ILLINOIS PRIMARY HEALTH CARE ASSOCIATION
ORAL HEALTH IMPLEMENTATION TOOL KIT

A tool kit developed from the Oral Health Implementation Guide by Qualis Health.

IPHCA
Illinois Primary Health Care Association

DentaQuest
Foundation
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Introduction
Oral health is an essential part of systemic health, yet oral health care services have been falsely separated from medical care for decades. Like primary care, prevention and early detection are critical components of oral health care. Increasingly, the progression of oral diseases is being linked to numerous systemic diseases, including cardiovascular conditions and diabetes, which highlights the need for the integration of oral health services with comprehensive medical care. Additionally, integration of oral health into primary care addresses a currently unmet need for many individuals. Numerous barriers exist for individuals seeking oral health care; amongst them are issues of access to providers, transportation, and cost. The primary care setting provides a novel point of access to oral health services and helps alleviate many of these barriers.

This tool kit has been developed as a resource to help health centers in understanding and effectively utilizing the Oral Health Implementation Guide, a document published by Qualis Health to aid in the oral health integration process. The Qualis Oral Health Implementation Guide offers a comprehensive guideline to achieve the vision of addressing oral health as a part of whole-person, patient-centered care. At the end of this tool kit (Appendix A), a checklist has been provided to guide you as you go through the integration process.

Acknowledgements
This tool kit was developed with the intention of helping health centers utilize and implement components of the Oral Health Implementation Guide, a document developed by Qualis Health for the Safety Net Medical Home Initiative. All contents in this document are shared by Illinois Primary Health Care Association (IPHCA) in acknowledgement that Qualis Health originally developed these ideas and images to be used by health centers and supporting organizations. IPHCA would like to acknowledge Qualis Health for publically sharing this content. Additionally, IPHCA would like to acknowledge and thank the DentaQuest Foundation for providing funding for the development of this tool kit. IPHCA would also like to thank several individuals that helped develop and provide feedback on this tool kit – Dr. Ghassan Souri, Dentist at Aunt Martha’s Health & Wellness and IPHCA Oral Health Consultant, Dr. Jeff Hummel, Medical Director for Healthcare Informatics at Qualis Health, and Dr. Debra Morrissette, Director of Oral Health Services at Community Health Partnership of Illinois.

This tool kit was developed by: Gabija Revis, IPHCA Intern and Cristina McKay, MPH, IPHCA Program Manager
Using This Tool Kit

The tool kit can be divided into three phases of implementation. The first phase – *Laying the Groundwork* – addresses the essential initial steps that must be taken prior to implementation of an oral health integration strategy. This includes tools for Engaging Leadership, Establishing a Quality Improvement Strategy, and Team Development. The second phase – *Successful Implementation Strategies* – draws upon evidence-based implementation strategies that have successfully helped Federal Qualified Health Centers (FQHCs) across the nation to integrate oral health. These tools can be divided into two categories: Information Gathering and Delivery of Services. The final phase of this tool kit – *Quality Improvement* – examines how data can be used for long-term quality improvement and how and when implementation goals can be re-evaluated.

Figure 1: Three Phases of Implementation

Please take note of the **Starting Small** annotations (always in an orange box) throughout this tool kit that are geared towards organizations that may have limited Health Information Technology (HIT) capabilities. Being able to modify electronic health records, while a great asset in oral health integration, is not a requirement to begin the integration process nor is it a prerequisite for using this tool kit.
Oral Health Fact Sheet - Illinois

An Unmet Need

- Approximately one in four adults in Illinois has untreated dental caries.¹
- Adults in Illinois listed cost, inconvenient location/times, and difficulty finding a dentist as three key reasons for not visiting the dentist more frequently.¹
- Geography plays a role. Oral health Emergency Department (ED) visit rates for adults are highest in rural and southern Illinois counties, where access to oral health care is limited.¹ This significantly increases the cost of treatment.
- Illinois Fee-for-Service Medicaid reimbursements are last in the nation for adults. Low reimbursement drives down provider participation in Medicaid. Seventeen of 102 counties in Illinois have no registered Medicaid dental provider, and 27 counties have only one registered Medicaid dental provider.¹

Children at the Forefront

- One in five children in Illinois has untreated tooth decay.¹
- Poor oral health can affect learning – $1 million school hours per year are lost because of dental-related pain. Children experiencing pain are less able to concentrate at school and early tooth loss has been linked to speech problems, failure to thrive, and reduced self-esteem.¹
- Illinois falls far behind other states (34th) in the number of Medicaid children receiving dental treatment.¹

Oral Health Integration

- Primary care practices are an important setting for oral health services – they create space for increased access to oral health care services and oral health education for underserved populations. Consider, for example, how children are more likely to have visited the doctor than the dentist in the last year.¹
- Strengthening referral mechanisms between primary care and dentistry can also help physicians and their staff to facilitate referrals to oral health care for their patients. However, primary care providers emphasize that referral mechanisms with oral health care providers must be established to make full integration possible.³

Aligning with a Patient-Centered Approach

- Oral health is linked to systemic health. There is a growing body of evidence suggesting that addressing oral health can help improve patient care, improve population health, and reduce costs.³
- Oral health integration aligns with the core values of the patient-centered health model.
- Patient-centered medical homes provide the perfect entry point for accessing dental care –
particularly for patients who may otherwise not be able to access dental services.

Phase 1: Laying the Groundwork

Pre-Assessments

Oral health integration aligns with the patient-centered medical home, but that does not always mean that a patient-centered medical home will prioritize oral health integration. For oral health champions to lay the groundwork for integration, they must identify the appropriate leadership and stakeholders, mobilize resources, and develop an organization-wide strategy.

There are several tools in the Qualis Implementation guide to engage leaders. It is strongly recommended that any organization will first consider and complete the readiness assessments posted by The Safety Net Medical Home Initiative to determine whether or not an organization is ready to consider oral health integration as a formal initiative.

Oral Health Practice Readiness Assessment to assist in identifying strengths and weaknesses in preparation for oral health integration.

Task #1: Complete the Oral Health Practice Readiness Assessment and Oral Health Information Technology Assessment

Oral Health Information Technology Assessment to assist in identifying the interface changes needed and the technical capabilities required in order to make those changes in the EHR. Completion of these assessments is an essential starting point for any organization beginning the formal oral health integration process. Consider the following summary of Health Information Technology (HIT) requirements required for optimal oral health integration, taken directly from page 54 of the Qualis Oral Health Implementation Guide:

“Assessment of the HIT system for oral health means verifying that the user interface can be modified to build data entry fields into charting templates as needed. The information entered into the data entry fields is most helpful to practices when it is stored as structured data. In order to create these data fields, the organization will also need:

- A database analyst with the programming skills to build the data entry fields, order sets, and a place to view the date of the last oral health assessment
- Authorization to modify the user interface and allocation of resources to support the effort
- A clinician familiar with the oral health clinical content who understands the workflow in which the data entry fields will be used and who can work with the database analyst to ensure the end result works for the care team.

The HIT assessment also needs to determine the practice’s ability to create custom quality reports. Reporting requires:

- A reporting database that is updated regularly from the production EHR server, including data from the oral health assessment data entry fields and the orders from the oral health order set.
- Report-writing software that can be used to build oral health reports
- A database analyst who can write queries using the software
- Authorization to write the reports and allocation of resources to support the effort
- A clinician familiar with the oral health clinical content who understands the workflow and who can
validate the reports
• A quality improvement staff member who understands population management and the Framework who can oversee the reporting methodology and turn reports into run charts.”

For some organizations, modifying and integrating the electronic medical records is beyond the capability of their information technology teams. For these organizations, oral health integration is not impossible; but acquiring data and accomplishing goals may be more challenging and may require more creativity and flexibility.

Engaging Leadership

The Case for Change: Incorporating Oral Health in Routine Medical Care is a modifiable PowerPoint that can be edited and customized to your organization. This presentation can be used to educate and inspire others. It includes basic information on the burden of oral disease, why oral health is an important component of comprehensive care, and what primary care teams can do to address oral health needs in their patients.

The “Oral Health Integration Kickoff Meeting Agenda” provides a template for how and where to begin the formal oral health integration process. Key players to include at the kickoff meeting may include representatives from:
- Organization and clinic medical staff – including a clinical champion, who has been identified to pilot the oral health integration program.
- Organization and clinic operations
- Organization finance
- Quality Improvement
- Health Information Technology (HIT)
- Dental team members (dental director, dentists, dental assistants, dental hygienists)
- Patient partners (patients who are engaged and active in their own health care, can provide feedback in a constructive and meaningful way)

Why Us?

We have regular contact with high-risk groups:
• Children
• Pregnant women
• Adults with diabetes

We are well equipped for the work:
• We routinely assess risk, screen for disease, offer preventive interventions, and refer patients to specialists when treatment is needed.
• We can apply these core competencies to oral disease.

The Case for Change: Incorporating Oral Health in Routine Medical Care

Why Us?

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• Children
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• We can apply these core competencies to oral disease.

Defining the “clinical champion”

- Often the medical director or the pilot clinician
- Able to build organization-wide support and momentum
- Able to develop a clear understanding of the Oral Health Delivery Framework
- Willing to present on various Oral Health-related topics to medical team

Planning Phase
Program leadership team identifies goals, establishes timeline for implementation, develops workflow and adapts EHR/quality reports.

Pilot Phase
Clinical pilot team, under direction of clinical champion, implements small-scale integration process, evaluating measures continuously.

Spread
Pilot program is spread to rest of organization once pilot is stable, further commitment of resources as needed.
Sample Oral Health Integration Kickoff Meeting Agenda

Date & Time: 1-hour duration: Location:

Session Objectives:
- Understand the importance of oral health integration and how it aligns with the strategic plan.
- Review the pilot plan and activities required to integrate oral health into the primary care setting utilizing the Oral Health Delivery Framework.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Owner</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome</td>
<td></td>
<td>10 mins</td>
</tr>
<tr>
<td>• Program leadership welcomes attendees and acknowledges:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• The impetus behind integrating oral health into primary care.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• How oral health integration supports the practice’s mission and/or strategic plan.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• The importance of this work and the handoff to the pilot team to begin the integration process.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Case for Change—Oral Health in Primary Care</td>
<td></td>
<td>30 mins</td>
</tr>
<tr>
<td>• Review the impact of oral disease with examples, powerful stories, and statistics on the impact of poor oral health on:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Overall health.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Other systemic diseases.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• High risk populations—including pediatrics, pregnancy, adults, patients with chronic diseases/diabetes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Review the benefits of addressing oral health in primary care.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Present oral health care as a key component of organized, evidence-based care in a patient-centered medical home (PCMH) practice.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Table talk: What are the potential benefits of integration for your health center?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pilot Phase Activities and Resources</td>
<td></td>
<td>10 mins</td>
</tr>
<tr>
<td>• Review the upcoming pilot activities (clinical content training, workflow optimization mapping, and planned implementation date).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Present other resources available: Oral Health Integration implementation guide, oral health integration tools, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Table talk: What other resources, tools, or training will your team need to provide integrated care?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Next Steps, Wrapping Up, and Questions</td>
<td></td>
<td>10 mins</td>
</tr>
</tbody>
</table>

Figure 3: Agenda source: Safety Net Medical Home Initiative. Organized, Evidence-Based Care Supplement: Oral Health Integration. Page 55. 2016.

Task #2: Download, customize, and present the Case for Change PowerPoint to key players at your organization. Use the Oral Health Integration Kickoff Meeting Agenda to guide the initial meeting.
Quality Improvement Strategy

**STEP 1) Outline quality goals – What are we trying to accomplish?**

Establishing S.M.A.R.T. Goals – developing specific, measurable, action-oriented, realistic, timely goals is an important component of managing your organization’s performance. Each oral health integration initiative should begin with goals that can satisfy the S.M.A.R.T. goal criteria.

<table>
<thead>
<tr>
<th>Specific: What are we trying to accomplish?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurable: In what ways can our success be measured?</td>
</tr>
<tr>
<td>Action-oriented: What results will we be able to see when our goals are accomplished?</td>
</tr>
<tr>
<td>Realistic: Are our goals achievable? Are there additional resources that we need to achieve our goals?</td>
</tr>
<tr>
<td>Timely: What is the time frame for accomplishing our goals?</td>
</tr>
</tbody>
</table>

Use *Figure 4* to begin brainstorming goals that are appropriate for your organization. This figure can be used in a planning meeting where the program leadership team is able to contribute to goal development. Allow this meeting to shape the target population and explicit standard of care that the organization is aiming to achieve.

<table>
<thead>
<tr>
<th>Goal(s):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources:</td>
</tr>
<tr>
<td>Criteria for Success:</td>
</tr>
<tr>
<td>Measurement:</td>
</tr>
<tr>
<td>Target Date:</td>
</tr>
</tbody>
</table>

*Figure 4: Quality Goals Outline*
Ultimately, the goal of oral health integration is to provide more comprehensive and better care for all patients. However, in order to be achievable, specific goals may need to be incremental in design. This may mean defining a target population that may be significantly smaller than the organization’s entire population (i.e. we will target only children coming in for well-child exams) or providing a limited set of interventions (i.e. we will only provide fluoride varnish to children six and under). This is an opportunity to customize organization goals to a specific patient population and to a specific organization’s resource capabilities. This allows the integration process to be both measurable and attainable.

**Starting Small:** It is important to stress that initial goals should be attainable on a small-scale, as the first oral health integration programs should be initiated as a pilot program – by one or a few clinicians and their care teams – and allow ample opportunity for program modification. If goals cannot be measured through the EHR interface, consider selecting an individual to pull charts once a week and enter data in Excel to track key measures.

### Examples of S.M.A.R.T. Oral Health Integration Goals

<table>
<thead>
<tr>
<th>Example Goal #1:</th>
<th>Using clinical data from the next year, we will apply fluoride varnish to 90% of children aged 6 and under at their annual well-child exam.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example Goal #2:</td>
<td>Using clinical data from the next year 80% of prenatal patients will receive oral health education and counseling during their first trimester.</td>
</tr>
<tr>
<td>Example Goal #3:</td>
<td>In the next year, we will successfully complete an oral health screening on at least 50% of our diabetic patients and provide a dental referral for patients identified as demonstrating “high risk” for oral disease.</td>
</tr>
<tr>
<td>Example Goal #4:</td>
<td>In the next year, our participating primary care team clinicians will complete the oral health screening EHR questions at 75% of new patient visits.</td>
</tr>
</tbody>
</table>

*Figure 5: Examples of SMART Oral Health Goals*

Defining and implementing a pilot program allows for the team to try new workflows and processes, identify obstacles, and work out solutions prior to large-scale implementation. To do so, the pilot team will need continuous support of the:

- Quality Improvement representative
- Health Information Technology Specialist
- Referral coordinator
- Operations supervisor

Regular communication will need to be established between the clinicians participating in the integration process and the support team that will be facilitating integration through structural modification of the electronic health record user interface, adaptation of the workflow, and development of clinical protocols. It is recommended that a bi-weekly or monthly meeting time is established prior to the beginning of the pilot program.

**Starting Small:** If a practice is unable to write clinical reports using EHR data, an alternative approach is to pull 20 or 30 charts and conduct a chart review to get a snapshot of how well a new process is working. For example, a practice may start the year with no information about periodontal disease among its diabetic patients. But by the end of the year, a pull of 30 random charts of diabetic patients may reveal that 80% of them were identified as having gingival inflammation and nearly all of those patients received a referral for treatment. This can tell a compelling story about the organization’s integration experience.
**STEP 2) Define roles and responsibilities – Who is going to accomplish this goal?**

The program leadership team includes the clinical champion in whose care team the pilot will take place. It also includes leadership representation from: Organization and clinic medical staff, clinic operations, finance, quality improvement, health information technology and dental director. Use the chart below to help identify these roles.

<table>
<thead>
<tr>
<th>Role</th>
<th>Responsibility</th>
<th>Name of Individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Champion</td>
<td>Implement oral health integration program, evaluate modifications of workflow and information system, share experiences with program leadership team</td>
<td></td>
</tr>
<tr>
<td>Clinical Pilot Team member</td>
<td>Support the clinical champion in oral health integration processes identified in pilot program</td>
<td></td>
</tr>
<tr>
<td>Clinical Pilot Team member (if applicable)</td>
<td>Support the clinical champion in oral health integration processes identified in pilot program</td>
<td></td>
</tr>
<tr>
<td>Health Information Technology Specialist</td>
<td>Adapt the EHR interface</td>
<td></td>
</tr>
<tr>
<td>Quality Improvement/Data Analyst</td>
<td>Will produce regular data reports and share them with the pilot and program team</td>
<td></td>
</tr>
<tr>
<td>Operations Supervisor</td>
<td>Develop clinical protocols to scale pilot program to larger level</td>
<td></td>
</tr>
<tr>
<td>Referral Coordinator (if applicable)</td>
<td>Facilitate and support establishment of referral network</td>
<td></td>
</tr>
</tbody>
</table>

*Figure 6: Pilot Roles & Responsibilities Chart*
**STEP 3) Outline a process for organizing, monitoring, and concluding results from integration initiatives – How will change be measured? Who will evaluate and share change?**

Measuring and monitoring data is an integral part of the Quality Improvement Strategy. Elaborating on the specific actions of team members and providing deadlines, as demonstrated in Figure 7.

<table>
<thead>
<tr>
<th>Action</th>
<th>Responsibility</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Example: Pull charts of children who came in for well-child exam and document proportion of those children who received fluoride varnish at well-child exam)</td>
<td>(Designated Quality Improvement specialist/data analyst, perhaps front desk team member)</td>
<td>(Weekly)</td>
</tr>
<tr>
<td>(Example: Receive weekly reports of proportion of children receiving fluoride varnish at well-child exam and complete annual run chart to demonstrate change in percentage of children receiving fluoride over clinical year. Hang the chart alongside other quality improvement measures in the clinic.)</td>
<td>(Designated quality improvement specialist/data analyst, or perhaps the Dental Director)</td>
<td>(Monthly updates)</td>
</tr>
</tbody>
</table>

*Figure 7: Action Plan for Quality Improvement Strategy Example*

Use Figure 8 to outline your organization’s process for organizing, monitoring, and concluding results from integration data, keeping in mind your organization’s technical capabilities and resources available.

<table>
<thead>
<tr>
<th>Action</th>
<th>Responsibility</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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</tbody>
</table>

*Figure 8: Action Plan for Quality Improvement*

**Task #3: With the program leadership team, complete the three step Quality Improvement Strategy Development Process (Figures 4, 6, and 8) to appropriately define your organization’s goals and measures.**
The **Recommended Oral Health Integration Metrics tool** (Figure 9) outlines process measures used by various community health organizations around the country when the Implementation Guide was field-tested. This tool can be a helpful guide for those looking to develop specific metrics.

### Recommended Oral Health Integration Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Denominator</th>
<th>Numerator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of target population patients (regardless of whether they were seen for a visit in this timeframe)</td>
<td>All of the patients in the clinician panel who meet the target population criteria, regardless of whether they were seen for an office visit within the past 365 days</td>
<td>N/A</td>
</tr>
<tr>
<td>Percentage of total population screened for oral health risk factors and oral disease</td>
<td>All of the patients in the clinician panel who meet the target population criteria, regardless of whether they were seen for an office visit within the past 365 days</td>
<td>All members of the denominator screened, i.e., all for whom questions were answered and oral findings documented, within the past 365 days</td>
</tr>
<tr>
<td>Percentage of target population found to be at high risk for oral health problems</td>
<td>Number screened within the past 365 days</td>
<td>All members of the denominator who had positive responses to oral hygiene, diet, bacterial exposure, or acid reflux questions (see below), or had oral dryness on exam</td>
</tr>
<tr>
<td>Fluoride varnish application</td>
<td>Number screened within the past 365 days</td>
<td>All members of the denominator with an order for fluoride varnish in the past year</td>
</tr>
<tr>
<td>Referral to dentistry</td>
<td>Number screened within the past 365 days</td>
<td>All members of the denominator with an order for referral to dentistry in the past year, or noted to be under active treatment of a dentist</td>
</tr>
<tr>
<td>Completed referrals</td>
<td>Patients in target population with order for referral to dentistry within the past 365 days</td>
<td>Members of denominator for whom consultation report from dentist has been received</td>
</tr>
</tbody>
</table>

*Figure 9: Recommended Oral Health Integration Metrics
Team Development

As discussed in the Oral Health Implementation Guide by Qualis Health, three things are required for team development prior to oral health program implementation.

1) A clear definition of the actions primary care team members can take to protect and promote oral health in the primary care setting

2) A streamlined process for fitting oral health into the primary care workflow. This process must be clear, but flexible to be adapted to different team configurations, diverse populations, and varying organizational priorities.

3) A practical model for close collaboration between medicine and dentistry.

These three requirements will be addressed individually, as part of the team development phase of oral health integration.

1) Definition of Actions: Understanding the Oral Health Delivery Framework

Perhaps the most important aspect of the Oral Health Implementation Guide by Qualis Health is the Oral Health Delivery Framework. This framework is a conceptual model of the five actions primary care teams can take to promote oral health – actions that are all within the scope of primary care clinicians and their teams. It provides the basis to achieving any goals established by the program leadership team. A clear understanding of this framework is critical when moving forward with the implementation phase.

![Figure 10: The Qualis Health Oral Health Delivery Framework.](image)

Appropriate use of the framework first requires an understanding of the responsibilities of various care teams. *Figure 11* shows a clear definition of each team’s responsibilities in oral health integration.

### Medical and Dental Responsibilities Chart

<table>
<thead>
<tr>
<th>Primary Care Team Responsibilities</th>
<th>Dental Team Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Understand the pathophysiology</strong> – understand the processes that maintain the balance of oral health and how that balance is disrupted by disease.</td>
<td><strong>Accepting referred patients</strong> – the dental team is responsible for accepting the patients referred from primary care as established by referral agreements.</td>
</tr>
<tr>
<td><strong>Case finding</strong> – be able to distinguish between normal and abnormal oral presentations and refer patients with suspicious patterns to a dentist for diagnosis and treatment.</td>
<td><strong>Diagnosis and treatment</strong> - of oral diseases</td>
</tr>
<tr>
<td><strong>Risk reduction</strong> – identification and reduction of risk factors is a low-cost, practical, efficient primary care intervention that can drastically improve oral health outcomes.</td>
<td><strong>Patient identification and reporting</strong> - collaborate with primary care teams to develop a process for identifying patients referred from primary care, as well as drafting a formal consultation report that can be sent back to the primary care physician.</td>
</tr>
<tr>
<td><strong>Individualized medical therapy</strong> – recognize dry mouth as a symptom that indicates a likely medication side effect with a potentially serious negative impact on teeth.</td>
<td></td>
</tr>
<tr>
<td><strong>Care coordination</strong> – establishing and maintaining relationships with dental specialists is the backbone of the integration framework.</td>
<td></td>
</tr>
<tr>
<td><strong>Clinical quality improvement</strong> – measure the impact of primary care efforts so interventions can be adjusted as needed to reach established goals.</td>
<td></td>
</tr>
</tbody>
</table>

*Figure 11: Medical and Dental Responsibilities Chart*
It is essential for everyone on the pilot team to understand the context for oral health integration and the reasons why oral health integration is important to the strategic goals of the organization. The program leadership team (specifically, the clinical champion) is responsible for teaching the care team why oral health integration is important. This can be done in a number of ways:

- **One-hour didactic introduction using Clinical Content training presentations and case studies, focused on the specific target population.** These presentations describe the essential clinical information a care team needs to know in order to implement the Oral Health Delivery Framework.
  - Clinical Content Presentations and case studies for three high-risk target populations (pediatrics, diabetes, and pregnancy) are offered in the Oral Health Integration Toolset.
- **Smiles For Life** – a national oral health curriculum containing both clinical presentations (with speaker notes) for a clinical champion to present to their practice team and short, relevant online modules that can be completed by care team members directly.

2) **Workflow Optimization**

Once pilot goals and team members have been identified, the next step of team development is to map the current workflow and then map the future workflow, which will integrate the new oral health program. The pilot team will then test the new workflow and adjust as needed, prior to spreading the workflow to the entire organization.

Mapping your current state workflow gives the optimization team a common understanding in detail of the workflow they are planning to modify, preparing them to make decisions about the most efficient way to perform new work and redistribute existing work. Mapping also brings to light places in a workflow where the process is unstable, i.e., where there is variation contributing to confusion and sub-optimal outcomes. Keep in mind that oral health integration often entails inserting several new steps into an already well-functioning workflow. To learn more about workflow optimization, please read the Workflow Optimization tool – which contains an example of workflow optimization – prior to completing task #5.
Task #5: Complete the 5-Step Visual Workflow Mapping Exercise with the workflow optimization team – include clinical champion, members of the clinical team, quality improvement specialists/data analysis, HIT specialists, and patient partners.

5-Step Visual Workflow Mapping Exercise:

1) Document the segments of a typical primary care office visit in the current workflow.
   Example: Patient schedules visit
   Example: Clinical assistant rooms patient

2) Document the tasks that primary care team does to prepare for a typical office visit, map these on the current workflow.
   Example: Front desk gathers and documents insurance information
   Example: Clinician reviews charts prior to clinic visit

3) Using the Oral Health Delivery Framework as a guide, create a list of new tasks that need to be completed in order for the oral health processes to be integrated into the existing workflow.
   Example: Identify oral health risk factors via screening (ASK)
   Example: Sign orders for fluoride varnish (DECIDE)
   Example: Apply fluoride varnish (LOOK)

4) Design a future workflow, which integrates the new tasks that need to be completed for oral health integration.

5) Plan to test the future workflow by clarifying where the future workflow will be tested, when it will be tested, and when a follow-up meeting with pilot team members will take place.
3) A Collaborative Model

Many patients screened during the course of a primary care visit will need dental care, including definitive diagnosis and treatment that only a dental team can provide. Whenever possible, the primary care team should support patients’ existing relationships by referring patients who have a regular source of dental care to their respective dentists. It can be expected, however, that many patients seen in the primary care setting will not yet have a relationship with a dentist and will need guidance on referral resources. The basic premise of the Oral Health Implementation Guide by Qualis Health (*Figure 10*, page 16) is that referrals to dentistry should be as smooth as referrals to any other medical or surgical specialist—the burden should not be on the patient to coordinate transitions of care.
Strategies for Building a Referral Network:

Primary care practices will need to identify supportive dental partners in order to build a referral network able to serve the full diversity of its empaneled patients. Primary care practices should be prepared to identify multiple referral partners in order to meet the access needs of established patients. Even federally qualified health centers with co-located dental practices may need to partner (or contract) with local dentists or other community health centers in order to meet the access needs of their medical patients.

- Location, public transportation options, language preferences, and literacy levels, among other factors. If the organization has a patient and family advisory panel or quality improvement team, ask for their ideas and input.
- Because many patients lack dental insurance, all primary care practices should secure referral partners that accept a mix of referrals, including people enrolled in Medicaid and a limited number of uninsured patients, or offer a sliding fee scale.

Ideally, the organization’s referral coordinator will spearhead the development and maintenance of a dental referral network. Identifying this role and responsibility early on in the oral health integration process allows for smooth, coordinated patient care. The organization’s referral coordinator should read Qualis Oral Health Implementation Guide prior to completing Task #6.

Starting Small: As standards for EHR interoperability become more widely adopted and expand to include dentistry, information for dental referrals will likely be handled using electronic health information exchange like any other referral. In the meantime, most practices will need to get started using less advanced methods of information exchange, such as secure email, standard mail, and fax.

If using the EHR to track referrals is not an option, it is reasonable to create a standalone system using an electronic spreadsheet. The referral coordinator is probably the person best suited to operate it, because referrals go out through the referral coordinator and consultant reports usually are routed to the referral coordinator as soon as they arrive in the clinic. A referral tracking spreadsheet can be set up to document the date of key events, including:
- Referral ordered.
- Referral sent to consultant.
- Date the patient was seen.
- Consult report received.
- Consult report attached to referral order and routed to ordering clinician.

Task #6: Using the resources above and Section 6 of the Qualis Implementation Guide, establish a protocol for patients who need a referral to a dentist. Consider that multiple referral partners may be an option and that referral outside of a co-located dental team may be required (i.e. for children under 3 or for medically-complex patients).
Phase 2: Successful Implementation Strategies

**Information Gathering**

Depending on what goals are established during the planning phase, certain information must be gathered during the primary care visit in order to act appropriately. Using the Oral Health Delivery Framework (see Figure 10), information gathering occurs during the ASK and LOOK components.

**ASK**

The small set of recommended questions listed below focus on gathering information to identify risk factors for clinical conditions (tooth decay, gum inflammation, etc). Primary care teams have a short amount of time available, multiple competing clinical issues for which they are screening, and only a limited set of oral health interventions appropriate in a primary care setting. A more comprehensive list of questions can be downloaded as a pdf: Recommended Oral Health Screening Questions.

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Data Entry Template</th>
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<tbody>
<tr>
<td>Oral hygiene (adolescents and adults)</td>
<td>On average, how many days per week do you brush your teeth for at least two minutes, twice daily, using fluoride toothpaste and floss at least once daily? [0, 1, 2, 3, 4, 5, 6, 7]</td>
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<tr>
<td>Oral hygiene (children under age 12)</td>
<td>On average, how many days per week do you brush your child’s teeth or supervise/monitor your child brushing their teeth? [0, 1, 2, 3, 4, 5, 6, 7]</td>
</tr>
<tr>
<td>Oral hygiene (all)</td>
<td>Have you seen a dentist in the last year? [Y/N]</td>
</tr>
<tr>
<td>Diet (adolescents and adults)</td>
<td>On average, how many times daily do you consume starch or sugar (sugary snacks or sugary drinks) between meals? [&lt; 1, 2-3, 4-5, &gt; 6]</td>
</tr>
<tr>
<td>Diet (children under age 12)</td>
<td>On average, how many times daily does your child consume starch or sugar (sugary snacks or sugary drinks) between meals? [&lt; 1, 2-3, 4-5, &gt; 6]</td>
</tr>
<tr>
<td>Exposure to cariogenic bacteria (all)</td>
<td>Has anyone in your immediate family (including caregiver) had tooth decay or lost a tooth from decay, in the past year? [Y/N]</td>
</tr>
<tr>
<td>Dry mouth (adolescents and adults)</td>
<td>Do you commonly experience dry mouth (i.e. requiring swallowing water to eat crackers)? [Y/N]</td>
</tr>
<tr>
<td>Screening assessment for symptoms of oral disease (adolescents and adults)</td>
<td>Do you experience tooth pain or bleeding gums when you eat or brush your teeth? [Y/N]</td>
</tr>
<tr>
<td>Screening assessment of symptoms for oral disease (children under age 12)</td>
<td>Does your child complain of tooth pain or have signs of bleeding gums when they eat or brush their teeth? [Y/N]</td>
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</table>

*Figure 15: Recommended Oral Health Integrations Metrics From the Qualis Implementation Guide. Page 92*
The primary care team is not expected to make a diagnosis of oral disease, however, the team members are expected to recognize signs of oral dryness, tooth decay, and gum inflammation. The Smiles for Life Curriculum and Clinical Content Presentations (on page 18) provide excellent resources to familiarize clinicians with what to look for in the mouth. For each finding, there is a corresponding set of potential interventions. Information gathered during the quick visual exam will inform how the clinician moves forward through the DECIDE and ACT portions of the Oral Health Delivery Framework.

Task #7: Update the EHR to include a set of relevant Oral Health Screening questions. Ensure that these questions can and will easily be integrated into the primary care workflow by participating clinical team members. Integrate with the pilot team and schedule a follow-up meeting after two weeks of implementation.

Starting Small: If you are unable to update your electronic health records to include a set of relevant Oral Health Screening questions, consider providing a screening sheet to the patient during check-in that can be filled out and reviewed by the provider during the appointment. That screening sheet can later be used for data analysis.

Delivery of Services

The delivery of services in oral health integration programs will be largely dependent on the resources available and the clinical team’s capabilities. For some organizations, delivery of services will be limited to patient education. For others, application of fluoride varnish and tracking of documented referrals will be possible thanks to efficient use of Health Information Technology. Figuring out your organization’s capabilities should occur during the planning phase not during the implementation phase, in order to ensure that integration goals might appropriately reflect the organization’s resources.

DECIDE

Clinical decisions involve pattern recognition on the part of clinicians and their care teams, and they take place in the context of sharing information with patients. Decisions are easier when key information is organized in a way that drives a correct decision. Figure 16, guides the care team in deciding what type of treatment or referral any patient may require. This template is useful for organizing information and understanding appropriate interventions.
ACT
There are numerous potential interventions, but for the sake of simplicity, only four will be discussed here. A comprehensive summary of primary care clinical interventions can be accessed in the Qualis Implementation Guide or on the flash drive. The four potential actions of primary care teams include:

1. Individualized medical therapy – Clinicians may add, change, or discontinue medications in the course of medical management. This type of intervention is indicated for: medication side effects impairing salivary function, acid reflux, and medication to assist smoking cessation.

2. Coaching – patient education is a key component of oral health care. Oral health coaching may be tailored to a specific patient’s needs but may include:
   a. Age-appropriate oral hygiene goals
   b. Consequences of exposing teeth and gums to sugar and strategies to reduce exposure
   c. Additional coaching tailored to individual behavioral approaches, such as acid reflux
   d. Referral for smoking cessation or substance use counseling and treatment.

3. Apply fluoride varnish – Fluoride can be delivered in several ways (toothpaste, a mouth rinse). Fluoride varnish is safe, easy to administer, and appropriate for patients of all ages with signs of active tooth decay, root exposure due to gum recession, or modifiable risk factors for caries including poor oral hygiene, excess exposure to sugar, and oral dryness. The Minnesota Oral Health Coalition has created a brief fluoride varnish application training video that can be viewed within the Qualis Implementation Guide or on the flash drive.

4. Referral to dentist – For suspected oral disease discovered by the Information Gathering components of the Oral Health Delivery Framework, referral to dentistry is indicated.
**Starting Small:** A practice might start by putting up oral health education posters in the waiting room and giving each patient a handout on how to brush and floss properly. Next, build up to providing active oral hygiene training over time. A recurrent concept in oral health integration is to start small and expand the scale of things that work well. Start with ideas for patient education about which the team is passionate and expand as they gain confidence.

**Task #8:** Using the Summary of Primary Care Interventions and Figure 15, create a specific list of potential interventions that your primary care team will implement. Select appropriate education resources for your patients. Integrate these interventions with the pilot team and schedule a meeting for follow-up after two weeks.

**Phase 3: Quality Improvement**

*Using Data for QI*

The final component of the Oral Health Delivery Framework focuses on Documentation.

**Document**

The documentation of information as structured data makes it possible to create reports that measure the impact of the care team's work on their target population. As shown in Section 7: of the Qualis Implementation Guide: Using Data for Quality Improvement, these reports allow the care team to see the percentage of their target population they have screened and what they found on screening. They also make it possible to record the actions that were taken to protect patients found to have modifiable risk factors and to ensure patients with active disease received appropriate diagnosis and treatment from a dental professional.

Once the target population and the standard of care are defined as structured data, it is possible to build reports that provide a visual representation of the results of the implemented change over time. A picture of population health consists of the following elements:

- The target population.
- The patients being assessed within the interval specified in the standard of care.
- What was found in the patients assessed?
- What was done for the patients in whom a problem was found?

An example of this approach would be a practice that has chosen a target population of adults with diabetes. The standard of care the practice selected is for every member of the population to have their oral health assessed at least yearly, with the care team looking for signs of active gum inflammation and tooth decay. Those patients found to have active disease who are not already being treated by a dentist for this condition are to be referred to their own dentist if they have one. Patients with disease who have no dentist are to be referred to a dentist within the referral network.
Starting Small: Many health care organizations are unable to modify their user interface or create a reporting system to support this type of work. In those cases, there are several work-around strategies that may be of value:

- Free-standing registries for high-risk populations, such as patients with diabetes or those who are pregnant and women of childbearing ages, can often be used to track oral health information.
- Some EHRs allow users to build patient lists that include the most recent date of a test or procedure, such as fluoride varnish. These tools can often be used to assess specific workflows, such as a workflow designed to ensure every child under six receives fluoride varnish at least twice yearly.
- It is always possible to sample patients in a target population and perform limited chart reviews. This does not rely on EHR modifications. Consider completing weekly or monthly chart reviews to determine whether goals are being met.

Task #9: Using the Oral Health Data Reporting and Run Chart tool, the program team’s data analyst should generate monthly data summaries and run charts regarding integration processes and provide a summary to program leadership at monthly meetings.
Revisit Goals, Promote Spread

By setting up data reporting at the outset of the program, preferably before making changes to the workflow, organizations are better prepared to spread oral health programs to a larger scale. A clearly defined target population and the ability to generate reports showing the target population for each clinician and care team allow for goals to be revisited on a regular basis. Through this regular interval of evaluation, the standard of care for management of the target population can potentially be re-evaluated and redefined, focusing on:

- How the target population will be assessed and how findings will be documented using of the Oral Health Delivery Framework.
- How frequently the target population will be assessed, for example, yearly for patients with diabetes, or at the first prenatal visit for pregnancy.
- What the standard set of actions for specific issues found on assessment will be, i.e. high risk of caries will be addressed with fluoride varnish and oral hygiene/diet coaching; caries or periodontal disease will be addressed with referral to dentistry?
- How the responses will be documented. Create reports that focus on the following care gaps:
  - Patients in the target population who have not been assessed
  - Patients in the target population who were assessed and found to have oral health problems but who did not receive the standard intervention

Strategies for Spreading Oral Health Integration:

- During the pilot, involve representatives from care teams or sites who will be engaged in spread efforts, which may increase their level of buy-in.
- Use the pilot team to coach others. Identify training and mentorship opportunities for members of the pilot team.
- Involve key administrative and clinical leaders to develop and support the spread plan.
- Facilitate clinician-to-clinician discussion and planning; this increases the likelihood that clinicians will recognize value in oral health integration and may allay anxiety about the amount of work involved.
- Use data from the care gap reports collected by the pilot team, patient success stories, and staff and clinician satisfaction testimonies to inspire new care teams.

Task #10: If appropriate for your organization, develop and disseminate a spread plan. The spread plan may include modification of the original Quality Improvement Strategy goals. Opportunities to implement oral health integration more widely may include:

- Spreading from a single target population to other target populations
- Spreading from a single care team to other clinicians within the same practice site
- Spreading from care teams at one practice site to multiple other sites in the system
- Spreading from a single component of the Framework to multiple components
## Appendix A: Task Sheet Summary

Please use this sheet for your own reference. It can be used to monitor progress on specific tasks, as well as provide space for reflection and feedback on the integration process.

<table>
<thead>
<tr>
<th>X</th>
<th>Date Completed</th>
<th>Task</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Task #1: Complete the <a href="#">Oral Health Practice Readiness Assessment</a> and <a href="#">Oral Health Information Technology Assessment</a>.</td>
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<td>Task #2: Download, customize, and present the <a href="#">Case for Change PowerPoint</a> to key players at your organization. Use the Oral Health Integration Kickoff Meeting Agenda to guide the</td>
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<td>Task #3: With the program leadership team, complete the three step Quality Improvement Strategy Development Process (Figures 4, 6, and 8) to appropriately define your organization’s goals and measures.</td>
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<td>Task #4: Lead an interactive, clinical training for the primary care team – using the clinical content presentations (accessible here and on the flash drive) or <a href="#">Smiles For Life National Curriculum</a>. Be sure to include anatomy and physiology of the mouth, teeth, and gums; the pathophysiology of oral disease; and the actions a primary care team can take to protect and promote oral health (The Oral Health Delivery Framework).</td>
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<td>Task #5: Complete the 5-Step Visual Workflow Mapping Exercise with the workflow optimization team – include clinical champion, members of the clinical team, quality improvement specialists/data analysis, HIT specialists, and patient partners.</td>
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