NH ORAL HEALTH BASELINE SURVEY I

Identifying Oral Health Resources and Promising Practices in Community-based, Non-traditional Settings

An inventory and examination of the state’s community-based oral health programs with consideration of promising and best practice criteria for use by providers, policy-makers, program planners and consumers.

This report is available for download from nhoralhealth.org
Table of Contents

Acknowledgements .................................................................2
NH Oral Health Coalition..........................................................3
Executive Summary.................................................................4
About the Survey.......................................................................5
  The Background and Mission..................................................5
  The Purpose and Objectives....................................................5
Logic Model.............................................................................6
Field & Sector Engagement......................................................6
Technical Support.................................................................7
Identifying the Standard..........................................................7
The Method..............................................................................9
The Survey...............................................................................10
  Data Content and Emerging Models .......................................11
  Model #1 - Child-focused Programs (N=35)...............................12
  Model #2 – Dental Operatories (N=19).....................................19
  Model #3 – Services in Senior Centers and Institutional Care (N=5)..............................................................................27
  Model #4 – Voucher Programs (N=6)........................................29
  Model #5 – Medical Offices (N=168)........................................31
Cross Model Comparatives......................................................37
  Differentiation of Hygienist-Centric Models and Dentist-Centric Models.................................................................37
  Workforce Comparison..........................................................37
  Differences in Services Provided..............................................36
  Comparison of Funding and Reimbursement Sources..................39
  Populations Served..................................................................39
  Record Keeping.....................................................................39
Networks for Follow-up Care and Referral..................................40
Alignment of Reimbursement and Services..................................45
Opportunities for Increasing Medical - Dental Integration............46
Future Work from Lessons Learned..........................................48
Reference and Resource Materials..........................................49
Appendices
  Appendix A. - Static Map/Entity Grid
  Appendix B. – Instructions to Access GIS Map
  Appendix C. – NH Dental Hygiene Licensed Workforce Comparative
  Appendix D. - Oral Health 411 - NH Data Sources
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Special Thanks to our Project and Report Funders for their Generous Support

- HNH Foundation
- DentaQuest Foundation

*The New Hampshire Public Health Association serves as fiscal sponsor for the NH Oral Health Coalition. Further information on the Coalition is available at: www.nhoralhealth.org*
NH Oral Health Coalition

The New Hampshire Oral Health Coalition is a diverse group of organizations, agencies, and individuals, concerned about the impact of oral health issues facing New Hampshire. This group is broadly representative of those involved in oral health provision, planning, policy-making and funding including the dental and medical communities, the legislature, educational programs, advocacy groups, insurance providers, state agency leaders, and private funders.

Established in 2002, this critical public initiative convened by the Endowment for Health and the New Hampshire Department of Health and Human Services as the Coalition for New Hampshire Oral Health Action published the New Hampshire Oral Health Plan: A Framework for Action to provide structure and vision for oral health advancement within New Hampshire. Maintaining the spirit of the plan as a “living document” the Coalition continues to work toward its vision of optimal oral health for the residents of New Hampshire.

In 2012, the Coalition accepted the role of hub organization for the development of the New Hampshire oral health stakeholder network within the nationally recognized Oral Health 2014 initiative, continuing that role into the subsequent Oral Health 2020. In 2015, the Coalition engaged with state and national stakeholders in developing the updated 2015 NH Oral Health Plan.

Further information on the Coalition and the NH oral health plans can be found at: www.nhoralhealth.org.
Executive Summary

NH Oral Health Baseline Survey
Identifying Oral Health Resources and Best Practices in Community-based, Non-traditional Settings

This report was written to provide an overview and summary of the *NH Oral Health Baseline Survey I* that was conducted during 2015-2016 statewide by the NH Oral Health Coalition with the support of the HNH Foundation and the DentaQuest Foundation for the purpose of identifying community-based oral health programs that take place outside of the traditional dental office.

The Baseline Survey was designed to gather the information to (1) create an inventory of community-based oral health programs, and (2) to determine the types of programs available including identifying who they served, how they staffed and financed their programs, and plans for the future. This data will be used to inform current and future oral health policy and program planning.

A 2-step interview process identified the overall umbrella business entities and the specific oral health programs each provided. That information was collated and examined in conjunction with the New England Survey Services and the University of New Hampshire Survey Center, resulting in the development of both static and geographic information system (GIS) mapping, a database grid, and this report.

Analysis of the information gathered resulted in the identification of 5 predominant models for community-based oral health provision:

- Child-focused models including schools, Head Start programs, Women and Children’s Nutrition (WIC) programs, and child cares;
- Dental operatories other than private dentist businesses;
- Senior centers and institutional care;
- Voucher payment programs; and
- Medical settings.

The models were examined against the Association of State and Territorial Dental Directors (ASTDD) best-practice criteria [http://www.astdd.org/best_practices/](http://www.astdd.org/best_practices/) that draws from a variety of professional standards and guidelines while recognizing the importance that each program needs to develop *their own best practices within the context of their own environment*. Although local programs have been highlighted in the report due to their alignment with ASTDD criteria, the criteria should not be used as a comparative score card as there is no single best way to build these community programs.

The report consolidates the data gathered and analyzed for use in local, regional and statewide program and policy development. To date these data have been used to inform the *2015 NH Oral Health Plan Update* and the *Legislative Commission to Study Pathways to Oral Health in NH* (Chapter 313, Laws of 2014; SB193).
About the Survey

The Background and Mission

In 2014 NH’s growing oral health stakeholder network embarked on a project to increase the number of registered dental hygienists working in the community under public health supervision.

After a statewide information-gathering road trip that included 5 mini-colloquia at various locations, stakeholders formed a common-vision to operationalize that deployment. In order to further that work, the team identified 3 preconditions that were needed for efficient and effective deployment statewide.

1. To increase the knowledge of practitioners, program planners and the public on the scope, availability and reimbursement for dental hygienists working under public health supervision in NH communities;

2. To expand the understanding of the reimbursement and funding options available to support oral health programs and services outside of the traditional dental office; and

3. To develop a more defined dental referral network for follow-up care and the establishment of a dental home.

It was determined that to meet these preconditions, it was necessary to first determine a baseline of services available within the state. On behalf of the state-wide network, the Coalition staff and members developed a plan to conduct a statewide baseline survey to (1) create an inventory of community-based oral health programs, and (2) to determine the types of services available in community-based programs including identification of who they served and how they staffed, financed, and developed their programs, and (3) to identify a common understanding of related best and promising practices.

To complete this work, the NH Oral Health Coalition applied for and received a grant from the HNH Foundation to conduct a survey of community-based, nontraditional oral health programs including those located in children’s primary care settings. This grant was leveraged with a stakeholder network-building grant from the DentaQuest Foundation.

The Purpose and Objectives

In order to inform and develop an expanded and coordinated network of community-based oral health services, this project is designed to:

- Create a single, statewide, baseline resource inventory of the oral health services provided in community-based, nontraditional settings including community oral health program settings and primary care medical offices currently providing fluoride varnish to children during well-child visits;
- Identify current practices, services, workforce and reimbursement;
- Discover oral health service gaps including those related to geography and subpopulations;
- Illuminate what expanded services can be implemented with minor investment, e.g. increased preventive services, piggy-backed programs providing multiple services or programs in one location or entry points, best and promising practices and models for the effective and efficient use of resources;
- Consolidate the data gathered for use in local, regional and statewide program and policy planning; and
Inform the **2015 NH Oral Health Plan** and the Legislative Commission on Pathways to Oral Health.

This information will be of value statewide to oral and systemic health providers, program managers, policymakers, and others involved in evaluating, establishing and strengthening current and future programs, benefits and training. The ultimate goal of gathering, analyzing, and providing the survey results is to impact expanded access to oral health services and improved oral health for the people of New Hampshire.

**Logic Model**

Our logic model for processing the data included the three stages of gathering the data, creating the informational database and maps, and comparing programs to an established standard for best practice, and then identifying emerging models and best practice examples within the NH community-based programs.

**Field and Sector Engagement**

The preparation and execution of this survey provided the opportunity for expansion of the growing oral health stakeholder network. In addition to targeted interview participants, this survey supported the connection with additional providers, programs, policy-makers and organizations in obtaining program, regulatory and policy information, and to assist in identifying community-based target programs. Although many of these organizations serve, in part, as consumer proxies, the individual consumer was not specifically engaged in the interview process. Contacts included:

**Professional Associations**
- NH Dental Society
- NH Dental Hygiene Association
- Bi-State Primary Association
- NH Medical Society

**Regulatory Bodies**
- Board of Dentistry
- Board of Medicine

**State Agencies**
- NH Department of Health and Human Services, Public Health, Oral Health Program
- NH Department of Health and Human Services, Office of Medicaid Business and Policy

**Education and Training Programs:**
- University of New England
- Concord’s Community College - NHTI
- Tufts University
- Boston University
Civic Programs:
• St. Vincent De Paul

NH Oral Health Coalition
• Steering Committee
• Survey Advisory Committee

Funders
• HNH Foundation
• DentaQuest Foundation

Technical Support
This project required external computer and analytic capacity to assist us with the project design, questionnaire and software development, and the data analysis. Two consultants were selected, New England Survey Services (NESS) and the University of New Hampshire Survey Center (UNH).

NESS, located in Brookline, MA, was selected to assist in the interview tool design, software development, information gathering, and the formation of the initial database including:
• Design of the program questionnaires;
• Creation of the I-Pad application;
• Establishment of the database; and
• Storage of data during the project.

NESS is heavily involved in dental projects both nationally and within NH including state-specific studies and database storage allowing for the opportunity to engage with other local projects.

Additionally, we selected the University of NH Survey Center (UNH) in Durham, NH to assist with design and analysis including:
• Guidance on the questionnaire design through establishment of “big” and “targeted” questions;
• Tabulation of responses;
• Creation of figures; and
• Preparation of data comparatives

UNH has strong knowledge of NH health policy including public health networks, free and reduced lunch, and other programs providing for a depth of local knowledge used in defining the survey questions.

Identifying the Standard
Analysis of the data was done at two levels. During Level I analysis, we obtained, consolidated and grouped the information gathered for the purpose of creating an inventory of community-based, non-traditional oral health programs statewide. This provided us the opportunity to review that data for characteristics, patterns, and trends to help us understand how NH programs operate. This allows us to share data on programs, identify gaps, and replicate success. This information can also be used to inform future policy, practice and program development.

The Level II analysis was done by taking the data collected above and comparing identified program and trend characteristics against selected best practice criteria from the literature. While the literature review revealed a lot of data on clinical and dental practices, there is a leaner body of metrics for oral health program development.
One well-aligned model for comparison comes from the Association of State and Territorial Dental Directors, [www.astdd.org](http://www.astdd.org). The ASTDD is an affiliate of the Association of State and Territorial Health Officers, [www.astho.org](http://www.astho.org). ASTDD “formulates and promotes the establishment of national dental public health policy, assists state dental programs in the development and implementation of programs and policies for the prevention of oral diseases; builds awareness and strengthens dental public health professionals’ knowledge and skills by developing position papers and policy statements; provides information on oral health to health officials and policy makers, and conducts conferences for the dental public health community.”

Additionally, ASTDD draws from a wide variety of professional standards and guidelines to more broadly and deeply develop its guidelines and recommendations. Their work recognizes the role of oral health teams, the range of funding and reimbursement options, and the challenge of developing community-based programs. [http://www.astdd.org/best-practices/](http://www.astdd.org/best-practices/)

The ASTDD Best Practices Project defines a best practice approach as an underlying public health strategy that is supported by evidence for its impact or effectiveness and has different successful implementation methods.

Using the ASTDD lens allows us to use our data in an applied comparative fashion that begins to illuminate promising and best-practice models that can be used in the development of pilot and new projects. The method uses a comparative of individual program attributes, aligned with factors deemed promising through ASTDD reviews.

ASTDD defines a best practice approach as a public health strategy that is supported by evidence for its impact and effectiveness, while helping programs to *develop their best practices within the context of their environment*. Their design is based on research, expert opinion, field lessons and theoretical rationale. This Best Practice Approach is not a score card but rather, is used to emphasize that *there is more than one single best way* to do something. Information reported will have varying strengths of evidence. [http://www.astdd.org/best-practices/](http://www.astdd.org/best-practices/)

The ASTDD Best Practices Committee has proposed initial review standards for five best practice criteria. Examples of the application of the criteria include:

1. **Impact and Effectiveness** examples include identifying specific measures and surveillance, increased well-being, changes in numbers served and types of services, reduction in disease, new policies, new programs, or infrastructure, “train the trainer” programs, training other sectors, using existing funding, addressing unmet need, “piggy-backing services,” establishing mutually-enforcing and complimentary activities, QA programs, etc.

2. **Efficiency** examples include favorable cost/benefit analyses, utilizing lower cost personnel, enacting laws and rules such as public health supervision, reduction in delayed care, serving in the right place at the right time, leveraging of resources, “service piggy-backing,” using reimbursement when available to expand the reach of grants, shared
resources including co-location, using pilots to embed new programs into existing services, expense v. benefit balance, data, using quality assurance (QA) programs, etc.

(3) **Demonstrated Sustainability** examples include the balance of public and private reimbursement mechanisms versus limited grant funding, integrating services or funding into the city or health budget, extended length of time in operation, existence of a system to bill and collect payables, funding from recurring grants, an operating plan to cover program expenses, implementation of evidence-based services, the use of creative sustainability partners, etc.

(4) **Collaboration and Integration** examples of establishment and use of partnerships, leveraged resources, co-location, “piggy-backing” services, formal operating agreements, extended services into other settings with related missions, e.g. medical schools, working together to build capacity and infrastructure, etc.

(5) **Objectives and Rationale** a plan and program that is anchored in needs identified and verified through surveillance and research, policy, regulatory, and practice authorities understand and support development and services, supported by local and national organizations, and recognized authorities, e.g. Healthy People 2020, CMS or HRSA initiatives, State OH Plan, NH Communication Plan, etc.

Also considered is the extent of use of the specific practice or model within the nation and the state regarding goals and measurements, e.g. Healthy People 2020, NH Oral Health Plan: A Framework for Action (2003) and the 2015 Oral Health Plan Update; etc.

**The Method**

We developed a statewide plan to identify, engage, and interview programs that provided at least one type of oral health service in the community. The unknown target number included clinical and program providers of preventive oral health services in community-based, non-traditional dental settings, and pediatric/family practice primary care medical providers.

We used a two-step interview system that first identified the umbrella “entity” holding legal responsibility for the program, and secondly, identified the types of oral health programs provided by that entity.

So, in the first step, an entity would provide identifying information such as name, address, contacts, and would select an entity type such as a health system/hospital, a Federally Qualified Health Center (FQHC), a Community Action Program (CAP), etc. Thirty-five distinct “entities” were identified as providing oral health services in 68 community-based programs, entities included:

- Hospitals and health systems,
- Medical offices,
- Human service agencies,
- Community Action Programs (CAPs),
- Federally Qualified Health Centers (FQHCs),
- Counties,
- Public health networks,
- Visiting nurse agencies, and
- Health departments.

We designed a process that recognized that a single “entity” might have one “program”, e.g. Milford School District, with a single school-based program, while others had multiple oral health programs, e.g. Families First Health & Support Center with a dental operatory, portable school program, child care
program, portable mobile van, and elderly housing/seniors programs. Our intent was to interview 100% of the programs identified.

In the second step, entities could select the specific type of programs they operated, e.g. a school-based program, a dental operatory, nursing home program, etc. That program selection triggered a subset of targeted questions.

Entities could have one or more program type, thereby triggering one or more questionnaires. Although the dropdown questionnaires were customized to each program type, all included questions on six core areas:

- Eligibility,
- Services,
- Workforce,
- Reimbursement/Funding,
- Referral networks, and
- Barriers/Gaps.

The questionnaires were designed to be administered and completed in any of three different ways to help ease administration and increase completion. They could be done by phone, in person as an interview, or self-administered through an emailed document. Virtually all of the medical office interviews, which were brief, were done by phone, but we felt the most valuable method for the community-based programs was the in-person interview. Since these questionnaires were lengthy, and often dealing with qualitative data, the interview gave the interviewer a chance to clarify complex questions and deviate from the script to more fully follow an area of interest. This, also, gave the respondent time to give in-depth answers.

In addition to the completion of the questionnaires, the phone and in-person interviews provided the opportunity for building relationships between the Coalition, and the entity and its program personnel, a key goal of network development.

Information was gathered from August 2015 through April 2016. The report includes the best available data provided by key respondents statewide. We are appreciative of the time and consideration stakeholders and respondents provided to this report.

We are aware that the development and implementation of oral health services and programs is a dynamic force but feel that the data and trends identified in this report, although a snapshot in time, provide value to the reader in helping to understand the status and trending of oral health public health programs within our state.

The Survey

This project included the completion of 296 entity and program interviews statewide. In that process, we identified 35 umbrella entities that were providing at least one community-based oral health program within their services for a total of 68 programs.

Additionally, 166 primary care medical sites were interviewed regarding the application of fluoride varnish by medical personnel within their programs, resulting in the identification of only 4 entities
with medical staff providing fluoride varnish at a total of 10 sites. These primary care sites included private pediatric and family physician offices, Federally Qualified Health Centers (FQHCs), human service agencies and clinics.

![Community-based Entity Types Identified](image)

**Figure 1: Entity Types Identified in Survey. (N=35)**

### Data Content and Emerging Models

One of the main goals of the survey was to identify and define current models of community-based, nontraditional oral health service within our state for the purpose of analysis and replication of best practice models. Once defined these models were compared with Association of State and Territorial Dental Directors best practice criteria to be used to design and develop new practices, programs and policies.

While the survey program questionnaires were built on 10 models for differentiation, analysis of the data, revealed that NH programs generally fell into only 5 broad model categories with minor variations.

We then used this information to identify specific in-state programs that aligned with ASTDD best practice criteria. Examples are highlighted throughout this report.

The 5 models that emerged are:

1. **Child-focused programs** that occurred in the locations that children and families naturally congregate such as schools, pre-schools including Head Start programs, child day care and Women, Infants and Children nutrition programs;

<table>
<thead>
<tr>
<th>Program Types Identified for Interview</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Day Care</td>
<td>1</td>
</tr>
<tr>
<td>Dental Operatory</td>
<td>17</td>
</tr>
<tr>
<td>Head Start</td>
<td>7</td>
</tr>
<tr>
<td>Medical Office</td>
<td>168</td>
</tr>
<tr>
<td>Mobile Dental</td>
<td>6</td>
</tr>
<tr>
<td>Nursing Home and Long-Term Care</td>
<td>4</td>
</tr>
<tr>
<td>Other/Undesignated</td>
<td>1</td>
</tr>
<tr>
<td>School Oral Health</td>
<td>21</td>
</tr>
<tr>
<td>Senior Center – Adult Day Program</td>
<td>1</td>
</tr>
<tr>
<td>Voucher Paid Dental Referral</td>
<td>6</td>
</tr>
<tr>
<td>Women Infants and Children (WIC)</td>
<td>6</td>
</tr>
</tbody>
</table>

**Table 1: Program Types by Number and Percent.**
2. Dental operatories that have a broader mission and scope of service including restorative and preventive services to adults and children;
3. Services in senior centers and institutional care;
4. Primary care and medical office locations that are integrating medical and dental programs;
5. Other programs that provide referral or voucher type support.

For this report, we will group our analysis, comments and recommendations into those same five models. Each of the models have been examined relative to the six core areas that include client eligibility, services provided, workforce utilized, reimbursement and funding billed and received, referral networks available, and barriers/gaps to access or service.

MODEL #1 – CHILD-FOCUSED PROGRAMS (N=35)
The most predominant model identified was that of the child-focused services. It includes programs that occur in the locations that children and families naturally congregate such as schools, pre-schools including Head Start programs, child day care and Women, Infants and Children (WIC) nutrition programs;

These programs generally provide the same range of oral health services often by the same staff or type of staff. They are often funded in the same fashion regardless of the entity or program type. For this reason, we grouped these programs together for analysis and comparison. All programs serving children (ages 0-19) are considered together with the exception of some operatories that are included in the next model.

The umbrella entities providing child-focused programs range from hospital systems and Federally Qualified Health Centers (FQHCs) to Community Action Programs (CAP) and local health departments. The majority of these services are provided in the school setting. Key factors that support this child-focused model include:

- The portability and ease of transporting and storing smaller equipment at schools and day cares;
- The efficiency of bringing an oral health care provider or small team to a central local site versus multiple children and families traveling to an office;
- The accessibility to services that can be done with parental permission without requiring a parent to miss work;
- The availability for children to receive oral health care at locations where they normally congregate such as schools, WICs, child care physicians’ offices, etc. This allows for the easy “piggy-backing” of essential services such as medical care, oral health services, educational programs, etc.

Within the scope of the Baseline Survey, we learned that children’s oral health services were provided to students in 216 schools, 7 Head Starts, 6 WIC programs and 1 child day care program. Each program has unique characteristics, and is shaped by multiple factors including community need, resources, geography, and the expectations of the local dental community.

Of note, most of the programs identified are “portable” in nature meaning that staff, equipment and supplies are brought from another location into the school – they may fit into a car, small van, etc. There is one “transportable” program in which students are bussed from the school to a community dental
clinic site. Additionally, some restorative services are provided to students on “mobile” dental operatories.

**Child-focused Programs: Eligibility**

Children are eligible for services in 35 programs by virtue of being enrolled in designated schools, Head Start programs, WIC or day care. Some NH WIC programs provide oral health services to both children and their parents.

The figure below illustrates the grade coverage spread and percent by the programs. Most children’s services are provided at pre-kindergarten and elementary school levels. Fewer programs are available at the middle and high school levels. Several entities reported an interest in including additional grades in their programs.

**Child-focused Programs: Services**

The range of services offered in child-focused programs varies widely from education only to screenings, prevention and limited restorative. Referral and care management support after screening is provided by approximately 79% of programs.

The services provided by the most programs (N=35) are fluoride varnish (85%), visual screening (82%), a hygienist oral screening (71%), and referrals for follow up restorative dental (77%).

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**ASTDD Criteria Highlight:**

**Impact and Effectiveness**

**Concord Dental Sealant Coalition**

- Utilization of evidence-based practice for sealants, fluoride varnish, and interim therapeutic restoration
- Provides easy access for high-risk children
- Serves low-income, uninsured and underinsured children
- Utilizes highest level of hygiene practice
- Utilizes Medicaid reimbursement, grants and donations

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**Figure 2: Children's Programs by Grade Level (N=389 Classrooms)**
Figure 3: Services Provided in Schools/Head Start/WIC/Child Care. (N=35)

Education only and hands-free screening programs exist to identify children in need of services and direct them to available local service sites, e.g. a hospital/clinic-based or mobile dental operatory. Hands free services can usually be provided without parental permission but most other services require parental permission. At WIC sites, parents or guardians are present during service delivery, allowing for the assessment and permission to occur concurrently.

Opt-in permission programs at schools can delay or prevent services needed if parents do not return the signed permission slip. This can be particularly frustrating for oral health program staff as often, the children with the most severe need, are the ones for whom parental consent is the most difficult to obtain.

The reimbursable preventive services of rubber-cup prophylaxis, fluoride varnish and sealants are clearly the mainstay of child-focused services. Some dental sealant programs include the use of authorized interim therapeutic restoration, which, if done by a NH certified public health hygienist working under public health supervision, is not currently reimbursable in the community-setting thereby presenting a disincentive to programs aiming to develop additional services outside of traditional settings in locations that may be more convenient and lower-cost. Referrals for dental homes and follow-up care are also highly reported but not reimbursed.

The services that are the least likely to be billable or paid were visual screenings, hygienist oral screening, referrals for follow up restorative dental, and referrals for establishment of a dental home.
Child-focused Programs: Workforce

While the school and child-focused programs report a wide variety of paid and volunteer staff, it is clear that the services in these programs are heavily preventive in nature and that this focus is reflected in their staffing and reimbursement. These programs are usually hygienist-centric. Ninety-seven percent of the programs have paid hygienists; while only 21% have a paid dentist. Thirty-five percent of the programs report volunteer dentists. As respondents were asked to “select all that apply,” a single program may have both paid and volunteer dentists.

Dental hygienists are key to the children’s programs where they often provide a wide-range of clinical and administrative functions. Thirty-four (N=35) of the child-focused programs are staffed by hygienists. Eighty-five percent of hygienists report spending more than half of their time in clinical services. Sixty-seven percent spend another quarter of their workday doing clinical support and patient follow-up and 71% spend another quarter of their time on administrative work including program management. A few also do grant writing and reporting.

The hygienists are often the “face of the program” serving as liaison with program, school staff, and the community, they frequently move the dental equipment and supplies in and out of the school, and in some areas drive the dental vehicle.

Figure 4 below illustrates the staffing patterns for child-focused programs and may explain why hygienists are spread so thin. Remember that the instruction for answering the question was to check “all that apply” so the same hygienists are counted on more than one line – typically, hygienists also serve as program managers and care coordinators.

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**Figure 4: Personnel Types at School/Head Start/WIC/Child Care Programs. (N=35)**
Only 38% of child-focused programs employ dental assistants and administrative support staff, so administrative tasks can encroach into the hygienists’ available time for clinical work. In addition, NH certified public health dental hygienists (CPHDHs) are trained and authorized to provide advance services for which they are not reimbursed. Those procedures include interim therapeutic restoration and silver diamine fluoride application, both under public health supervision; they are reimbursed when done by the same practitioner in the private office. Child-focused programs report that the lack of time and funding limits the ability of programs to grow and serve more patients.

<table>
<thead>
<tr>
<th>Average % of Hygienist Time Spent</th>
<th>Overall N=56</th>
<th>Head Start/WIC/Schools/Child Care N=34</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative</td>
<td>8%</td>
<td>10%</td>
</tr>
<tr>
<td>Financial</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>Clinical Support and Follow-Up</td>
<td>9%</td>
<td>10%</td>
</tr>
<tr>
<td>Clinical Service</td>
<td>75%</td>
<td>68%</td>
</tr>
<tr>
<td>Other</td>
<td>5%</td>
<td>8%</td>
</tr>
</tbody>
</table>

Table 2: Percentage of Hygienist Time by Function in Overall and Child Programs.

School program success hinges on collaboration between the oral health provider and school staff. Most hygienists rely heavily on the school or child-focused program nurse to market the program to administrators and parents, identify eligible children, collect permission forms and ensure that at-risk children get to dental treatment.

At the time of the survey, 27 child-focused programs (N=35) reported having a certified public health dental hygienists (CPDH) on staff. It is important to note that this does not mean 27 individuals, as many hygienists work in more than 1 program. The NH Board of Dentistry reported 24 certified public health hygienists in March 2016; 16 of them working in child-focused programs. Additionally, 4 child-focused programs reported having someone in the CPHDH training and certification process.

In 2012, NH implemented an additional classification of hygienist practice called the Certified Public Health Dental Hygienist (CPHDH). Duties added were interim therapeutic restoration and radiographs to be done by the hygienist under public health supervision with appropriate training and with a supervising collaborative dentist. NH DEN 302.02; NH Revised Statute Annotated (RSA) 317-A: 21-e.

Child-focused Programs: Reimbursement and Funding

Under the ASTDD best practice criteria, the ability to bill for a reimbursement has stronger sustainability quality than a time limited grant funding. This reimbursement factor is also
reported by the Children’s Dental Health Project as a *critical revenue source* for school sealant programs.

The child-focused programs estimated that less than 10% of their reimbursement and funding comes from Medicaid and CHIP reimbursement. This is a relatively small amount of revenue from what is considered a vital, sustainable funding source. This percentage is likely linked to the lack of either a Medicaid or private reimbursement mechanism for the CPHDHs doing authorized worked under public health supervision in community-settings. When indicated, the use of interim therapeutic restoration and the application of silver diamine fluoride in the community provides a less intrusive, lower cost option to traditional fillings.

In the hygienist-centric child-focused programs, private philanthropic foundations and grants from the NH Department of Health and Human Services, Division of Public Health Services, Oral Health Program contracts provide approximately half of the revenue received. These funds may be linked to pilot projects that allow for innovation but that may struggle for sustainable funding following the initial pilot. Contracts and grants can range from single to multi-year funding.

<table>
<thead>
<tr>
<th>Average % of Reimbursement and Funding from Varied Sources</th>
<th>Overall Respondents N=58</th>
<th>Schools/Head Start/ WIC/Child Care N=35</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Insurance via NH Medicaid/CHIP</td>
<td>14%</td>
<td>9%</td>
</tr>
<tr>
<td>Private Foundation/Philanthropy Grants</td>
<td>18%</td>
<td>27%</td>
</tr>
<tr>
<td>NH Dept. of Public Health Contracts</td>
<td>15%</td>
<td>23%</td>
</tr>
<tr>
<td>Consumer Self-Pay/Sliding Fee</td>
<td>5%</td>
<td>&gt;1%</td>
</tr>
<tr>
<td>Private Commercial Insurance</td>
<td>4%</td>
<td>1%</td>
</tr>
<tr>
<td>Local and Civic Funding</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>Contracted Services</td>
<td>9%</td>
<td>&gt;1%</td>
</tr>
<tr>
<td>Federal Grants</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Other</td>
<td>19%</td>
<td>19%</td>
</tr>
</tbody>
</table>

Table 3: Percentage of Sources of Reimbursement in Overall Respondents versus Schools/Head Starts/WIC/Child Care.

**Child-focused Programs: Referral Networks**

To help evaluate long-term anecdotal statements about the difficulty of finding both urgent, and non-urgent follow up care including the establishment of a dental home, we included questions on the percent of patients needing follow-up care and the ease of finding both urgent and non-urgent referrals.
The determination of need for urgent follow-up is based on the presence of oral pain and swelling. Non-urgent follow-up referrals were identified as the need for routine preventive and restorative services not involving oral pain or swelling, including the establishment of a dental home.

<table>
<thead>
<tr>
<th>Average % of Patients That Need Urgent versus Non-Urgent Follow-up</th>
<th>Urgent Follow-up Care</th>
<th>Non-Urgent Follow-up Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall (N=53)</td>
<td>18%</td>
<td>42%</td>
</tr>
<tr>
<td>Head Start/WIC/Schools/Child Care (N=35)</td>
<td>8%</td>
<td>27%</td>
</tr>
</tbody>
</table>

Table 4: Average Percent of Patients Needing Urgent versus Non-Urgent Follow-up for All Respondents versus Child-focused Programs

The data suggests that the ease of finding resources for follow-up care is age and Medicaid eligibility related. Referral of Medicaid eligible children for a range of services is not as difficult because of a children’s comprehensive oral health Medicaid benefit. When a child-focused program is part of an entity that also has a dental operatory, referral is much easier.
Child-focused Programs: Barriers and Gaps
As noted above, child-focused programs overwhelmingly follow the hygienist-centric model with the major focus on prevention. Gaps in services or access within these programs appear to be defined by limits on the hygienist scope of services and reimbursement, sources of sustainable funding, geographic constraints, plus time spent securing follow-up care for conditions, many non-urgent, that are found during screening. These findings will be further discussed in the comparative section to follow.

Model #2 – Dental Operatories (N=19)
The second most prevalent model identified was that of the dental operatory. By nature, these programs look most like a traditional dental office. They may be free-standing business entities or they may be linked to another entity type such as: a Federally Qualified Health Center, a hospital or health system, a clinic, a health department, a van, a county, a public health network, or another human services program. 100% of the responding dental operatories report having a dentist on staff and therefore have the capacity to provide and bill for dental restorative and/or rehabilitative services, a factor that the ASTDD identified a critical to sustainability.

For this study, dental operatory is defined as a community-based program that has a dental chair(s) and equipment with the capacity for restorative services provided by a dentist. The program is usually linked with some model of prevention services, whether or not integrated. This definition does not include the private dentist office.

We identified 19 programs and received responses from 17. The vast majority of programs (88%) came into operation between 1997 and 2016. Prior to that point, only 2 programs existed within the state. The first was located within the state’s largest city health department in Manchester; and the second was a public access operatory at the NH Technical Institute – Concord’s Community College that operated in conjunction with the Institute’s dental auxiliary training programs. Since that time a wide variety of operatory programs have emerged include mobile and “piggy-back” type programs.
Dental Operatories: Eligibility

Age
Statewide, dental operatories can and do serve a range of ages. Of the 17 respondent programs, all of them accept children from the age of 4 to 19; all but one program also accept children from 0 to 3. Adults within NH, ages 20 to 64 are served by 15 of the programs and adults over 65 are served in 14.

Income
Income eligibility questions reveal that, in 100% of programs, patients are expected to pay a co-pay or minimum fee, however that payment may eventually be covered by a third-party or may be written off by the operatory.

Regarding public benefits, Medicare, a Federal program, and the nation’s largest health insurer for adults, covering over 266,000 residents of NH, includes no dental benefit. NH Medicaid, a State and Federal program, has only a limited adult dental benefit that provides eligible adults with emergency care only, e.g. pain and infection management, and tooth extraction. Dentures are not provided. This means that public health dental operatories may be the only source of affordable dental care and dentures for low income adults.

Dental Operatories: Services
Services provided by operatories range from visual screening up through and including restorative and rehabilitative dental care and subsequent referral. This is in large part due to the inclusion of a dentist in the dental operatory team, 94% of operatory programs reported providing acute and non-acute restorative care and 76% reported providing rehabilitative care such as dentures and implants.

Prevention
Preventive services in the operatories include standard screenings, cleanings, and, sealant programs from fluoride varnish, traditional sealants, and interim therapeutic restorations.

In over 94% of the programs, hygienists provide screenings, prophylaxis (rubber cup and toothbrush) with only 1 of the 17 programs not providing hygiene services.
Fluoride is included in 94% of programs including rinses, varnish and sealants; 65% of programs (11) provide interim therapeutic restorations – a sealant process that provides both pain relief and glass ionomer coverage of the decayed area. The sealed area prevents the development of further decay under the seal.

100% of programs have radiograph services available.

![Figure 8: Services Provided in the Dental Operatory Programs. (N=17) versus Overall.](image)

**Dental Operatories: Workforce**

Unlike some of the other models, the 17 dental operatories all report having at least one paid dentist on staff. All but one program have at least one paid hygienist and paid assistant. Other types of staff include program managers (11 programs), care coordinators/navigators (8 programs), and 13 programs report using other staff including bus drivers, escorts, and nurses. Only a few programs augment the paid dental clinical staff with volunteer clinicians. Two programs include a volunteer dentist, 3 have volunteer dental assistants, and 1 has a volunteer hygienist. At the time of the survey, seven of the programs (41%), reported having staff vacancies.
Figure 9: Types of Personnel in Dental Operatory Programs. (N=17).

To evaluate the ease of hiring, we used a Likert-type scale with 5 steps from extremely easy to extremely difficult, the vast majority of operatories report “Somewhat easy” (7) to “Somewhat difficult” (6) with 2 reporting at the midrange of neither easy nor difficult. See Figure 10.

Figure 10: Ease of Hiring in Dental Operatory Programs. (n=17) versus Overall.

In addition to examining the type of personnel and staffing in the operatories, we also asked about the allocation of duties within the individual programs. Due to the nature and funding of programs, there is often an extension of clinical staff into administrative and supportive functions. The charts below provide information on personnel allocation estimates.

Within dental operatories, dentists report the vast majority of their time spent on clinical services (81%) and clinical support and follow-up (6%) for a total of 87% of time allocated to clinical functions. A smaller amount of time is spent on administration (4%) and financial work (3%), with the remainder coded as other.
Hygienists also report the vast amount of their time spent on clinical services (87%) and clinical support and follow-up (7%) for a total of 94% of their time on clinical functions. In comparison to the dentists, the hygienists reported about the same time to administration (5%) but only 1% to financial and 0% to “other”.

In contrast to “Overall” programs, dental operatories showed a higher allocation of time for both hygienists and dentists to clinical services and less time to administration.

Within Dental Operatory programs, 6 (n=17) report having a CPHDH while the remaining 11 report no CPHDHs. Of the 6 programs with CPHDHs, 2 programs have 2 CPHDHs and 4 programs have 1 CPHDH. Three of the 11 without a CPHDH report that they have someone in the training and certification process, while 7 report no one in training or certification, and 1 program does not know.

By contrast, as we saw in the previous section, in child-focused program settings (N=35) two-thirds of programs reported having CPHDHs on staff. As previously noted in the section on child-focused programs, the same individual hygienist may be counted at more than program.
Figure 11: Certified Public Health Hygienists in Overall Respondents (n=58) versus Dental Operatories (n=17).

For hygienists in NH to practice under public health supervision, they must have a collaborating dentist as outlined in NH DEN 402.02; two-thirds of dental operatory respondents (66%) say they have supervising collaborative dentists on staff, 26% do not and 9% were unsure. See Figure 12 below. NH dental rules do not require that the designated collaborating dentist be on staff with the hygienist. However, the availability of an on-staff, NH-qualified collaborating dentist helps to identify opportunity for public health hygienists, certified or not, to be employed within the program.

The fact that dental operatories have fewer collaborating dentists than overall programs may simply reflect the fact that in operatories, hygienists are operating under general or direct supervision rather than public health supervision.

Figure 12: Supervising, Collaborative Dentists in Overall Respondents (n=58) versus Dental Operatories (N=17).

Four of the operatory programs report having dental residencies on site. The dental residents spend almost 100% of their time on clinical service and clinical support. These residencies are linked with the University of New England (UNE), Tufts University, and the Arizona School of Dentistry and Oral Health (A.T. Still University). Both the UNE and Arizona schools have a public health dentistry focus.

Dental Operatories: Reimbursement

On the whole, the operatories report a wide and diverse list of sources of reimbursement and funding that includes state and federal contracts, private and public billing, consumer billing, philanthropic and civic grants, and privately contracted services.
<table>
<thead>
<tr>
<th>Average % of Reimbursement/Funding by Type</th>
<th>Overall N=58</th>
<th>Dental Operatory N=17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Insurance via NH Medicaid/CHIP</td>
<td>14%</td>
<td>28%</td>
</tr>
<tr>
<td>Private Foundation/Philanthropy Grants</td>
<td>18%</td>
<td>4%</td>
</tr>
<tr>
<td>NH Dept. of Public Health Contracts</td>
<td>15%</td>
<td>4%</td>
</tr>
<tr>
<td>Consumer Self-Pay/Sliding Fee</td>
<td>5%</td>
<td>15%</td>
</tr>
<tr>
<td>Private Commercial Insurance</td>
<td>4%</td>
<td>11%</td>
</tr>
<tr>
<td>Local and Civic Funding</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Contracted Services</td>
<td>9%</td>
<td>3%</td>
</tr>
<tr>
<td>Federal Grants</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>Other</td>
<td>19%</td>
<td>25%</td>
</tr>
</tbody>
</table>

Table 7: Percentage of Reimbursement and Funding by Type in Overall Respondents versus Dental Operatories.

For operatories, the most predominant sources of funding and reimbursement are Medicaid and CHIP public insurance benefits that are billed by 16 programs. Those funds apply mostly to children, who have a comprehensive dental benefit, in contrast to Medicaid-eligible adults for whom there is only a limited benefit. All of the operatory programs report using consumer self-pay/sliding fee mechanisms, but further questioning reveals that much of that money is uncollectible and will eventually be either written off or collected from a 3rd party compensatory means. Private insurances are billed by 10 programs.

Another critical source of funding is philanthropic grants that are key to providing service for adults and seniors without insurance, and to offset other limited funding sources. Funds received from local, civic and private foundations may target specific specialty populations, or may apply generally to ensure greater access.
Fourteen programs report the capacity to see additional patients if they had additional staff and space. When asked how they would expand, respondents identified that it could be done through the addition of sites, services, staff, and funding opportunities.

**Dental Operatories: Referral Network**

Respondents were asked about both the need for and ease of urgent and non-urgent restorative follow-up referrals. It is important to remember that by definition, in the operatory setting there is already some level of restorative service provided.

![Graph: Relative Ease of Finding a Dentist for Pain and Swelling](image)

**Figure 13: Relative Ease of Finding a Dentist for Pain and Swelling in Overall Respondents (N=59) versus Dental Operatories (N=17).**

Regarding finding follow-up care for urgent need, defined as including pain and swelling, 59% (10) of operatories report it “extremely difficult” to find a dentist for follow-up care. Two reported it was “extremely easy” and three reported “somewhat easy”. Despite being dental operatories with the capacity and advantage to provide the receiving dentist with x-rays and clinical records, they too report having difficulty with follow up referrals.

In addition to clinical services, 65% of operatory programs provide a range of services from follow-up calls/information to scheduling appointments. Fewer than half of the operatories also arrange transportation, notify and/or remind parents, and 47% make contact to ensure that the follow-up appointment and service happened.

Over half of the programs reported that 76% to 100% of their patients need non-urgent follow-up including the identification of a dental home. Finding that source for follow-up was ranked as “extremely difficult.” This may be in part due to the lack of “urgency” and limited patient resources.

**Dental Operatories: Gaps**

The most significant service gap identified is affordable and accessible operatory care statewide for low income adults. This is closely aligned with the state’s limited “emergency only” adult Medicaid dental benefit and the costs associated with preventive and restorative dental care. According to the Kaiser...
Foundation Commission on Medicaid and the Uninsured, in March 2016, NH was one of only 13 states with a limited “emergency only” Medicaid adult dental benefit.

**Model #3 – Services in Senior Centers and Institutional Care (N=5)**

All services identified under this model were portable and contractual. As noted above, both Medicare, with no dental benefit, and NH adult Medicaid, with an “emergency only” benefit, provide for very limited oral health care within both the community-based and institutionally-based oral health programs. The emergency only benefit provides treatment for pain and infections, usually through extraction of problematic teeth and pharmaceuticals. There is no restorative care to save teeth or provide dentures.

For this model, “senior” is defined as an adult 65 or older. Those “living in an institutional care setting” can be of any age.

**Senior Centers and Institutional Care: Eligibility**

Many NH seniors receive oral health services in community-based programs such as community-based dental operatories, nursing homes, assisted living residences, and senior centers. In the programs studied, the vast majority of services to seniors were provided in community-based dental operatories as discussed above in Model #2. Patients over the age of 65 are served at 14 dental operatories and 3 mobile programs. By contrast, the model in this section, will explore programs that are connected with institutions such as nursing homes, assisted living programs, and senior centers.

**Senior Centers and Institutional Care: Services**

Unlike the community-based operatories, this model is based on the programs available in the nursing home or senior centers that specifically serve many seniors and those with disabilities and special needs.

During the survey, 4 nursing home dental service contractors were identified. All 4 offer screening, oral exam, prophylaxis, fluoride varnish, acute and non-acute restorative services and rehabilitative services including fixing and relining dentures. Three of four offer interim therapeutic restoration, and 3 of 4 offer radiographs. All report that the dental records are integrated into the patient’s nursing home chart.

Senior center services, identified at 5 sites, include screening, oral exam, prophylaxis, fluoride varnish, interim therapeutic restoration, acute and non-acute restorative services and rehabilitative services. All 5 senior center sites were served by a single entity.

**Senior Centers and Institutional Care: Workforce**

In NH nursing and residential care facilities, oral health services, except for daily oral care provided by patients and facility staff, are mainly provided by dentists under contract with long-term care facilities. Licensed nursing assistants provide daily brushing and share responsibility with nursing staff for identifying acute situations that require dental referral. A limited number of dental hygienists serve in this setting mainly providing staff education and limited preventive services. The dental providers
sometimes offer “in service” training to facility staff. Nursing and social work staff are the liaisons with the families in situations that require permission to treat or money to provide more extensive care than is covered in the contract.

Dental services are provided by individual dentists, with or without a hygienist, or by dental service vendors with several dentists with hygienist and dental assistant support. Administrative support and care coordination is often done by the staff of the facility.

“The changes in oral health in long term care have happened over time, but the most significant issue is that residents are more medically compromised with complex medical histories and a list of pharmaceuticals that impact oral care.”

John Ahern, D.D.S., President, NH Dental Society

While nursing home residents tend to be elderly, there are some younger residents who need 24/7 care due to injury or chronic disease. The demographic in facilities has changed over time from the “rest home” model where people went to just live out their lives. Long-term care residents, versus short-term rehabilitation patients, now seem to be older and sicker than in the past. Nursing home stays are on average shorter than in the past. As a consequence of better lifelong preventive oral health services and improvements in restorative care, residents now tend to arrive at the care setting with more natural teeth, dentures, and even implants. However, residents with chronic conditions are also more medically compromised and have complex lists of medications, some of which negatively impact oral health. Dental providers now need a broader understanding of dental and systemic health.

Senior Centers and Institutional Care: Reimbursement and Funding

Public funding and private resources for adult dental services in NH are limited. However, nursing homes that participate in the Federal Medicare or NH adult Medicaid programs, must provide for emergency dental care and any routine dental care defined within the applicable Medicaid state plan. How this is accomplished varies widely within the state. At least extractions, antibiotics, and pain relief are available. Dentures are not a NH adult Medicaid benefit.
Oral health services are provided in many NH long-term care facilities through contracts between the provider dentist and the facility. Contracts usually provide for a negotiated, set number of hours per month at a set rate. The full range of services covered is identified in the contracts. There are a limited number of dentists who currently service NH nursing homes and they may do so with mobile or stationary equipment.

In contrast, the surveyed senior centers are grant funded. Services at these sites are provided at no cost to patients who have no regular dentist. Basic fillings and some denture repairs are included.

**Senior Centers and Institutional Care: Referral Network**

Beyond the required services provided in the nursing home contract, the most common unmet dental need is for oral surgery. The oral surgery specialist referral process is handled by the nursing home staff after consultation with the patient/family. The patient/family may incur out-of-pocket expenses for those services.

**Senior Centers and Institutional Care: Gaps**

Regardless of income, nursing home patients that require services beyond the facility contract must pay for those services with their own resources.

Factors that create gaps in service delivery to non-institutionalized seniors include geographically underserved areas, limited numbers of programs and funded services, and limited sources of reimbursement. Each of these factors is significantly impacted by the lack of a publicly funded adult dental benefit.

**MODEL #4 – VOUCHER PROGRAMS (N=6)**

Voucher programs present few common attributes, but are designed and funded to fill a gap in the local oral health delivery system including some rural areas of Strafford, Coos and Monadnock counties.

**Voucher Programs: Eligibility**

Eligibility requirements varied, each program is distinct. Three of the programs serve children only and 2 are for adults only. The 3 children’s programs receive referrals from the school-based screening programs. Four out of six of the programs accept only patients who are clients of the umbrella entity. Two have additional income eligibility requirements. Due to the small sample of 6, there is no
transferable trend for replication; rather this section identifies single program examples that work for their communities.

**Voucher Program: Services**
Types of available services run the gamut and appear to be limited by factors such as dollar amount limits or referral network adequacy. Three of the six have payment caps from $450 - $800; another has no dollar limit but will pay only for relief of pain. Two of the four voucher programs have no patient waiting list and 2 have lists from 10-30 patients at any given time. More adults than children have to wait and the waiting list for non-urgent care is more problematic because of limited funding combined with a lack of urgency. Two programs make dental appointments and provider reminders, 5 provide other types of care coordination, and 1 provides vouchers only and does not provide any support services. One program serving adults pays only for the first 2 visits.

**Voucher Programs: Workforce**
All voucher/paid referral programs are run by administrative staff of the umbrella entity. Service delivery is done by a separate program or provider.

**Voucher Programs: Reimbursement and Funding**
Voucher programs use a variety of funding sources. Two of the 6 programs are funded by private charitable foundations, 1 receives Federal grant money, 2 are funded by hospital operating budgets, and the other 1 relies on a regional grant. Dentists are reimbursed following guidelines set out in the contracts or agreements under which they provide service. They are usually paid some percentage of the “usual and customary” fee.

**Voucher Programs: Referral Network**
All 6 voucher program respondents report having specific dental practices to which they can refer patients. Two of them have a formal contract agreement with these dental practices and 4 have both formal and informal agreements.

Half of respondents said there are enough places to refer for dental follow-up care while a third say this is sometimes true. Only one respondent said there are not enough places for dental follow-up care, and when asked about specific types of care, they said there are not enough places for both urgent care and non-urgent care including referral for the establishment of a dental home. That respondent also felt the referral network base was limited because their patients are uninsured or underinsured, reimbursement is low, and sliding fee options were unavailable.

![Figure 14: Voucher Programs - Do You Have Enough Places to Refer Patients That Need Follow-up Care?](image-url)
Voucher Programs: Gaps and Barriers
The strength of the referral network is only half of the issue. Availability and reliability of transportation presents frequent problems in areas where patients have to travel a great distance (up to 2 hours) to receive care. Some voucher programs try to overcome this obstacle by subsidizing the cost of personal transportation, arranging and paying for transportation services or providing for mobile service delivery. Voucher programs can provide some relief for individuals with significant economic and geographic limitations.

MODEL #5 - MEDICAL OFFICES (N=168)
A key goal of the survey was to identify and define the numeric and geographic baseline for pediatric and family physician medical offices where the medical staff were applying fluoride varnish in conjunction with well-child visits.

The medical offices were identified state-wide by means of reviewing physician and hospital listings, hospital and healthcare websites, professional regulatory boards, and by word of mouth. One hundred and sixty-five practices were interviewed. Entities ranged from free-standing independent private offices, to health systems/hospitals with multiple primary care sites, Federally Qualified Health Centers, and others.

![Figure 15: Does your Medical Office Provide Fluoride Varnish? (N=165)](image)

Medical Offices: Eligibility
While the intent for this portion of the survey was to establish the baseline prior to the implementation of NH Medicaid payment for oral health services in the medical setting, in actuality, both changes launched concurrently due to the national and in-state reaction to the US Preventive Services Task Force (USPSTF) recommendations for private/commercial insurers to include a fluoride varnish benefit for children up through age 5. However, given the responses from the medical programs participating at the time of the Baseline Survey, it is likely that the USPSTF recommendations had not yet impacted NH medical offices.
Medical Offices Reporting “No”
165 interviews were done with providers and staff. Demographic data was collected and each respondent was asked; “Does your office provide fluoride varnish applications as part of well-child visits? "Yes or No?"

The answer chosen then placed the entity into a bifurcated interview tool that either allowed them to describe the oral health services they delivered including information on staffing, process flow, and reimbursement; or provided them the opportunity to explain why oral health services were not provided at their location.

With an N=165, 154 medical office sites reported that they were not applying fluoride varnish. They were then asked for the primary reasons why not; they could check all that applied. Key results indicated:

- No procedure in place for applying varnish (99 programs)
- Not aware of fluoride varnish use in a medical setting (45 programs).
- Not reimbursed for providing the service (26 programs)

Those responses comprised the vast majority of responses and did not align with the anecdotal responses we had used to define the question.

![Figure 16: Primary Reasons for Not Using Fluoride Varnish. (Select All that Apply) (N=154)]()

For the “no” respondents, at this point the survey ended and respondents were asked if they wanted further information – only 42 sites requested additional information. While that seems low given the increased awareness of the US Preventive Services Task Force (USPSTF) requirement that private insurers include fluoride varnish as a benefit for eligible children, it may actually reflect that often a single respondent would answer for multiple sites within a system – so a “no” might impact multiple locations.

Medical Offices Reporting “Yes”
Only 11 sites responded that they were applying fluoride varnish in the medical setting. Responses indicated that 4 entities (2 FQHCs and 2 Hospital/Health Systems) had oral health assessment and
fluoride varnish application in place in one or more locations. In 10 sites the fluoride varnish was applied by medical staff and in 1 it was applied by a partnering dentist that came into the medical office.

Both of the FQHC entities were in rural, northern parts of the state and together they provided fluoride varnish at 6 of the identified sites. The hospital/health systems programs were located centrally and west central; both grew from medical school residency training sites. There were no sites south of Concord reporting the application of fluoride varnish in the medical setting by medical staff.

An array of oral health services can be done within the setting. Among those medical offices who use fluoride varnish, most consider all of the following oral health preventative services as part of a well-child visit. One hundred percent of offices (N=11) reported doing well-water testing and dentist referral. Ninety percent of offices do oral screenings and fluoride varnish applications for children 0 to 3 years of age. On an N=10, 90% recommend a dentist visit at age 1 year, and 1 program recommends less than 1 year, which would be consistent with 1st tooth eruption for many children. Of the 10 medical offices with medical staff providing fluoride varnish, only 3 said they were aware of the USPSTF recommendation.

Figure 17: Oral Health Preventive Services as Part of Well-child Visit in the Medical Setting. (Select all that apply) (N=11.)

Figure 18: Medical Provider Recommended Age for First Dental Visit. (N=10).
Respondents were asked what training program had been used by their practitioners to prepare for oral health services in the medical setting. Responses indicated the following. The high number of “don’t know” responses is likely indicative of the fact that the survey respondent, often, was not the practitioner.

![Figure 19: Type of Oral Health Risk and Fluoride Varnish Training(s) used by Medical Staff. (N=11).]

**Medical Offices: Workforce**

In 2010, under a Children’s Oral Health Initiative, NH passed legislation to allow the application of fluoride varnish by primary care providers. The legislation identified what type of training was required and who must apply the varnish in order to receive Medicaid payment. Effective retroactively to February 1, 2015, payment is available for eligible children with a Medicaid medical benefit, when fluoride varnish is applied by a physician, nurse practitioner, or physician assistant serving as the primary care provider. Private medical insurance coverage is defined by each individual insurer. Figure 18 reflects the engagement of medical primary care providers in the application of fluoride varnish. The care providers tell us that the application is very fast and that they use the time to emphasize the importance of oral health and to provide anticipatory guidance on good oral hygiene.
Some programs apply the fluoride varnish to all children and some use a risk-based assessment. Figure 21 below shows that the practice is heavily weighted in the direction of applying the fluoride varnish to all children, the next figure shows the risk-assessment tools that are used. It is important to remember that this is indeed a small, baseline survey and that is still early in the implementation process.
Figure 22: Identification of the Type of Tool Used for Early Childhood Caries Risk Assessment? (Select All That Apply) (N=8.)

Figure 22 allowed for a “select all that apply” and likely reflects the variety of ways that assessment is currently approached in the medical setting. Additionally, as the provider was not always the respondent, it is not clear how accurate the response numbers are in relation to practices. CAMBRA (Caries Management by Risk Assessment) and Bright Futures (provided through the American Academy of Pediatrics) are two of the many risk-assessment tools available.

Respondents were also asked if they tracked dental visits for children. Responses by child’s age indicate the following.

Figure 23: Medical Office Tracking of Children’s Dental Visits by Age. (Select all that apply) (N=11).
Medical Offices: Reimbursement
Seven respondents (N=11) report that billing goes to all available sources. But 4 programs do not bill at all. It should be noted that at the time of the survey NH Medicaid medical payments for the application of fluoride varnish in the medical setting was just being started. The identified programs were not yet billing directly for the services.

Payment at the FQHCs was absorbed via the FQHC encounter rate payment system. At the time of the survey, the hospital-based programs neither billed nor were reimbursed by Medicaid, likely due to the legacy of no direct reimbursement mechanism. Of note, at times, fluoride varnish application supplies were available via donations from staff and other sources including hospital charitable care mechanisms.

Cross Model Comparatives
Although the vast majority of the survey data is best reported in the format of the five models identified above, there are some key trends and messages that emerge when comparing models.

**DIFFERENTIATION OF HYGIENIST-CENTRIC MODELS AND DENTIST-CENTRIC MODELS**
Two models of service delivery became apparent early in the survey administration. The distinction is revealed in how the program is designed and staffed. This dichotomy plays out in a number of ways including client base, scope of service, staffing, reimbursement and record keeping.

Hygienist-centric models are primarily seen in programs serving children such as schools, Women, Infants and Children’s nutrition programs (WIC), Head Starts and child care. (N=35) All of the services are provided in schools or child care settings with portable equipment and supplies and limited staffing. Only 21% have electronic dental record capacity, the remainder use paper records.

The dentist-centric models, of which the dental operatory is the primary example, is used in more “traditional” settings like dental clinics and mobile dental operatories. Their staffing tends to be more robust and diverse across the spectrum, the scope of services more comprehensive including a range of restorative services, and reimbursement sources lean toward those that are more sustainable.

**WORKFORCE COMPARISON**
Figure 24 below compares staffing patterns between dental operatories and child-focused programs. Operatories have a wider range of staff. An important caveat is that one staff member can be counted in multiple roles. Hygienists in the children’s programs tend to function in multiple roles beyond the clinical and may serve as the program’s manager, care coordinator, van driver etc.
Figure 24: Type of Personnel in Overall Programs (N=58) versus those in Child-focused (35) and Operatory (17) Programs.

One illustrative factor that bears comparison is the percent of hygienist’s time devoted to clinical services in dental operatories versus in school programs.

<table>
<thead>
<tr>
<th>Average % of Hygienist Time by Function</th>
<th>Overall N=56</th>
<th>Dental Operatory N=17</th>
<th>Schools/ Head Start/ WIC/ Child Care N=35</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative</td>
<td>8%</td>
<td>5%</td>
<td>10%</td>
</tr>
<tr>
<td>Financial</td>
<td>3%</td>
<td>1%</td>
<td>4%</td>
</tr>
<tr>
<td>Clinical Support and Follow-Up</td>
<td>9%</td>
<td>7%</td>
<td>10%</td>
</tr>
<tr>
<td>Clinical Service</td>
<td>75%</td>
<td>87%</td>
<td>68%</td>
</tr>
<tr>
<td>Other</td>
<td>5%</td>
<td>0%</td>
<td>8%</td>
</tr>
</tbody>
</table>

Table 8: Percentage of Hygienist Time by Function in Overall, Dental Operatory and Child-focused Programs.

Hygienists in child-focused programs spend 20% less time on clinical services than those in dental operatories and twice the time on administrative duties than their counter parts in dental operatories. This is likely due to at least 2 factors (1) the ability for the dental hygienist working under public health supervision to work remotely from the dentist, thus providing for the opportunity for more community-based programs under the coordination of the hygienist, and (2) the prevention-focused scope of the hygienists practice.

With community-based sites, many children, who would otherwise not receive oral health education and care, are served in the very places in which they, and their families, congregate such as schools, Head Starts, WICs, child cares, etc. Care coordination including that from hygienists is a value-added component; however, the program administration and coordination does not require the hygienist’s clinical skill set. More clinical services could be provided and potentially reimbursed if the program had...
a non-clinical coordinator or navigator to assist with none clinical tasks. This would allow for the hygienist to serve more children in need in the over 200 community sites in NH, while providing for the referral, linkage, and follow-up needed.

<table>
<thead>
<tr>
<th>Differences in services provide</th>
<th>Average % of</th>
<th>Dental Operatory</th>
<th>Head Start/ WIC/Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Insurance via NH Medicaid/CHIP</td>
<td>28%</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>Private Foundation/Philanthropy Grants</td>
<td>4%</td>
<td>27%</td>
<td></td>
</tr>
<tr>
<td>NH Department of Public Health – Oral Health Contracts</td>
<td>4%</td>
<td>23%</td>
<td></td>
</tr>
<tr>
<td>Consumer Self-Pay/Sliding Fee</td>
<td>15%</td>
<td>&gt;1%</td>
<td></td>
</tr>
<tr>
<td>Private Commercial Insurance</td>
<td>11%</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td>Local and Civic Funding</td>
<td>4%</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>Contracted Services</td>
<td>3%</td>
<td>&gt;1%</td>
<td></td>
</tr>
<tr>
<td>Federal Grants</td>
<td>7%</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>25%</td>
<td>19%</td>
<td></td>
</tr>
</tbody>
</table>

Table 9: Percentage of Reimbursement/Funding by Type in Dental Operatories versus Child-focused Programs.

**Differences in Services Provided**

As aligned with applicable scopes of practice, services provided in dental operatories, with a stronger restorative capacity, vary from those provided in child-focused programs. Hygienist-centric programs are oriented toward oral health education and prevention services while dentist-centric programs are able to provide everything from prevention to dental restoration and rehabilitation.

**Comparison of Funding and Reimbursement Sources**

Hygienist-centric programs, such as child-focused services, tend to rely more heavily on grants and local funding (62%) while dentist-centric programs, such as dental operatories, bill reimbursable sources like Medicaid, private insurance and consumers (54%).

**Populations Served**

Dental operatories serve all ages of patients and may be the only community resource for adult Medicaid patients in need of relief of pain and infection outside of the emergency department, or primary care setting, if available. In contrast, hygienist-centric programs serve children in schools, Head Start, WIC and a child care setting. They tend to be located in both rural and urban areas and are critically necessary in low-income school districts.

The directionality of service delivery is also an interesting comparison. Hygienists more often bring their services out into the community. While for the most part, dentist-centric programs are stationary and patients go to them.
**RECORD KEEPING**

Fourteen of seventeen dental operatories reported having electronic dental record systems and, as many of them are part of a community health center, the dental records are more likely to be integrated into the patient’s medical record. In contrast, almost half of child-focused programs rely on paper dental records. See Figure 25. For informational purposes, Table 10 shows the types of software used.

**Figure 25: Type of Dental Record Used in Overall (N=58) versus Dental Operatory (N=17) versus Child-focused Programs (N=35).**

**Table 10: Number of Programs Using the Designated Health, Medical, or Dental Record Software Type.**

<table>
<thead>
<tr>
<th>Electronic Dental Record</th>
<th>Integrated Medical/Dental Record</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centricity Logician (1)</td>
<td>Centricity (1)</td>
<td>Boston University/NESS (2)</td>
</tr>
<tr>
<td>Dentrix (2)</td>
<td>Dentrix with Centricity (1)</td>
<td>Nursing Home Record (1)</td>
</tr>
<tr>
<td>Eagle Soft (1)</td>
<td>Toothcounters &amp; Logician (2)</td>
<td>Nursing Home System (1)</td>
</tr>
<tr>
<td>Forsythe (2)</td>
<td>VisDental with Centricity (1)</td>
<td></td>
</tr>
<tr>
<td>Softdent (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toothcounters (2)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Networks for Follow-up Care and Referral**

Network adequacy reflects service capacity and is a very important component of community-based oral health programs. Building the network requires collaboration and a common vision for the community. Some program and entity collaborations have been in place for a number of years, while others are still evolving. Collaborative relationships can be based on contractual arrangements, less formal agreements, or through simply long-standing, workable traditions. Collaboration, one of the ASTDD criteria for best practices, can include but not be limited to the establishment and use of partnerships, leveraged resources,
co-location, “piggy-backing” services, formal operating agreements, extended services into other settings with related missions, and working together to build capacity and infrastructure. This type of collaboration can help to build and strengthen a dental referral network to support community-based and medically-based oral health programs.

Barriers to the ability to refer and link patients into the next phase in the continuum of dental and oral health care has been anecdotally attributed to subsequent delayed and deferred oral health care. In this survey, we queried programs on both the need for follow-up care and the ease of finding a dentist or dental home to provide the next needed service. The tables below will further define the information received.

For community-based services, the overall respondents (N=53) indicated that on average, 18% of their patients require urgent follow-up care, while 42% require non-urgent care including the establishment of a dental home. For dental operatories versus child-focused programs, the dental operatories, serving a range of ages, report that 32% of their patients need urgent follow-up versus 8% for child-focused services. While dental operatories report that 70% of patients need non-urgent follow-up, child-focused programs report 27%. Many programs report that non-urgent follow-up care can be more difficult to find due a combination of a lower level of urgency and limited community resources.

<table>
<thead>
<tr>
<th>Average % of Patients that Need Urgent versus Non-urgent Follow-up</th>
<th>Urgent Follow-up Care</th>
<th>Non-Urgent Follow-up Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall (N=53)</td>
<td>18%</td>
<td>42%</td>
</tr>
<tr>
<td>Dental Operatory (N=17)</td>
<td>32%</td>
<td>70%</td>
</tr>
<tr>
<td>Schools/Head Start/WIC/Child Care</td>
<td>8%</td>
<td>27%</td>
</tr>
</tbody>
</table>

Table 11: Average Percentage of Patients that Need Urgent versus Non-urgent Follow-up Dental Care in Dental Operatory versus Child-focused Programs.

To further define the need for follow-up care, we looked at the programs in relation to the percent of patients they serve that need urgent and non-urgent follow-up care.

For urgent follow-up, almost 2/3 of the overall programs reported up to 25% of their patients needed urgent follow-up. However, another 9 programs reported that 25% to 50% of their patients needed urgent follow-up. Four programs reported 51% to 100%.

Breaking that out into dental operatories versus child-focused programs indicated that 26 child-focused programs, almost two-thirds, reported that up to 25% of their children needed urgent follow-up. Only 2 of the children’s programs reported higher urgent need rates and no children’s program reported up to 100%. See below.
For non-urgent follow-up versus urgent follow-up, overall program respondent numbers in all types of programs shifted up along the continuum percentage-wise towards the higher end of Table 12. This is likely due to two factors, (1) the widespread presence of non-urgent disease at the community care level coupled with (2) the inclusion of the establishment of a dental home in this category.

Overall, the need for non-urgent follow-up in all types of programs (N=53) showed that in the vast majority of overall, dental operatories and child-focused programs up to 50% of patients required non-urgent follow-up with some programs reporting up to 100% especially in the dental operatories. Additional discussion on differences in urgent vs non-urgent follow-up can be found in Models #1 and #2.

### Table 12: Percent of Patients by Type of Program Requiring Urgent Follow-up Care

<table>
<thead>
<tr>
<th>Percent of Patients by Type of Program Requiring Urgent Follow-up Care</th>
<th>0%</th>
<th>1-25%</th>
<th>26 – 50%</th>
<th>51-75%</th>
<th>76-100%</th>
<th>Do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Respondents (N=53)</td>
<td>2</td>
<td>35</td>
<td>9</td>
<td>2</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Dental Operatories (N=17)</td>
<td>0</td>
<td>8</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Child-focused Programs: Schools, Head Start, WIC and Child Care (N=35)</td>
<td>2</td>
<td>26</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

### Table 13: Percent of Patients by Type of Program Requiring Non-urgent Follow-up Care

<table>
<thead>
<tr>
<th>Percent of Patients Needing Non-urgent Follow-up</th>
<th>0%</th>
<th>1-25%</th>
<th>26-50%</th>
<th>51-75%</th>
<th>76-100%</th>
<th>Do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Respondents (N=53)</td>
<td>1</td>
<td>20</td>
<td>14</td>
<td>2</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Dental Operatories (N=17)</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Child-focused Programs: Schools, Head Start, WIC and Child Care (N=35)</td>
<td>1</td>
<td>18</td>
<td>10</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>
Overall, nearly three in four respondents provide records to receiving providers, 62% send a letter information sheet home to parents, 54% phone parents about urgent follow-up care, and 50% verify that follow-up service occurs. Less than half schedule an appointment for the child (48%), provide x-rays to receiving providers (35%), remind patient of appointments (31%), notify parents of appointments (21%), or arrange transportation to appointments (12%).

Differences in support services between dentist-centric and hygienist-centric programs regarding follow-up care vary widely. Most dentist-centric programs serve children in the presence of a parent or guardian which eliminates a lot of phone calling and letter writing post visit. Hygienist-centric child-focused services take place, with prior consent, in settings outside of the presence of parents and thus may have a more complicated follow-up referral process; when the child needs care that requires the services of the dentist, referral is out of the program, even if it is to a dental operatory in the same entity, leading to scheduling delays and the chance that the family will not keep the appointment. On the other hand, follow-up for urgent care in a dentist-centric dental operatory is usually done in-house (with some exceptions like oral surgery) reducing the need for records transfer, further communication with parents, etc. Appointments for the next visit are done with the parent/guardian before the family leaves the office. See Figure 26 below.

Figure 26: Services that Support Effective Urgent Care Referrals. (N=52).
Almost a third of respondents say it is easy [extremely (9%) or somewhat (20%)] to find a dentist to provide urgent dental care, while almost two-thirds say it is difficult [extremely (46%) or somewhat (20%)].

![Figure 27: How Easy or Hard is it to Find a Dentist to Provide Urgent Dental Care? (N=58).](chart)

Only 16% of respondents say it is easy [extremely (9%) or somewhat (7%)] to find a dentist to provide non-urgent dental care, while 75% say this is difficult (49% extremely, 26% somewhat).

![Figure 28: How Easy or Hard is it to Find a Dentist to Provide Non-Urgent Dental Care? (N=53).](chart)

Referral of Medicaid-eligible adults and children for non-urgent follow-up care and establishment of a dental home remains difficult because reimbursement levels are considered low.

The other most frequently expressed reason given for limited acceptance of Medicaid-covered and low income patients is broken appointments. Patients are often unable to follow through due to intervening social and economic factors such as:

- Lack of reliable transportation,
- Limited financial resources,
- Inability to take time off from work,
- Long distances to appointments,
- Limited number of dentists especially in rural areas,
- Lack of dental specialists in certain parts of the state, and
- Limited oral health literacy in the general public.
Alignment of Reimbursement and Service.

As noted above, review of the data identifies differing patterns of reimbursement for hygienist-centric versus dentist-centric models.

For the most part, the range of services provided by dentists are directly reimbursable to the dentist or to their organization by means of a fee schedule. The exceptions to that include the FQHC encounter rate; nursing home oral health services provided under contract; purchased “block time” services such as pre-operative clearance for low-income, Medicaid, and Medicare beneficiaries; and for restorative services for Medicaid adult patients who have “emergency-only” benefits.

By contrast, in the public health setting, not all services provided by hygienists are reimbursable either to the dentist or to the NH Medicaid Children’s Health Assurance Program (CHAP) that provides for billing directly by a community-based oral health setting that may employ the hygienist.

A majority of overall programs respondents (55%) use a dental provider number for billing NH Medicaid, 17% use Children’s Health Assurance Program (CHAP) number, and 28% don’t bill Medicaid. Dental operatories generally bill via the dental provider number; child-focused programs use either a dental provider number or the program CHAP number. The child-focused programs also have a significant rate of not billing Medicaid.

Non-billable services, done by the hygienist are often paid for by public or private grants, a system considered to be “less sustainable” under the ASTDD criteria.

Not all hygienist services, billable within the private dentist office, are billable for the hygienist practicing in the public setting under public health supervision. Further information is available in Appendix C. “NH Dental Hygiene Licensed Workforce Comparative.”

Hygienist services, authorized through their scope of practice and level of supervision and currently billable when performed in the public health settings include:
- Child rubber cup prophylaxis
- Sealants for eligible children
- Application of fluoride including varnishes, rinses, and silver diamine fluoride for eligible children

Services *authorized within scope of service and performed by hygienists* but not currently billable in public health settings include:
- Screenings/exams,
- Interim therapeutic restoration,
- Radiographs,
- Referrals, and
- Toothbrush prophylaxis.

The result is that although in a public health setting, a hygienist can *practice* at the full scope of their license, not all services are billable through either public or private insurers. The impact is that a higher burden of payment is being drawn from grants and philanthropy to provide the same services that are reimbursable in the private setting, thereby reducing the total number of beneficiaries that could be served in public programs.

In 2015, the Legislative Commission to Study Pathways to Oral Health Care in NH, Chapter 313, Laws of 2014; SB193, chaired by Senator Jeb Bradley, in their November 1, 2015 Report, recommended

“The State should create a dental Medicaid reimbursement mechanism that allows payment for the Certified Public Health Dental Hygienist performing currently authorized interim therapeutic restoration (ITR) and radiographs under public health supervision consistent with payments currently made for other authorized services."

The Department of Health and Human Services is looking at ways of addressing this discrepancy.

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**Poisson Dental Center – Catholic Medical Center**

As part of a larger health system, Poisson reports a range of *integrated* oral health services that support the overall health of their patients and efficient use of resources for the completion of over 1000 emergency department dental issues per year, training for and integration with the pregnancy center and their local Dartmouth Hitchcock pediatric office, and oral health assessment training for the hospitalists.

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**Opportunities for Increasing Medical–Dental Integration**

As per the data gathered, there remain many opportunities for further integration of medical and dental services within our state’s health systems. Both the 2003 and 2015 New Hampshire Oral Health Plans indicate, medical-dental integration is an ongoing priority within our state. Highlighted within this report are several avenues to increase...
the integration of medical and dental services including exploring new venues, new providers, new services, and new systems.

As noted earlier in the report, while our intent was to identify the baseline on the use of fluoride varnish in the pediatric primary care settings, the survey ran concurrent with the initial implementation of “From the First Tooth,” a grant supported in New Hampshire by the work of Hugh Silk, MD, MPH, a family physician from the University of Massachusetts.

Dr. Silk was funded by the DentaQuest Foundation to implement a training program for primary care medical providers on the integration of oral health risk assessment, referral and fluoride varnish application within the medical setting where children and their families go for routine services. Dr. Silk targeted the 6 New England States, and due to changes in Medicaid reimbursement in 2015, NH was able to implement the training program on short notice.

Under the 1st year of the grant, we were able to train, 9 additional NH medical office sites and initiate training with a 10th. The offices are in varying phases of implementation with several successfully performing the clinical services and receiving payment for the work done. Trainings were coordinated by the Coalition with the grant administration done by the North Country Health Consortium.

NH has now received a 2nd year of funding for the program and will be able to train a minimum of 10 additional sites. The program utilizes Module 6 of the “Smiles for Life” National Curriculum on Oral Health. Each training includes both clinical and administrative content to support full implementation at each location.

Additional medical-dental integration opportunities that are emerging within the state include:

- Emergency room programs that include dentist and oral surgeon staffing, follow-up for emergency patients who are guaranteed access through contracts or referral, and triage with follow-up referral into the community setting;
- Pre-op surgery models are developing due to the need for oral health/dental clearance for surgeries including cardiac. Due to the lack of an adult Medicaid dental benefit, some providers are contracting for blocks of time to ensure dental access for clearance and treatment prior to medical surgery that is otherwise covered;
- Hygienist/dentist practice within the medical setting, including primary care, is a model that creates a lot of interest. Due to considerations for supervision and reimbursement, there are limited examples for consideration. Those examples in NH include a hygienist that contracts for limited time in a local obstetric office with payment through the hospital system; hygienists providing services in pediatric offices through either payment from the hospital or through a grant; and a dentist in a pediatric medical setting that is reimbursable through their home office; and
- Integration of board maintenance of certification (MOC) projects for physicians, e.g. implementation of fluoride varnish in the medical setting by pediatricians and family physicians.

While the examples are limited, there remains a good opportunity to further explore the design, outcomes and reimbursements for these models.
Future Work from Lessons Learned

While there are many facts and lessons learned from the initial examination of the community-based, non-traditional oral health system, the data remains rich for further mining. To support the integration and use of this report, we anticipate a series of related activities:

- Targeted dissemination of the report for those involved in service provision, program design, policy and regulatory development, and to consumers;
- Small targeted convenings that allow the participants to review the data and collaboratively determine how the information applies to them, e.g. NH Pediatric Society meeting, school administrators meeting, etc.;
- Development of a series of “shorts,” mini-reports that allow for further delineation and definition of potential models and their replicability, e.g. school sealant programs, WIC services for children and parents, etc.;
- Further examination of geographic, social determinants of health, and other factors that play a significant part in the availability of community-based services. Consideration of public health networks, free and reduced lunch programs, and others;
- Consideration of additional pathways for professional and continuing education on oral health for medical providers and other allied health professionals; and
- Advocacy for an adult Medicaid dental benefit.
Reference and Resource Materials


Dental Sealants: Proven to Prevent Tooth Decay: A Look at Issues impacting the Delivery of State and Local School-Based Sealant Programs, Children’s Dental Health Project, May 2014


State Health Facts: Total Source Total Number of Medicare Beneficiaries. Accessed at: http://kff.org/medicare/state-indicator/total-medicare-beneficiaries/?currentTimeframe=0


New Hampshire Oral Health Data Report 2015, New Hampshire Department of Health and Human Services, Division of Public Health Services, Bureau of Community Health Services, Rural Health and Primary Care Section, Oral Health Program.


<table>
<thead>
<tr>
<th>City</th>
<th>School</th>
<th>Head Start</th>
<th>Type</th>
<th>WIC</th>
<th>Child Day Care</th>
<th>Medical Practice</th>
<th>Dental Operator</th>
<th>Vouch-Plaid Ref.</th>
<th>Phone Number</th>
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<td>Littleton</td>
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<td>Bogacs, David</td>
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<td>Mobile/Portable</td>
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<tr>
<td>Easter Seals</td>
<td>Manchester</td>
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This is a static representation of the GIS map of community based, nontraditional oral health programs in New Hampshire. The GIS map is fully interactive and will be embedded on the NH Oral Health Coalition Website – nhoralhealth.org.
## Appendix C

### NH Dental Hygiene Licensed Workforce Comparative

<table>
<thead>
<tr>
<th>Practitioner</th>
<th>Registered Dental Hygienists (RDH)</th>
<th>Dental Hygienist under Public Health Supervision (PHDH)</th>
<th>Certified Public Health Dental Hygienists (C-PHDH)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Location</strong></td>
<td>Private and public community dental practices</td>
<td>Additional settings: schools, hospitals or other institutions, e.g. nursing homes, Head Start, WIC offices, food pantries, etc. and homes.</td>
<td>Additional settings: schools, hospitals or other institutions, e.g. nursing homes, Head Start, WIC offices, food pantries, etc. and homes.</td>
</tr>
</tbody>
</table>
| **Allowable Procedures** | - Collect and assess medical and dental histories  
- Performance of complete prophylaxis (cleaning)  
- Perform professional application of topical fluoride  
- Place sealants, if qualified  
- Radiographs | - Collect and assess medical and dental histories  
- Performance of complete prophylaxis (cleaning)  
- Perform professional application of topical fluoride  
- Place sealants, if qualified | - Collect and assess medical and dental histories  
- Performance of complete prophylaxis (cleaning)  
- Perform professional application of topical fluoride  
- Place sealants, if qualified  

Plus additional services:  
- Interim Therapeutic Restorations (ITR) — temporary restorations to sedate or seal  
- Perform radiographic bite-wings |
| **Supervision** | Direct, in-direct, and general supervision, in office by an actively-licensed NH dentist. | Public health supervision by an actively-licensed NH dentist, who can be off-site and who reviews the records once in a 12-month period | Public health supervision by an actively-licensed NH dentist, who can be off-site and who reviews the records once in a 12-month period. Must have a written collaborative agreement with a supervising dentist. |
| **Educational Pathway** | Associate or baccalaureate in dental hygiene | Associate or baccalaureate in dental hygiene | An associate degree. in dental hygiene plus courses and exams identified in 302.05(aa)(1,2,3)  
- Evidence based dentistry  
- Infection control in public health settings  
- Medical management in public health settings  
- Management of medical records, and  
- Caries stabilization; or  
A baccalaureate degree in dental hygiene with 6 hours in community dental health, or, if a dental hygienist and holding a master’s degree in public health. |
| **Examination Requirement** | - National Board Exam – written  
- ADEX, dental hygiene exam - written and clinical  
- State of NH Jurisprudence exam – written  
- Apply to NH BODE for license to practice in NH | - Apply to the Board of Dental Examiners for PH supervision – see website for forms and publications (http://www.nh.gov/dental/) | All C-PHDHs, regardless of educational pathway, must  
- Complete 3,200 hours of practice with a minimum of 1,600 within prior 2 years;  
- Complete a course in caries stabilization that is a minimum of 6 hours as outlined in 302.05(aa)(3)a; and be qualified in dental sealants pursuant to DEN 302.05(m) and (n), if similar training was not received as part of that dental hygiene school curriculum. |
| **Reimbursement Pathway** | Through dentist for covered services. | Through dentist or CHAP program for covered services. | Through dentist or CHAP program for covered services.  
- No reimbursement mechanism for ITR or radiographs. |
Glossary and Abbreviations

BODE – NH Board of Dental Examiners.
CHAP – Children’s Health Assurance Program - NH Medicaid.
DEN – NH Administrative Rules designation for rules formulated by the NH Board of Dental Examiners.
Direct Supervision - "Direct supervision" means a dentist with an active license is in the dental office, authorizes the procedure, and remains in the dental office while the procedures are being performed, and before dismissal of the patient evaluates the performance of the dental hygienist or dental assistant.\(^{\text{x}}\)
Indirect Supervision - "Indirect supervision" means a dentist with an active license is in the dental office, authorizes the procedures, and remains in the dental office while the procedures are being performed by the dental hygienist or dental assistant, and evaluates the performance of the dental hygienist or dental assistant at a subsequent appointment.\(^{\text{xi}}\)
General Supervision - "General supervision" means a dentist with an active license has authorized the procedures, and the procedures are being carried out in accordance with the dentist’s diagnosis and treatment plan, and the procedures will be personally evaluated and reviewed by the dentist with the patient at least once in a 12 month period.\(^{\text{xii}}\)
Head Start - A program of the Administration for Children and Families through the U.S. Department of Health and Human Services; Head Start promotes the school readiness of young children from low-income families through agencies in their local community.
ITR – Interim therapeutic restoration. A substance placed as a temporary restoration to sedate or seal a tooth.
Public Health Supervision - “Public health supervision” means a dentist with an active license authorizes procedures which are to be carried out by a dental hygienist with an active license practicing in a school, hospital or other institution, or for a homebound person without the dentist having to be present provided the dentist has reviewed the records once in a 12 month period.\(^{\text{xiii}}\)
RSA – Revised Statute Annotated; NH statutory laws.
WIC – The Special Supplemental Nutrition Program for Women, Infants, and Children. WIC provides federal grants to States for supplemental foods, health care referrals, and nutrition education for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, and to infants and children up to age five who are found to be at nutritional risk. The program is through the US Department of Agriculture.

\(^{\text{i}}\) RSA 317-A:21; DEN 101.07, DEN 402
\(^{\text{ii}}\) DEN 101.20; 302.01; DEN 402.01(d)
\(^{\text{iii}}\) RSA 317-A:21-e; DEN 302.05 (aa-ac)
\(^{\text{iv}}\) DEN 402.01(d) (1-8)
\(^{\text{v}}\) Ibid.
\(^{\text{vi}}\) Ibid.
\(^{\text{vii}}\) RSA 317-A:21-e; DEN 402.01(d) (1-8) and (9,10)
\(^{\text{viii}}\) RSA 317-A:9; DEN 301.01
\(^{\text{ix}}\) DEN 302.05(m) and (n)
\(^{\text{x}}\) DEN 302.02 (a)
\(^{\text{xi}}\) DEN 302.02 (b)
\(^{\text{xii}}\) DEN 302.02 (c)
\(^{\text{xiii}}\) DEN 302.02(d)

Disclosure: This document is prepared as a tool for discussion. It is a summary of the dental hygienist requirements. It is your responsibility to know the RSA 317-A, the Dental Practice Act, and the dental administrative rules.
Appendix D

Oral Health 411: NH Data Sources

2015 NH Oral Health Plan Update

The 2015 New Hampshire Oral Health Plan provides a framework for achieving optimal oral health, as part of overall health, and is intended to be a roadmap for everyone who has a stake in New Hampshire’s oral health. This Plan reflects a deep commitment to increasing access to oral health services; promoting prevention of oral health pain and disease; and integrating oral health with overall health to reduce significant disparities in oral health for the most vulnerable and at-risk populations. The Plan is designed to be broad and strategic, and can be modified and adjusted as conditions, resources, and external environmental factors change. The 2015 New Hampshire Oral Health Plan honors the previous plan and builds on its success. It identifies three priorities and six cross-cutting priorities, and includes outcome measures that will allow for ongoing evaluation of progress toward reaching the goal of the plan: A measurable, integrated oral health plan to improve the overall health of all of New Hampshire using evidence-based and/or best practices. This plan is an update to the 2003 NH Oral Health Plan: A Framework for Action.


NH Oral Health Communication Plan 2015-2020

This five-year New Hampshire Oral Health Communication Plan (OHC Plan) is designed to serve as a guide for the marketing and communications efforts of the New Hampshire Department of Health and Human Services, Division of Public Health Services, Oral Health Program (OHP) and their partners. It is to be flexible and adaptable to meet the needs of both the OHP, as well as their partners, including the NH Oral Health Coalition (NHOHC), the NH Oral Health Communication Subcommittee and others who may have an interest. It outlines the plan’s five-year goals, objectives, and strategies. The overarching goal of this plan is to accomplish the delivery of OHP key messages and additional information about oral health to key target audiences in New Hampshire in order to address OHP’s key Public Health Goals: Access to Oral Health Care, Oral Health Care Prevention and Timely Interventions, and Integration of Oral Health Care into Health Care. The five primary and secondary target audiences are outlined by year in Figure 1: Primary and Secondary Target Audiences, and are as follows: 1) Legislators and decision makers, 2) Parents of children with first their tooth to five years, 3) Medicaid providers, 4) New Hampshire healthcare and oral health providers, and 5) New Hampshire adults.


The NH Oral Health Data Report 2015 is organized to provide detail about oral disease, the impact of that burden, associated risk and protective factors, and also about the oral health workforce capacity in New Hampshire. In addition, contextual detail about New Hampshire, including the public health service delivery system and the demographic and socioeconomic profile has been included. For measures specific to oral health, where available, relevant national data and targets have been included for comparison purposes. The report establishes a documented burden of

NH Oral Health Coalition on behalf of the NH Oral Health Stakeholder Network
May 2016
Appendices • 55
disease and highlights disparities that exist in both disease experience and access to preventive care. It is intended to serve as a valuable resource for the public, dental and medical clinicians, researchers, public health professionals, and decision makers at the organizational, local, and state levels. It is the hope of the DHHS - NH Oral Health Program that this report will raise awareness about the need for oral health services and about the importance of monitoring oral health data, and that it will guide efforts to prevent and treat oral disease, ultimately contributing to overall health. [http://www.dhhs.nh.gov/dphs/bchs/oral/documents/oral-health-data-2015.pdf]

The Commission to Study Pathways to Oral Health Care in NH – Final Report; Chapter 313, Laws of 2014; SB 193

This Commission was established for the purpose of analyzing and evaluating barriers to and coverage for dental care for underserved New Hampshire residents, the impact of the implementation of Expanded Function Dental Auxiliary (EFDAs) and Certified Public Health Dental Hygienists (C-PHHDs), and how adding these two new professions to the dental team will meet the need for oral health services in New Hampshire. A report and recommendations was required for publication by November 15, 2015. NH DHHS, Public Health/Oral Health. [http://nhoralhealth.org/blog/wp-content/uploads/2015/11/FINAL_SB_193_Oral_Health_Pathways_Commission_Report.pdf]

NH Pediatric Improvement Project Study – Oral Health in Primary Care, 2015. NH Pediatric Improvement Project. For more info: Holly Tutko, holly.tutko@unh.edu.

NH Dental Data Claims Project, 2015. NH Institute on Health Policy and Practice. For more info: Abbott Willard, abbott.willard@unh.edu.

NH Oral Health Baseline Survey on Community-based, Non-traditional Programs – Report anticipated in the summer of 2016. For more info: Gail T. Brown, gbrown@nhoralhealth.org


More to Smile About – 2014, [http://www.nhds.org/publications/more-to-smile-about]; and
This project and report was funded by:
HNH Foundation
DentaQuest Foundation