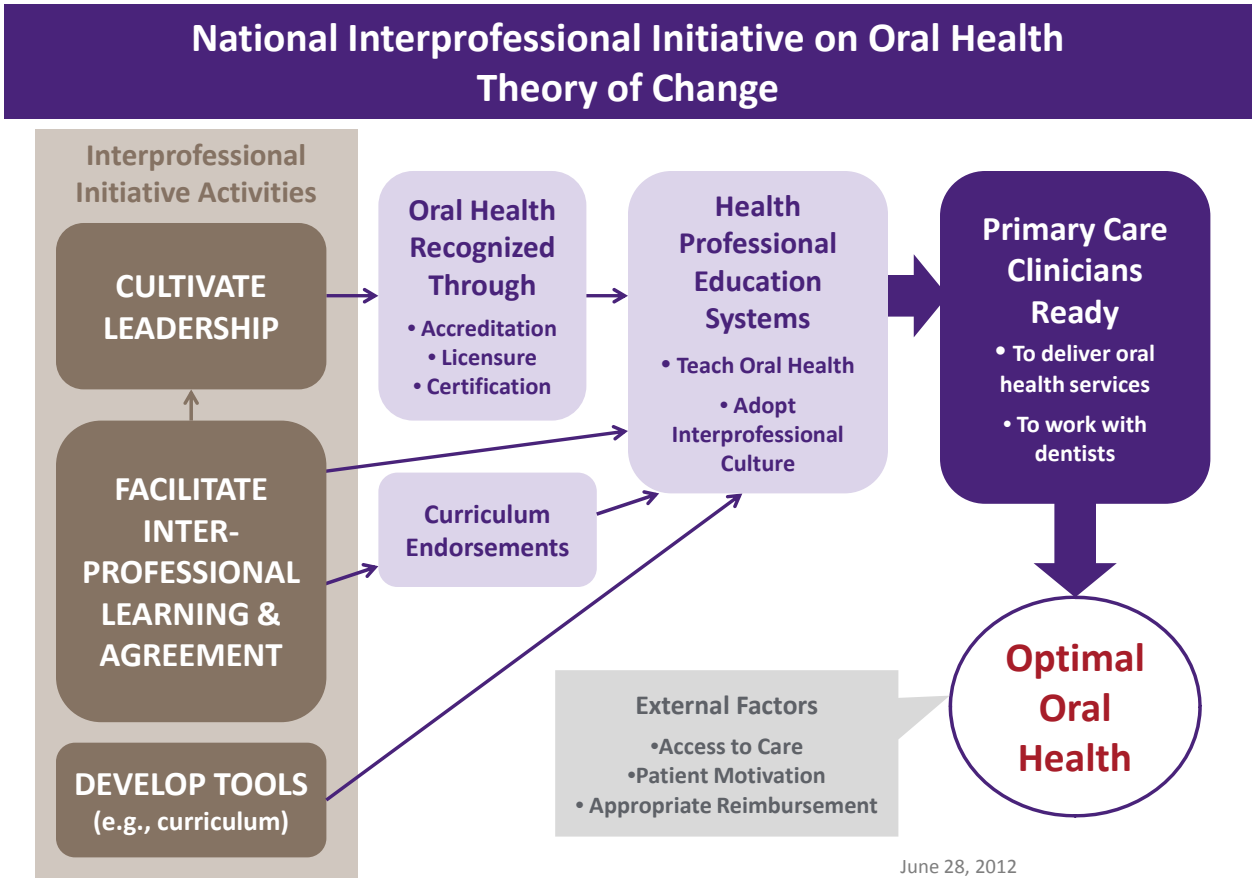
National Interprofessional Initiative on Oral Health
Summary of 2012 Evaluation Findings

October 2012

This document presents findings from an exploratory evaluation of the National Interprofessional Initiative on Oral Health, specifically regarding its push for primary care education systems to teach oral health and adopt an interprofessional culture around oral health. The Interprofessional Initiative is still in the early stages of implementation. Although its curriculum is well-established, its system-level change strategies are still evolving. This formative evaluation, assessing both the process of the initiative's work and its early outcomes, is intended to inform ongoing program development and support decisions about the future of the Interprofessional Initiative.

During the evaluation planning stages in May and June 2012, Harder+Company worked collaboratively with the Interprofessional Initiative to develop a refined theory of change (Exhibit E1) to enhance our understanding of how program implementation leads to short- and longer-term results. The theory of change shows three categories of Interprofessional Initiative Activities that are intended to lead to interim steps on the way to longer-term outcomes. Looking at each activity in turn, **cultivation of leadership** means developing strong buy-in regarding oral health in primary care, and a commitment of individuals to work toward systems change.

E1. Theory of Change



The Initiative cultivates leadership by, among other things, recruiting oral health champions and funding work within professions, such as the Physician Assistant Leadership Summits and Nursing Leadership Summit in Oral Health. The Interprofessional Initiative also **facilitates interprofessional learning and agreement**, for example through its annual symposia and by its solicitation of endorsements for the Smiles for Life curriculum, establishing common ground across professional boundaries and securing organizational buy-in of an interprofessional approach to oral health. Finally, the Interprofessional Initiative supports the **development of tools**, most notably the Smiles for Life curriculum, designed to provide evidence-based materials to build oral health skills in primary care clinicians using a profession-neutral approach. Through these activities, the Interprofessional Initiative aims to influence the primary care education system in several ways:

- By persuading profession-specific accreditation, licensure, and certification bodies to incorporate oral health as a requirement,
- By accruing influential endorsements of Smiles for Life that will increase utilization, and
- By working directly with primary care education institutions to incorporate oral health content into their programs (especially through use of Smiles for Life) and build into their teaching and institutional cultures an expectation of understanding and collaboration across professions.

The Interprofessional Initiative is focused on the educational pipeline rather than direct work with practicing clinicians. However, its theory of change posits that its efforts to change the primary care education system will lead to primary care clinicians being ready to deliver oral health services and work with dentists. The theory of change guided the development of the evaluation's data collection approaches and instruments, and sharpened the central evaluation question that focuses on the Health Professional Education Systems box in Exhibit E1: *How is the Interprofessional Initiative effecting change in education of primary care clinicians?*

Methods

Data collection occurred from June to early September2012. To address the central formative evaluation question in this limited timeframe, the evaluation team together with Interprofessional Initiative staff set the following parameters to define the scope of the data collection:

- **Two main data collection methods**. *Key informant interviews* provided opportunities to hear the experiences and perspectives of educators of health professionals as well as funders involved with the Interprofessional Initiative in its efforts to bring oral health into primary care education. To ensure that respondents would be able to provide an informed assessment of the Interprofessional Initiative, the Initiative's staff provided the evaluation team with an initial list of fifty interview contacts, and those who responded to the interview request were asked for referrals to additional people who were informed on interprofessional efforts in oral health.

  A *survey of accredited programs* captured early outcome data on the reach of oral health content in general and the Smiles for Life curriculum specifically into primary care education. These data provided a quantitative look at the extent to which curricular changes are occurring in primary care education, measuring an important systems change strategy of the Interprofessional Initiative. The survey entailed individual direct contacts by email and/or phone to 143 programs, including family medicine residencies, graduate nursing programs, and physician assistant programs. The contact list included all such programs in the case study states (see below) that were accredited by the organizations listed in Exhibit E2, as listed on those organizations' websites as of May 2012. The survey asked the following questions:

a) Does this program include an oral health component, and
b) If so, is the Smiles for Life curriculum used?
c) Have you heard of Smiles for Life?

We also included in our synthesis of findings additional quantitative outcomes data compiled by Lisa Forsberg of the Interprofessional Initiative from the Smiles for Life website user statistics.

E2. Accrediting organizations that served as sources for contact lists of surveyed programs

Organization	
ACGME	Accreditation Council for Graduate Medical Education
ARC-PA	Accreditation Review Commission on Education for the Physician Assistant
CCNE	Commission on Collegiate Nursing Education
NLNAC	National League for Nursing Accreditation Commission

- **Four state-level case studies.** The evaluation focused on four states—Colorado, New York, Virginia, and Washington—for survey data collection and state-level perspectives from interview respondents. These states were selected by Initiative staff due to being locations of substantial Interprofessional Initiative activity, and in the case of Virginia, also being a grantee state for the DentaQuest Foundation's Oral Health 2014 initiative. The case study approach was applied to the survey to document the presence of oral health in the curricula of health programs in the four states. Interview respondents included key informants from these four states, as well as respondents with a national-level educator perspective or a funder's perspective. State-level findings are not intended to be representative of other states.
- **Three professions.** As noted above, the survey was limited to the three professions of family medicine, physician assistant, and nursing for purposes of feasibility of data collection. These professions were selected due to being among the most involved in Interprofessional Initiative efforts to date. Interview respondent affiliations comprised a broader range of health professions including pediatrics, obstetrics, and dentistry.

E3. Accredited Program Survey Response Rates

	Accredited Programs	Responses	Response Rate
Family Medicine	60	36	**60%**
Physician Assistant	27	14	**52%**
Graduate Nursing	56	28	**50%**
Total	**143**	**78**	**55%**

In total, 40 individuals were interviewed about their viewpoints from national, state, or funding angles. Several respondents provided multiple perspectives—in total: 15 national-level, 26 state-specific, and 7 funder perspectives. Appendix A provides a list of the interview respondents. Across the four case study states, a total of 78 accredited programs responded to the survey. Response rates by profession are shown in Exhibit E3; state-level responses rates are provided in Appendix B.

Limitations

As with any evaluation, certain limitations must be considered when interpreting findings.

- Because most of the interview respondents were contacts provided by the Interprofessional Initiative and many had a strong stake in the Initiative's work and/or the Smiles for Life curriculum, they were likely to be positively predisposed toward the Interprofessional Initiative. To encourage candid responses, the evaluation team assured respondents that their names would not be attached to their comments. We also sought some interviews with respondents who had minimal connections to the Interprofessional Initiative to hear a broad range of perspectives.

- We cannot know the opinions of those who declined or did not respond to our interview requests (21 in total). Interviews were limited to the month of August, and some non-respondents probably were unable to schedule due to travel or other time constraints. However, some may not have scheduled with us due to an unfavorable opinion of oral health in primary care generally, or the Interprofessional Initiative specifically. Due to the reasons stated here, the qualitative nature of these interviews, and the limited sample size, the findings cannot be generalized to larger populations—for example, other regions where the Interprofessional Initiative is active.
- The survey was limited in scope by including only a few simple questions. Respondents may have had differing interpretations of the term "oral health component" as well as a possible response bias towards answering affirmatively if they assumed that was the preferred answer. There also may have been non-response bias in which those programs that did not respond were less likely to have oral health program components. Results should be seen as exploratory in nature with the overall goal of informing further strategy and evaluation efforts.

Despite these limitations, we feel this evaluation provides valuable insights regarding the progress of the Interprofessional Initiative to date as well as opportunities and challenges to inform future efforts.

Key Findings

Overall, interview respondents reported that the Interprofessional Initiative is making progress on promoting oral health in health education systems, also acknowledging that this is a large task. These key findings include themes and highlights from the assessment of Interprofessional Initiative process and early outcomes, organized into the sections listed at right.

E4. Key Findings Sections

- Developing Leadership
- Education Systems Change
- Opportunities and Challenges for Systems Change
- State by State Findings
- Implications for the Interprofessional Initiative

Developing Leadership

The Interprofessional Initiative has marshaled a small but growing network of health leaders to work toward its mission. The extent and strength of the Interprofessional Initiative's network was suggested by interview respondents frequently referring to each other in describing the accomplishments and progress made in promoting oral health in primary care education. The perception among interview respondents was that those involved in the Interprofessional Initiative reflect a network of committed individuals from a wide range of professions, but these participants are in many cases not representing professional associations or organizations; rather, they are participating on an individual basis. For example, as one participant commented, "There are some individuals [from internal medicine and geriatrics] who have been at some of the meetings, but from an organizational point of view, I don't know how well they're represented." On the other hand, the network has clearly grown over the last several years, starting with the founding members of Smiles for Life, and expanding into additional professions and larger attendance each year at the Interprofessional Initiative Symposium. Respondents also indicated that organization-level commitment is growing, frequently citing Smiles for Life endorsements, which now include a total of twelve organizations from professions of family medicine, pediatrics, physician assistants, nursing, and dentistry. The American Dental Association is the most recent endorser of the curriculum.

The Interprofessional Initiative and STFM are among the major drivers of oral health in primary care education. Eighteen interview respondents with national or funder perspectives were asked to name the organizations that were driving the push to incorporate oral health into primary care education. Exhibit E5

shows the top five organizations named and the number of respondents who named them. The top five include both the Interprofessional Initiative and the Society of Teachers of Family Medicine, the group that developed and owns the Smiles for Life curriculum.

E5. Top five organizations named as major drivers of oral health in primary care education

Organization		Number of Mentions[a]
AAP	American Academy of Pediatrics	7
STFM	Society of Teachers of Family Medicine	4
AAMC	Association of American Medical Colleges	4
NIIOH	National Interprofessional Initiative on Oral Health	3
HRSA	Health Resources and Services Administration	3

[a]Number of interview respondents who named the organization out of 18 who were asked. Respondents could list multiple organizations.

Education Systems Change

In several specific professions, the Interprofessional Initiative is making progress on spreading knowledge of oral health. When asked whether the Interprofessional Initiative is effectively filling a gap in health professional knowledge of oral health, respondents frequently identified specific professions where this had happened:

- The **physician assistant** profession was cited as a "home run," due to inclusion of oral health in education programs and a high degree of buy-in among practitioners as well as accrediting and certification organizations. Respondents commonly explained that the profession is well-suited to take on oral health. For example, as one put it,

  > *They're very homogenous with a limited number of organizations and they… collaborate well historically with the medical profession. For those reasons, it's been a slam dunk and they've done a stellar job at incorporating the curriculum and getting the message out there.*

  In fact, multiple interviewees commented that oral health was so well-suited to physician assistants that they were "somewhat embarrassed by the realization that they'd been looking at the pharynx and totally bypassing the mouth." Additionally, several people spoke of the annual Physician Assistant Summit in a positive light, describing it as "energizing" and importantly including leaders from key physician assistant organizations as well as from medicine and dentistry.

- **Family medicine** and **pediatrics** disciplines were also named frequently as making strong inroads. "[The Interprofessional Initiative has] especially helped join the primary care physicians—family medicine and pediatricians—together with nursing in terms of access to dental care," noted one national-perspective respondent. Another noted both success and challenge, saying, "We've done really good work in getting it incorporated into family medicine [education], but it's really hard to get it incorporated into everyday practice."

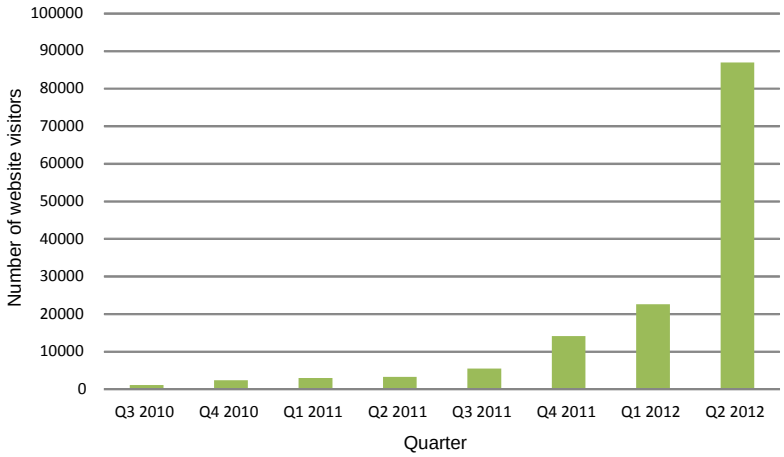
"[The physician assistant profession has] done a stellar job at incorporating the curriculum and getting the message out there."

- Many respondents also spoke of **nursing** as an area of accomplishment, although commonly people said it was harder to see movement in this profession, with many citing the sheer number of nursing professional organizations as a barrier to widespread involvement. "Oral health is such a natural fit within the nursing profession," remarked one, "But we've got to find ways to get the message spread more and curricula incorporating it more. It's tough with the

disparate structure of the nursing profession." Another agreed, "I don't know how you do it with all the myriad nursing organizations across the country."

Overall, interview findings pointed to important progress in spreading knowledge about oral health, most notably in the professions mentioned above. However, with the physician assistant profession being the closest example, there was little evidence that oral health has achieved a clear and firmly-established home in primary care education. "[Due to the Interprofessional Initiative,] there is more education out there, but it's not institutionalized yet in very many places," one respondent summarized.

E6. Smiles for Life Discrete Website Visitors by Quarter, as Reported by the Interprofessional Initiative, July 2012



Smiles for Life website visits have increased dramatically. Smiles for Life website statistics, tracked and summarized by Interprofessional Initiative Program Administrator Lisa Forsberg in July 2012, show that the number of visitors to the website has skyrocketed during 2012 (Exhibit E6). In just the first six months of the year, over 100,000 individuals visited the website, more than four times the number in all of 2011. Furthermore, the number of people completing online modules of Smiles for Life for continuing education credit was on the rise, with physician assistants the highest users, followed by physicians and then nurses (data not shown). As of July, approximately 9,000 people had received continuing education units since the launch of the 3rd edition of the curriculum in 2010. The website does not currently track users by their institution, though this data element would align directly with the Interprofessional Initiative desired outcome to see Smiles for Life in use by 500 programs. The statistics made positive impressions on several interview respondents. Exemplifying this response, one said, "The utilization numbers are amazing; I never thought [Smiles for Life] would get the exposure it has."

"When some dentists aren't seeing children at a young age, even when referred… it sends a mixed message."

Key informants praise Smiles for Life and call for teaching of interprofessional competencies. Interview respondents agreed in their high regard for the Smiles for Life curriculum, and added that other educators and practitioners are impressed with it as well. Several noted that in their experience, educators who have developed an alternative curriculum typically have done so only because they did not know about Smiles for Life. Respondents identified the Interprofessional Initiative's key roles with Smiles for Life as promoting the curriculum and supporting the substantial efforts required to keep the curriculum up to date. As one stated, "If the Smiles for Life curriculum… did not have the NIIOH behind it, we would not have nearly the uptake we have had." Multiple respondents commented that in addition to the clinical skills

covered by the curriculum, there is a need to teach interprofessional competencies as well. A respondent remarked, "It's essential to have an interprofessional team approach. I don't think anyone's teaching people to do that at all. I worry about that as a possible limit." Another concurred, explaining that "HRSA ended up with a guideline for oral health that said it should be done in an environment of interprofessional care, and I think 90 percent of people have no idea what that means."

E7. Accredited Programs with Oral Health Components

	Include OH component	Use Smiles for Life	Heard of Smiles for Life
Family Medicine (n=36)	31%	14%	22%
Physician Assistant (n=14)	57%	14%	21%
Graduate Nursing (n=28)	50%	7%	14%

Surveyed programs report substantial inclusion of oral health components, with small numbers using Smiles for Life. Substantial numbers of survey respondents—including half or more of the physician assistant and nursing programs in participating case study states—reported that their program includes an oral health component (Exhibit E7). Respondents who inquired about what was considered an oral health component were told their response should be based on their own judgment. Fewer respondents (7 to 14 percent) reported that their program uses the Smiles for Life curriculum, and 14 to 22 percent reported having heard of Smiles for Life (a category that includes those *using* Smiles for Life). These figures indicate moderate penetration of Smiles for Life and the importance of oral health into a large field of educational institutions, at least in states with concentrated Initiative activity.

Opportunities and Challenges for Systems Change

Oral health is still seen as a special interest. A strong theme that emerged through the interviews was that oral health is not yet seen across the board as integral to overall health. In primary care education settings, the topic of oral health is often seen as a "topic du jour"—that is, one of many possible add-ons to the existing curriculum, and one that could be replaced by the next health trend to come along. One interview respondent made the point that "it's got to be institutionalized or it will be the flavor of the month." Another noted, "Getting [oral health] into medical school curricula is a high hurdle. Everyone and their cousin wants something in there." Key informants agreed that on a large scale there is a need for a cultural shift in perspective away from oral health being seen as a special interest and instead rising in priority so that it is seen as "a glaring oversight" if left out of primary care training.

"Perspectives have changed a lot in the last ten years and dentists are starting to be more of the solution."

Educators and practitioners emphasize the importance of the dental profession as a strong partner. Dentists play a key role in supporting oral health buy-in among other professions, a point that emerged in two ways. First, several interview respondents remarked that dentists should be available to teach Smiles for Life because they hold the highest credibility as oral health experts. For example, one respondent stated, "It's nice to have a dentist who has expertise available to answer questions." Second, others commented that they see resistance among some professionals to learning or teaching oral health because of a perception that in practice, dentists will not accept referrals of young children or low-income adults. One person, echoing others, remarked on this as it relates to children, "Working to get dentists

comfortable treating children under three is still a huge issue for us… There are not many [dentists] that will accept referrals. One of the things we do hear from primary care practitioners is that they have difficulties making that referral sometimes." Another respondent suggested that such access shortages serve to undermine the importance of oral health from the public's perspective. "When some dentists aren't seeing children at a young age, even when referred by a pediatrician, it sends a mixed message," he said. These finding imply a desire to have the dental profession as a committed partner in the interprofessional effort.

Dentists and the dental profession are beginning to show acceptance of an interprofessional approach. Although some respondents described the dental profession primarily as a barrier to an interprofessional approach towards oral health, others cited changing attitudes and examples of support coming from individual dentists and organized dentistry. "Perspectives have changed a lot in the last ten years and dentists are starting to be more of the solution," commented one, referring to a solution for addressing unmet need for oral health care. Another respondent whose views were shared by others observed that in her experience, "[Dentists] want to help, but… they want to be involved in training and ensure correct information is taught," again supporting the idea of a stronger role for dentists in education of other health professionals. Overall, respondents—including dentists themselves—gave mixed feedback about the extent of buy-in among dentists, and many connected this to a need for increased efforts toward inclusion and partnership.

Non-dental professionals cite several compelling reasons to be involved in oral health. Interviews were conducted mostly with people involved in Interprofessional Initiative activities, and buy-in was typically strong among them. Interestingly, a variety of common views emerged when they were asked to identify compelling reasons to involve primary care practitioners in oral health. The arguments they shared may help to refine messages for recruiting champions and gaining broader buy-in. Over a dozen respondents cited the importance of pediatric and family medicine practitioners emphasizing the importance of oral health and early prevention, since young children otherwise have little exposure to oral health care. As one described it, children see their physicians "many more times in the first year than any other health professionals except some nurse practitioners and family physicians; certainly more than dentists." Another common reason cited was the trend towards medical homes or health homes, in which oral health is a necessary part of a connected and collaborative system. "We can't have a health home without knowing what each other is doing," was a typical comment. Finally multiple respondents offered viewpoints related to the idea that the mouth is integral to the rest of the body, with growing evidence of health linkages between oral health and systemic health, and providers tasked with caring for the whole body must be aware of and involved in oral health. As succinctly stated by one physician, "To provide the best possible care, you can't ignore the mouth."

"To provide the best possible care, you can't ignore the mouth."

Each level of the system presents opportunities and challenges. Across the interview respondents, many different points were raised about the needs, opportunities, and challenges of making changes at various levels of the primary care education system. Some respondents advocated for a greater focus on working directly with practitioners, while others recommended focusing on schools and/or accreditation and qualifying organizations. Still others emphasized a need for broad efforts to shift professional and social norms across the health care field. Exhibit E8 organizes and summarizes the main points identified by respondents regarding changes to different levels of the system.

E8. Approaches toward Oral Health Education across Health Professions

Individual ↕ Population

Target & Goal	Issue	Opportunities	Challenges
PRACTITIONERS **Goal:** Providers recognize importance of oral health across professions, learn skills, and routinely apply them in practice.	In general, non-dental health care providers do not examine or treat the oral cavity.	• Continuing education credits are available for Smiles For Life (SFL). • Practitioners who see oral health issues in their patients are likely to view oral health as important professional knowledge. • Information on state reimbursement policies could be posted on the Initiative website.	• Practitioners are extremely numerous and difficult to reach in large numbers. • Seasoned practitioners have already formed skills, habits, and attitudes.
SCHOOLS **Goal:** Oral health is incorporated into curricula at health education institutions.	Most schools do not include oral health as a standard part of the curriculum in health professional education.	• Students will be prepared to enter practice ready to address oral health. • SFL is ready for classroom use.	• Curricula change frequently and are dependent upon particular individuals on faculty, making it difficult to sustain oral health content. • Learnings do not always "stick" in practice, especially if workplace culture is not supportive.
ACCREDITORS & QUALIFIERS **Goal:** Oral health knowledge becomes a requirement for institutional accreditation and/or for qualifying exams for practitioners.	Most health professions are not required to include oral health as an educational component.	• These organizations have great influence over schools' curricula.	• In nursing, many different organizations handle accreditation and qualification. • Some organizations want to keep requirements general in nature, reducing opportunities to mandate oral health.
HEALTH CARE FIELD **Goal:** Raise profile of oral health so that its importance can no longer be ignored across professions.	Non-dental health fields typically see oral health as "not my job." The current social norm is that oral health is optional.	• Respected health care journals have substantial influence over the field. • National associations and agencies can help to move the needle on providers' view of oral health.	• Acceptance of the importance of oral health may not lead quickly or directly to new practices by providers.

State by State Findings

Preliminary survey results suggest that while some states have substantial percentages of programs with oral health components or Smiles for Life in use, New York State lags on these measures. The number of accredited program survey responses in separate states is too small to be conclusive, but oral health inclusion appeared to be present in roughly two thirds of programs in Washington and Virginia, and a third of programs in Colorado and Washington reported knowledge of Smiles for Life. Across all three survey measures, New York State appeared to have the lowest prevalence compared to the other three case study states (Exhibit E9). For state-level results broken out by profession, see Appendix B.

E9. Programs with Oral Health Components by State

	Include OH component	Use Smiles for Life	Heard of Smiles for Life
Washington (n=12)	67%	17%	33%
Virginia (n=13)	62%	8%	15%
Colorado (n=15)	40%	27%	33%
New York (n=38)	29%	5%	11%

State-level findings underline opportunities for enhanced promotion of Smiles for Life. Across the four case study states, substantial differences exist between percentages of programs that reported including oral health and those that reported using Smiles for Life. Possible explanations are that their oral health components are minimal (i.e., not comprising the use of a formal curriculum) or that they are using an alternative curriculum. Simply having heard of Smiles for Life does not mean a program puts it into use, as evidenced by higher percentages having heard of the curriculum than are using it. These discrepancies suggest there are opportunities to present Smiles for Life as an enhancement to what is already included in programs and to educate potential users on how the curriculum can be smoothly incorporated into a variety of program formats.

Implications for the Interprofessional Initiative

Interview respondents were asked for suggestions about how the Interprofessional Initiative should move interprofessional oral health education forward. The following findings are themes that emerged from the interviews.

The Interprofessional Initiative would benefit from increased visibility. By raising the profile of the organization and of the broader importance of oral health, the Interprofessional Initiative will be better positioned to change systems. Respondents recommended several strategies for increasing visibility among key audiences, including building connections with deans at academic institutions and working with them on their terms, publishing to a greater extent in oral health and other academic journals, developing a marketing plan and materials, and ensuring the Initiative's presence and visible representation at meetings convened by key partners. Illustrative quotes from respondents include:

- *They can't get the recognition from the field without getting into the journals.*
- *They should do some public relations work – get out and talk more about oral health.*

"There's real support for interprofessional education like never before."

- *They need to be more assertive in… publications and marketing materials to create a more visible presence that really represents their influence—and would increase their influence.*
- *There are several strategies that will be important [including] developing a broader and more effective communications strategy about this [Smiles for Life] curriculum.*

Opportunities exist to broaden the Interprofessional Initiative's reach to additional professions, though some suggest first strengthening ties to those currently involved. Interview respondents made several main points with regard to opportunities with specific disciplines:

- Several people emphasized the importance of strengthening connections to the professions and organizations already involved. For example, one respondent commented that "continuing to work with pediatricians is huge. They're the voice of child health policy." Another noted that the American Academy of Pediatrics (AAP) has a strong system of recruiting champions of its oral health education efforts in every state and that the Interprofessional Initiative would do well to adopt this model or "maybe we need to work with their champions." One national-level respondent voiced concerns about spreading resources too thinly by going after increasingly more professions, with potentially less impact on patient oral health. He stated,

  There have been conversations about other [professions], like pharmacy and others. I think they're way too far out on a tangent to be really relevant. Putting investments there isn't going to gain the kind of yields to make sense.

- In contrast, many respondents expressed interest in broadening the reach to more strongly involve additional professions, including obstetrics, pharmacy, public health, nutrition, and others. As one suggested, "We've been targeting the primary care folks, but a lot of those specialty care folks have a lot to do with oral health impacts." They also mentioned institutions they felt needed to be more involved; these are listed in Exhibit E10.

E10. Organizations suggested for stronger ties to the Interprofessional Initiative

Organization	
AAFP[a]	American Academy of Family Physicians
ACGME[a,b]	Accreditation Council for Graduate Medical Education
ACOG[a]	American Congress of Obstetricians and Gynecologists
ACP	American College of Physicians
ADEA	American Dental Education Association
CAPIR[c]	ADA Council on Access, Prevention, and Interpersonal Relations

[a]Mentioned by more than one interview respondent.
[b]And other accreditation and qualifying organizations.
[c]Also mentioned by one respondent as driver of oral health in primary care education.

- Including dentistry to a greater extent in interprofessional conversations and activities also emerged as a theme. Multiple people spoke of more collaboration with dentistry as a necessary factor for buy-in and the success of the Interprofessional Initiative's mission. As a respondent outside of the core Initiative network remarked,

  I am somewhat familiar with people who are involved in the NIIOH; I don't think there is a really strong dental presence. Without that it is seen as an 'us versus them' approach… For this to work, the element of collaboration has to be really highlighted.

  A state-level respondent offered an example of how such collaboration had benefited her program:

  [Dentists at first] felt threatened about kids receiving services outside of dental offices. As we've joined forces, we've tried to involve dentists on our TA teams, and that concern has gone to the

wayside…. We've worked to give some credit to the dental concerns [and] have evolved as a more credible program.

The recent endorsement of Smiles for Life by the American Dental Association demonstrates a step forward in the relationship between the Interprofessional Initiative and organized dentistry.

Many say the time is right for the Interprofessional Initiative to clarify its priority strategies and map a clear future direction. As evidenced by the points made above in this Implications section, as well as in Exhibit E5 earlier in this report, interview respondents indicated many possible strategies and directions for the Interprofessional Initiative. Several respondents noted that the Initiative is at a strategically important juncture for deciding on next steps. One described the Interprofessional Initiative as having "moved from infancy to youth. It's in a critical window of opportunity now. With HRSA support, there's real support for interprofessional education like never before…learning with and about each other." There was a call for "much more tangible outcomes" and "realistic expectations." The latter respondent went on to ask, "What does success look like in realistic terms? It shouldn't just be from a discipline perspective." Finally, several people voiced optimism at a future of possibility, seeing the Interprofessional Initiative's capacity to put those ideas into action as the limiting factor. "There are lots of good ideas, and they do some of those, but…they need more people power."

"It's essential to have an interprofessional team approach. I don't think anyone's teaching people to do that."

Conclusions and Questions for Further Thought

The initial evaluation of the National Interprofessional Initiative on Oral Health yielded rich findings, summarized in Exhibit E11 on the next page, from a broad range of interview respondents and a preliminary survey. Overall, Harder+Company finds that the Interprofessional Initiative has made reasonable progress in building a national consensus for the integration of oral health and primary care, although the network of educators, practitioners and associations will need to be broadened or potentially deepened to achieve larger-scale results. The strategies used to effect systems change in the primary care educational system may need refinement, given the system's decentralization and the complexities and challenges identified in the evaluation findings. The evaluation team intends for this report and the findings within it to inform strategic thinking about the Interprofessional Initiative's next steps, as well as its needs and desires for evaluation in the future. Planning questions for possible consideration include the following:

- In what ways do the initial evaluation findings affirm the approaches that the Interprofessional Initiative has taken to date?
- Can the Interprofessional Initiative better achieve its goals by prioritizing a *broadening* of its network to include as many professions as it can, or a *deepening* of its work with a small number of professions where there is strong traction? What trade-offs are inherent in each approach?
- How can the Interprofessional Initiative expand its visibility given current capacity?

- What is the role of dentists and organized dentistry in the Interprofessional Initiative's work going forward?
- What specific strategies should the Interprofessional Initiative focus on to achieve change in the short term and how do these link to a longer term plan? What opportunities currently exist to develop strategic partnerships and harness resources for selected strategies?
- What would signify success or important progress in the short term? In other words, what milestones can the Initiative use to measure its success on an annual basis towards longer term desired outcomes?
- Over what time periods is it realistic to expect achievement of interim milestones and longer term goals?

E11. Summary of Key Findings

Report Section	Findings
Developing Leadership	▪ The Interprofessional Initiative has marshaled a small but growing network of health leaders to work toward its mission. ▪ The Interprofessional Initiative and STFM are among the major drivers of oral health in primary care education.
Education Systems Change	▪ In several specific professions, the Interprofessional Initiative is making progress on spreading knowledge of oral health. ▪ Smiles for Life website visits have increased dramatically. ▪ Key informants praise Smiles for Life and call for teaching of interprofessional competencies. ▪ Surveyed programs report substantial inclusion of oral health components, with small numbers using Smiles for Life.
Opportunities and Challenges for Systems Change	▪ Oral health is still seen as a special interest. ▪ Educators and practitioners emphasize the importance of the dental profession as a strong partner. ▪ Dentists and the dental profession are beginning to show acceptance of an interprofessional approach. ▪ Non-dental professionals cite several compelling reasons to be involved in oral health. ▪ Each level of the system presents opportunities and challenges.
State by State Findings	▪ Preliminary survey results suggest that while some states have substantial percentages of programs with oral health components or Smiles for Life in use, New York State lags on these measures. ▪ State-level findings underline opportunities for enhanced promotion of Smiles for Life.
Implications for the Interprofessional Initiative	▪ The Interprofessional Initiative would benefit from increased visibility. ▪ Opportunities exist to broaden the Interprofessional Initiative's reach to additional professions, though some suggest first strengthening ties to those currently involved. ▪ Many say the time is right for the Interprofessional Initiative to clarify its priority strategies and map a clear future direction.

Appendix A: List of Interview Respondents

Educators with National Perspective

Frank Catalanotto (Dentistry), University of Florida
Melinda Clark (Pediatrics), Albany Medical College, New York *
Mark Deutchman (Family Medicine), University of Colorado *
Maria Dolce (Nursing), New York University *
Alan Douglass (Family Medicine), Middlesex Hospital, Connecticut
Joanna Douglass (Pediatric Dentistry), University of Connecticut
Caswell Evans (Dentistry), University of Illinois **
Wanda Gonsalves (Family Medicine), Medical University of South Carolina
Anita Glicken (Physician Assistant), President, NCCPA Foundation *
Judith Haber (Nursing), New York University *
Cynthia Lord (Physician Assistant), Quinnipiac University
Russell Maier (Family Medicine), Central Washington Family Medicine Residency Program *
Hugh Silk (Family Medicine), University of Massachusetts
Norman Tinanoff (Pediatric Dentistry), University of Maryland **
Peggy Walsh (Physician Assistant), Baylor College of Medicine, Texas Children's Hospital

**Also contributed state perspective.*
***Also contributed funder perspective.*

Educators with State Perspective

Colorado
Amy Barton (Nursing) University of Colorado
Jeanne Bird (Physician Assistant), Red Rock Community College
Jonathan Bowser (Physician Assistant), University of Colorado
Patricia Braun (Pediatrics), University of Colorado
Diane Brunson (Dentistry), University of Colorado
Amy Hansen (Physician Assistant), Colorado Academy of Physician Assistants
Karen Savoie, Director, Cavity Free at Three
Jack Westfall (Family Medicine), University of Colorado

Virginia
Anthony Miller (Physician Assistant), Shenandoah University
Anne Schempp (Physician Assistant), Shenandoah University

New York
David Dasher (Dentistry), LeMoyne College
Jay Kumar (Dentistry), SUNY Albany and New York State Department of Health
Ira Lamster (Dentistry), Columbia University
Catherine Nowak (Physician Assistant), Mercy College
Renee Samelson (Obstetrics and Gynecology), Albany Medical College
Mary Springston (Physician Assistant), LeMoyne College)

Washington
Eleanor Bond (Nursing), University of Washington
Steven Meltzer (Physician Assistant), MEDEX Northwest
Jim Sledge (Dentistry), University of Washington
Linda Vorvick (Physician Assistant), MEDEX Northwest

Funder Perspective

Patricia Baker, Connecticut Health Foundation
Ralph Fuccillo, DentaQuest Foundation
David Krol, Robert Wood Johnson Foundation
Dianne Riter, Washington Dental Service Foundation
Laura Smith, Washington Dental Service Foundation

Appendix B: Survey Responses in Detail

Accredited Program Survey Response Rates by State and Profession

	CO	NY	VA	WA	Total Programs	Total Responses	Overall Response Rate
Family Medicine	80% (8/10)	60% (15/25)	50% (6/12)	54% (7/13)	60	36	**60%**
Physician Assistant	100% (2/2)	50% (10/20)	25% (1/4)	0% (0/1)	27	13	**48%**
Graduate Nursing	83% (5/6)	38% (12/32)	50% (6/12)	67% (4/6)	56	27	**48%**
Total					**143**	**76**	**53%**

Accredited Programs with Oral Health Components by State and Profession

	Include OH component	Use Smiles for Life	Heard of Smiles for Life
Colorado			
Family Medicine (n=8)	38% (3)	25% (2)	38% (3)
Physician Assistant (n=2)	50% (1)	50% (1)	50% (1)
Graduate Nursing (n=5)	40% (2)	20% (1)	20% (1)
Total (n=15)	40%	27%	33%
New York			
Family Medicine (n=15)	13% (2)	6% (1)	6% (1)
Physician Assistant (n=11)	55% (6)	0% (0)	9% (1)
Graduate Nursing (n=12)	25% (3)	8% (1)	17% (2)
Total (n=38)	29%	5%	11%
Virginia			
Family Medicine (n=6)	33% (2)	0% (0)	17% (1)
Physician Assistant (n=1)	100% (1)	100% (1)	100% (1)
Graduate Nursing (n=6)	83% (5)	0% (0)	0% (0)
Total (n=13)	62%	8%	15%
Washington			
Family Medicine (n=7)	57% (4)	29 (2)%	43% (3)
Physician Assistant (n=0)	N/A	N/A	N/A
Graduate Nursing (n=5)	80% (4)	0%	20% (1)
Total (n=12)	67%	17%	33%