helps to prevent a lot of cavities. But most of the dentists don't put the sealants on because then that puts them kind of out of business."

- Mother of Teenagers, Riverside

In sum, the suggested ways to frame children's oral health for public understanding and support reported from the cognitive interviews were strongly validated by the focus group research. Advocates for children's oral health policies and programs should:

- link children's oral health to whole health:
- define children's oral health problems as diseases;
- make explicit the consequences of delayed attention to oral health problems;
- provide a clear solution or arena of responsibility (insurers, laws, schools, etc.);
- connect the consequences of children's oral health problems to other aspects of a child's achievement (attention to schoolwork, growth);
- emphasize a "can do" approach to children's problems that empowers community action;
- counteract the default frame of teeth, personal responsibility, family negligence, cosmetic consequences, self esteem, etc.; and
- use messengers who underscore these messages and enhance the issue's importance in your community.

Moderator: What is the most compelling thing you could say to your neighbor on this issue?

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"It affects their learning capabilities, if they have problems."
"It affects their whole life, really."
"It's a bigger problem than I suspected."
"The statistics ..."
"Medical consequences."
"For me it was prevalence."
"Health consequences."
"Health problem."
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[&]quot;Someone who isn't going to make a bundle of money off it ... like dentists."

[&]quot;Maybe dentists could volunteer."

[&]quot;I trust a nurse practitioner ... she would be knowledgeable or he would be knowledgeable but they are not in the dental field."

III. Findings from the Survey Research

To verify the qualitative research reported above, FrameWorks has invested in two separate survey research efforts: A) an original national opinion survey, and B) benchmark opinion surveys conducted before and after frame-based advertising in Washington state. Each of these projects is described below.

A) National Survey on Children's Oral Health

To further verify the qualitative research discussed in previous sections, FrameWorks conducted a random telephone survey of 1,000 adults nationwide on April 24–26, 2000. Meg Bostrom, with Public Knowledge, LLC, designed and analyzed the survey.

The main goal of the survey was to study the impact of several problem statements on their support for policy solutions. Survey respondents were asked to allocate an imaginary \$100 contribution among four types of organizations. These were organizations that: provide free dental services to poor children, work to get better dental health insurance for all children, work to get better dental screening into public schools, and educate parents about the importance of proper tooth brushing. Half the respondents were asked to allocate their dollars before they heard any information about children's oral health, while the other half allocated their dollars after hearing three persuasive messages about children's oral health. The messages were:

"Brushing and flossing are not enough. Regular dental visits, optimal fluoride levels in the water, new scientific breakthroughs like sealants, are critical to good oral health. And some studies suggest that, without these actions to prevent dental problems, children with poor oral health may be more susceptible to all kinds of disease, such as infection, poor speech, diminished growth, and cardiac problems in adulthood."

"More than half of all children do not have dental insurance. This results in almost one third of a family's health expenses being spent against their children's oral health. We've allowed insurance companies to fragment coverage so that arms and legs are insured, but our eyes and mouths are not. That's a crazy approach to health care, with a direct impact on every family's checkbook."

"Children with poor oral health experience significant pain, which can affect their eating habits and growth, makes them more likely to get sick and miss school, and even affects their ability to concentrate in school. If we want children to succeed in school, we need to understand that learning and health are linked."

All three messages proved convincing to more than two-thirds of adults. The message linking oral health and pain with ability to succeed in school was the strongest individual message tested, regardless of question order and the influence of other messages. The next strongest message proved to be the "dramatic consequences" message. Overall, it was just as convincing as the school performance statement. Sixty-nine percent said it was convincing, with 31 percent rating it extremely convincing. Interestingly, when it was the first message respondents heard, it was rated as more convincing than when it was the last message heard. Opinion analyst Meg Bostrom

believes that the shock value of the statement may be less compelling when the public has had the opportunity to consider other consequences, like educational achievement.

While the dental insurance message proved weakest of the three, it was aided by the other messages. When the message linking poor oral health to a variety of diseases was heard prior to this message, it caused people to place more priority on the dental insurance message.

A comparison of the responses between those allocating resources before hearing information and those allocating resources after hearing information demonstrates that the messages increase the priority people place on free dental services for poor children. The average contribution for free dental services jumped by \$2.40, even though none of the messages tested referred to poor children or advocated for a specific policy solution. FrameWorks concludes from this finding that the "disparities" message may perform better when it is subtle and not connected to negative stereotypes associated with poverty, welfare and poor parenting.

B. Benchmark Opinion Surveys in Washington State

A communications campaign entitled "Watch Your Mouth" was created by the FrameWorks Institute in the summer of 2000, with funding from Washington Dental Service Foundation, to apply the research findings to a broad-based effort to improve the oral health of Washington State children. The first phase of the campaign (July 2000 – June 2001) was designed to create a public dialogue around children's oral health that would move the issue from a private problem of making sure parents brush their children's teeth, to an issue with public responsibility, i.e., making sure all children have access to treatment. This new dialogue built explicitly on the communications research described above.

In addition to an extensive earned media campaign, a comprehensive public service advertising campaign was developed, complete with print ads, radio spots, posters and brochures. The goal of the advertising was to accurately reflect the findings of the research, meet the requirements of a public education message to get PSA placement, create a favorable climate for a variety of policy positions, and gain the enthusiastic support of diverse coalition members. Through the Watch Your Mouth campaign, nearly 300,000 posters, brochures, tattoos and mugs were distributed statewide, increasing visibility of the campaign and children's oral health in general.

To test the campaign's ability to shift opinion, public opinion surveys were conducted prior to the public campaign, and again after six months (October 2000 and April 2001). Nearly 500 Washington State adults (497) were interviewed by telephone in October 2000, and 502 were surveyed in April 2001. The interviews took roughly 10 minutes on average. The margin of error for each sample is +/- 4 percent.

Key Findings

From October 2000 to April 2001, the Watch Your Mouth campaign was able to create significant shifts in Washington State public opinion regarding children's oral health. Every indicator, including attention to the issue, redefinition of the issue and support for policy proposals, saw a statistically significant increase. Some specific findings include:

- 14-percentage-point gain in those who have heard about the COH issue
- 9-percentage-point gain in recalling seeing news or ads about the issue

- 7-percentage-point gain in the priority of kids' oral health
- 7-percentage-point gain in understanding that brushing and flossing are not enough
- 6-percentage-point gain in knowing that poor oral health leads to other health problems
- 10-percentage-point gains, on average, in strong support for policy proposals

These shifts are surprising, given the reliance upon public service and earned media placements for delivery of the message.

Detailed Findings

Visibility and Importance of Children's Oral Health

The campaign successfully brought attention to the issue of children's oral health. In October, only 17 percent reported that they had heard "a lot" or "some" about the issue. By April, this figure nearly doubled, to 31 percent (a jump of 14 percentage points). Furthermore, the proportion of Washington state residents who recalled seeing news or ads about the issue jumped 9 percentage points, from 18 percent to 27 percent.

In addition to increased visibility, the priority of children's oral health climbed 7 percentage points, from 56 percent to 63 percent saying it should be an "extremely high" or "high priority." Interestingly, *children's oral health* in Washington State increased in priority, while *dental health* for the country did not, further substantiating the campaign's ability to promote this specific issue. None of the "national" issues tested increased in importance, but some of the "priorities facing children in Washington State" did increase. "Providing preschool education for all kids" increased a modest 4 percentage points. "Making sure all kids have their immunizations on time" only gained 2 points in priority, but increased 9 points in "extremely high priority." The lift in immunizations as an issue was a result noted in the earlier message-testing research. Watch Your Mouth delivers a prevention message, so it is intertwined with immunization in the public's mind, creating additional support for that issue as well.

Priorities Facing the Country ("Extremely High" plus "High Priority" in Percent)				
Improving the quality of public education	86%	89%		
Making health care affordable and accessible	83%	85%		
Protecting the Social Security System	79%	84%		
Reducing violent crime	79%	80%		
Protecting the environment from pollution and other damage	74%	72%		
Promoting jobs and a healthy economy	73%	73%		
Making dental care affordable and accessible	<i>59%</i>	<i>58%</i>		

Priorities Facing Children in WA State ("Extremely High" plus "High Priority" in Percent)			
	April	October	
Making sure all kids get their full set of immunizations on time	77%	75%	
Improving kids' oral health	63%	<i>56%</i>	
Providing preschool education for all kids	55%	51%	
Increasing the number of quality afterschool programs	52%	49%	

After exposure to the campaign, improving kids' oral health was seen as a much higher priority than preschool education and afterschool programs. While the Watch Your Mouth campaign does not try to compete with these other important issues, this comparison serves to demonstrate that children's oral health has a place in the public debate. Preschool education and afterschool programs are issues that have received national attention; improving kids' oral health is poised for similar attention.

As should be expected, awareness of the sponsoring organization itself (Citizens' Watch for Kids' Oral Health) remained very low; 2 percent of survey participants could correctly recite the name of the coalition.

Defining Oral Health as a Health Issue

Importantly, the visibility of the campaign not only increased children's oral health as a public priority; it also led to greater understanding of oral health as a health issue. There was a 6-percentage-point increase in the public's knowledge that poor oral health leads to other health problems (from 39 percent to 45 percent), and a 7-point increase in believing that brushing and flossing are not enough and dental visits and fluoride are also important (from 58 percent to 65 percent) over the course of the campaign. These gains in issue definition are just as important as the increases in visibility and priority of the issue, because the health definition builds public responsibility to solve the problem for the community as a whole rather than just making sure one's own children brush their teeth.

The Main Reason to be Concerned About Children with Poor Oral Health: (In Percent)				
· · · · · · · · · · · · · · · · · · ·	April	October		
They will grow up with stained, ugly teeth, which will hurt their self-esteem	3%	3%		
They will be in pain from gum disease and cavities, which will keep them from concentrating in school	18%	16%		
They will be more likely to face other health issues due to poor nutrition	45%	39%		
All	30%	35%		
None/don't know	4%	7%		

Which Statement Comes Closest to Your View:					
(In Percent)					
	April	October			
If kids take good care of their teeth by brushing and flossing, their mouths will	14%	13%			
be healthy and cavity-free.					
Brushing and flossing are not enough. Regular dental visits and fluoride	<i>65%</i>	<i>58%</i>			
protection for kids are critical to good oral health.					
Both	18%	27%			
Neither/don't know	3%	3%			

Support for Policy

As part of the Watch Your Mouth campaign, a coalition was formed to do more than just make the public aware of the importance of children's oral health; it was designed to create public responsibility for children's oral health and to lead to support for policy change. The campaign proved successful in building public support for oral health policies that public experts say would help solve the problem, leading to a 10-percentage-point average increase in strong support for a variety of policy proposals. Washington State residents strongly support:

- fluoride protection for all kids (84 percent favor, 50 percent strongly favor, +13 points in strong support)
- financial incentives for employers to offer dental insurance (86 percent favor, 49 percent strongly favor, +10 points in strong support)
- Medicaid dental care for low-income children (86 percent favor, 45 percent strongly favor, +9 points in strong support)
- dental screenings in schools (81 percent favor, 42 percent strongly favor, +10 points in strong support)
- incentives for dentists to practice in rural and poor areas (82 percent favor, 38 percent strongly favor, +7 points in strong support)

Other Campaign Effects

The Watch Your Mouth campaign also commissioned Pam Morgan to review the advertising and earned media to determine the extent to which the Washington State campaign was able to stay on message in the course of attracting news and public service placement. This is important

because, too often, communications materials are diluted or diverted in order to secure placement, making them less effective in changing opinion.

Morgan's review found striking differences between the op-eds, on the one hand, and the news articles and TV news, on the other, in terms of reframing of the issue. The op-eds were deemed strong and effective in reframing the issue toward social responsibility and whole health. Prevention was explicitly mentioned, and the messenger was often a doctor or other civic leader, not the expected dental messenger. Both the op-eds and the media-generated reports (both newspaper and television) replaced the traditional "parental/individual" focus with one of "community/policy"; this in itself is quite an accomplishment. The newspaper articles and TV news pieces did, however, tend toward more traditional framing of the issue, using visuals that undercut the message. "In those vehicles the campaign could most tightly control, such as op/eds, the messages were true to the research recommendations," notes Morgan. "But the newspaper articles and TV news segments continue to include many elements of the old framing of the issue." These findings underscore the value of controlling the message and the production of news segments, a goal that only the op-ed and public service media were able to achieve.

Lastly, the campaign was able to secure data from a forthcoming report that reviewed the content of one month's television news in six major markets nationwide with respect to children's issues. First, the study shows no coverage of children's oral health issues in any market. This is especially surprising given the study period: June 2000, immediately following the release of the Surgeon General's report. One can conclude that this report had few "coat tails," and that all news coverage of the issue secured in Washington State was indeed "earned," in that it resulted directly from stimulation by Citizens' Watch. Put another way, without this campaign, it is highly likely that Washington TV stations would have aired no news at all about the issue. Second, in a review of the child health coverage, important differences emerge between the quality of the news secured by Citizens' Watch and the dominant frames of child health news on other issues. Most child health news stories focus largely on at-risk kids or accidents affecting children, and the only "solution" is consumer safety. Thus, the quality of coverage accorded to children's oral health was also powerfully influenced by the Watch Your Mouth campaign in Washington State.

It should be noted that a final survey was conducted in Washington State in 2001; it was, however, subject to the impact of 9/11 and, of course, priorities for children's oral health fell along with every other issue, as Washington's economy was dramatically affected. Interestingly, the connections between oral and overall health remained strong, demonstrating that the reframing of the issue remained while its salience diminished. FrameWorks concludes that the Watch Your Mouth campaign accomplished an important educational goal, which can be accrued to future advocacy efforts.

In sum, the Washington State case study appears to give further credence to the communications research findings and to suggest that children's oral health can be translated to the public in ways that empower citizens and communities to rally around the issue. By conscientiously framing the issue along the lines suggested by the research, carefully choosing frame elements that support the reframed messages, public health experts can help the public embrace a new approach to children's oral health, one more in line with the Surgeon General's call to action and the proven programs and policies of public health practitioners.

About the Institute

The FrameWorks Institute is a national nonprofit think tank devoted to framing public issues to bridge the divide between public and expert understandings. Its work is based on Strategic Frame AnalysisTM, a multi-method, multi-disciplinary approach to empirical research. FrameWorks designs, commissions, publishes, explains and applies communications research to prepare nonprofit organizations to expand their constituency base, to build public will, and to further public understanding of specific social issues — the environment, government, race, children's issues and health care, among others. Its work is unique in its breadth — from qualitative, quantitative and experimental research to applied communications toolkits, eWorkshops, advertising campaigns, FrameChecksTM and Framing Study Circles. See www.frameworksinstitute.org.

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