SECTION 4

How to Prepare for Successful Implementation

Introduction

Successfully implementing the Oral Health Delivery Framework (the Framework) in a primary care setting involves thoughtful preparation. This section describes the planning, development, and composition of an oral health integration program. The roles that are necessary for the planning and piloting of the program are reviewed, strategies to engage patients and families are discussed, and common challenges and concerns are described, as well as ways to address them. The key events and tools available to support implementation are outlined in detail, including the:

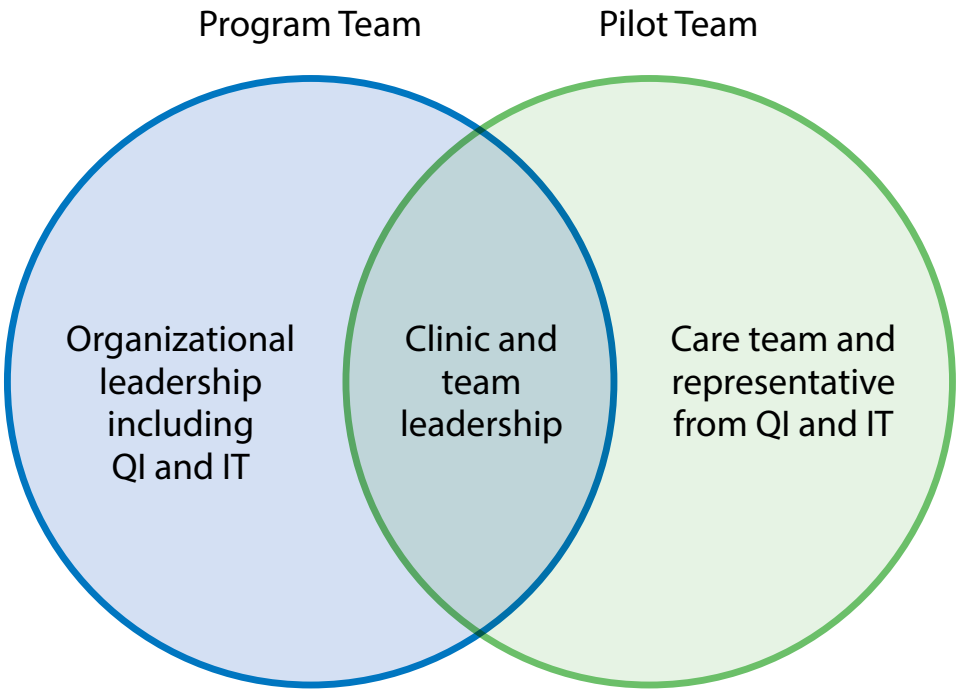
- Kickoff event.
- Clinical content training.
- Interactive workflow optimization mapping.
- Test of change.

"I would definitely bring in clinicians and staff from the beginning—they're the ones doing the work, and you often forget to bring the front line into the planning process. What has made our process successful is we haven't overcomplicated things. We thought really hard about how to keep it simple and avoid overwhelming or overburdening staff. We know we can't hammer everything out overnight, and that's okay. We'd rather start out slow and steady than put this enormous puzzle into motion too quickly." —Aron Goffin, MPH, Multnomah County Health Department–East County Health Center

Planning a Successful Oral Health Integration Program

A successful oral health integration program begins with the formation of a program leadership team, made up of clinic or system leaders and decision-makers who will be responsible for designing the program. An important component of this program design is a small-scale pilot test of change in a single care team with a specific target population. This provides an opportunity to test and modify the workflow and supporting information system until it works well enough to expand to the remainder of the clinic or delivery system, and to other populations. The pilot team is the testing group for the program design. Both the program and the pilot should be planned together, using the pilot as a model for the program. This means the program leadership team needs to include the clinical champion in whose team the pilot will take place. The program leadership team must also monitor the pilot closely so that the lessons learned in the pilot are reflected in the program. The relationship of the program team to the pilot team is shown in Figure 4.1. The overall sequence of the major milestones in program development is shown in Figure 4.2.

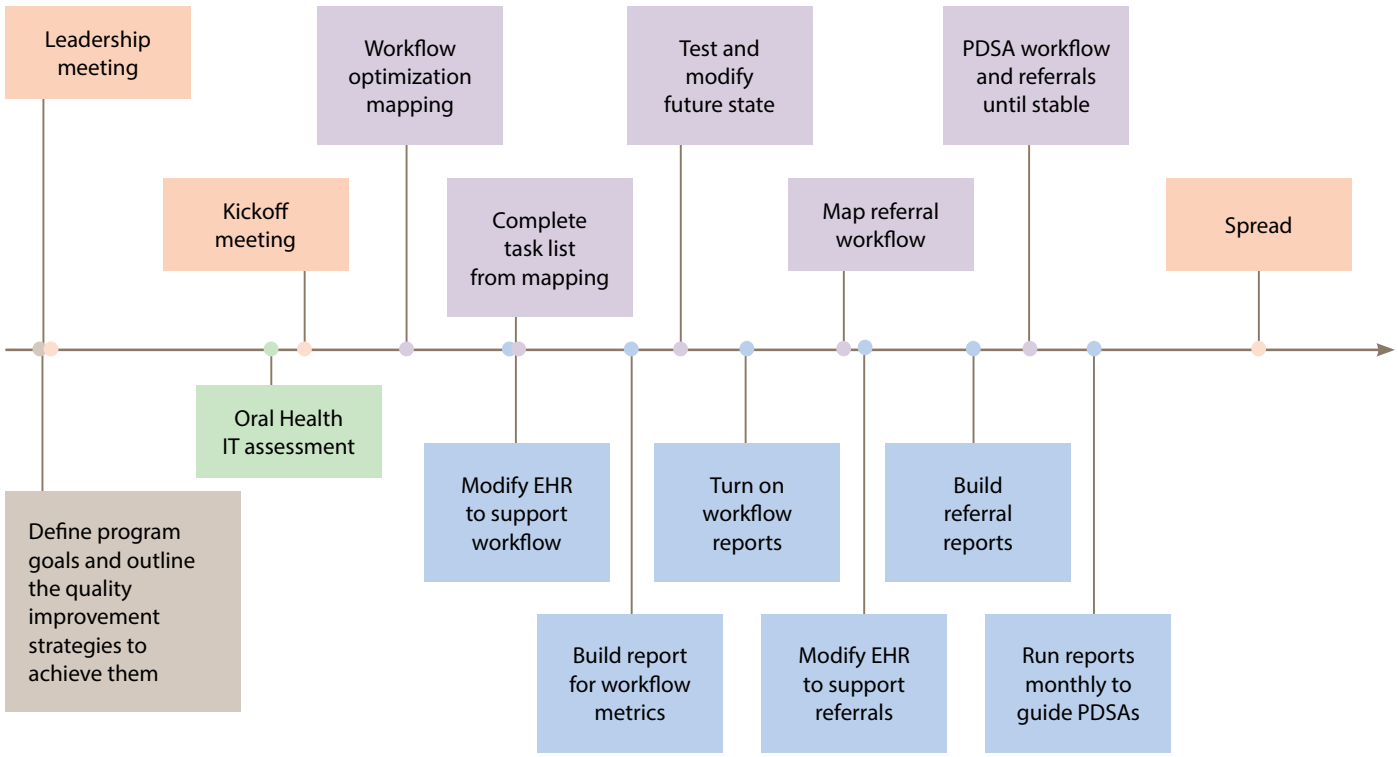
Figure 4.1: Overlapping composition of the program team roles and the pilot team



"Having a champion who doesn't think oral health integration is a big deal and is willing to just do it makes a big difference. It helps to have champions who aren't afraid of change."

—Elizabeth Aughney, DDS, One Community Health

Figure 4.2: Overall timeline showing the sequence of major events in program development



Establish the program leadership team

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.
- Organization and clinic operations.
- Organization finance.
- Quality improvement (QI).
- Health information technology (HIT).
- Dental director (if partnering with a co-located dental clinic).

The person who is responsible for the financial health of the clinic should be involved in planning the program to ensure it is aligned with the economic interests of the organization. In a smaller practice, there may be just two to three people who represent the roles listed above (e.g., the clinic manager, the clinician champion, and the QI super-user). There is value in having patient involvement when designing new services, and an effort should be made to include someone, perhaps a board member, who can provide that perspective whenever possible.

The program leadership team must be able to articulate to the practice or system as a whole that oral health is an essential component of primary care that has historically been left out, and demonstrate how oral health integration fits into the organization's strategic plan. A goal might be added to the strategic plan that states, "Develop an oral health program that identifies patients at risk of, or who currently have, oral disease, and provide appropriate care and care coordination services." If the practice doesn't have a strategic plan, oral health might be reflected in the mission statement. For example, "Provide comprehensive whole-person care to all patients."

Steps for the program leadership team

1. Include appropriate leadership representation.
2. Hold a planning meeting to articulate and document program goals, target population, timeline for pilot, and strategy for spread.
3. Choose a pilot care team representing all appropriate roles.

The program leadership team then must develop and maintain a plan to support the goals, strategy, and timeline of the program. This might be as part of a clinical pathway for prenatal care, a mechanism to improve diabetes outcomes, or a component of a larger effort to manage population health. The key role of leaders throughout oral health integration program development is to commit resources and remove barriers.

The program leadership team needs to hold a planning meeting with the following agenda:

- Establish the goals of the program:
  - Target population.
  - Standard of care.
  - Members of the program and pilot teams.
- Establish a timeline for the pilot:
  - Workflow optimization.
  - Adaptation of the electronic health record (EHR).
  - Quality reports.
- Develop a plan to spread the pilot to the rest of the organization once the pilot is stable.
- Commit resources (e.g., staff time, budget if needed for EHR modifications or fluoride varnish purchases).

Goals of the program

The program's goals need to be articulated in an Aim Statement; for example, "The goal of the program is to ensure that all adults with diabetes have their oral health evaluated annually."

Case Vignette: Selecting a Pilot Team at One Community Health

One Community Health is a federally qualified health center located in Hood River, OR, a rural community of 7,200 people. On selecting a pilot team for their oral health integration program, Elizabeth Aughney, DDS, at One Community Health shares, "We picked a pilot team that was most likely to get that this is important. We did present the program in advance at a clinician meeting. The director of the residency program and I spent one hour-long lunch session presenting to all clinicians." During the discussion that followed the initial presentation, "We heard every possible reason why oral health integration wouldn't work," shares Aughney. "It was hard to hear that early on, but it was also good because we could identify the biggest barriers and tackle them before beginning implementation. One of the biggest concerns was that the capacity in medical and dental is very different in terms of the number of clinicians, and we know that the biggest unmet need in the community is dental care. Clinicians were concerned that patients would need a referral to a dentist, but then they wouldn't be able to be seen." To help mitigate that concern, the program leadership team worked out a clear referral process for closing the loop and selected a narrowly focused target population (patients with diabetes with an HbA1c greater than 9.0). This has kept the initial numbers very low, and is letting the pilot team demonstrate that the referral process will work and patients can be seen for dental care.

Define the target population and explicit standard of care

Defining the target population relies on demographic and clinical parameters:

- Age: children, adolescents, adults, older adults, etc.
- Special populations: pregnant women, women of childbearing years, etc.
- Clinical focus: well children, adults with diabetes, etc.

"We want to keep it small, consistent, and feasible for a while to work out the kinks, so we can get comfortable with everything. We'll probably expand to more staff at the same site before we expand to other sites. We need a few months to look at more data and make sure the processes we have in place are manageable. Our clinicians say it is taking about two to three minutes to do everything—screening questions, exam, and fluoride varnish." —Aron Goffin, MPH, Multnomah County Health Department–East County Health Center

The standard of care should include how often an oral health assessment is to be performed, the type of visit in which it will take place, and what will be considered an abnormal finding. Abnormal findings may include:

- Modifiable risk factors for caries and/or periodontal disease.
- Presence of active tooth decay and/or gum inflammation.

"Our biggest challenge was choosing too small of a target population. Because the number of patients is so low, we haven't had the opportunity to work out all the bugs in our workflow and for everyone to practice." —Jane Dageenakis, Clinic Staff Supervisor, Rinehart Clinic

The standard of care also includes protocols the care team will use to respond to abnormal findings in the oral health screening assessment. These actions should be discussed in sufficient detail that leadership can be confident that the interventions are feasible with current staffing and resources.

The actions recommended for primary care fall into four categories:

1. Individualized medical therapy:
    - Discontinue/reduce dose of medications causing oral dryness
    - Add medications to treat oral conditions (fluoride, salivary aids, chlorhexidine rinse).
2. Patient and family education, counseling, or coaching.
3. Application of fluoride varnish in the clinic.
4. Referral to dentistry.

The program leadership team may choose to assess the readiness of the practice to begin oral health integration before beginning to engage the pilot team and plan the subsequent events. Refer to the Oral Health Practice Readiness Assessment for questions to consider and suggestions of conditions under which additional technical assistance might be necessary to support integration.

Workflow optimization is also an opportunity to assess whether the care team has sufficient capacity to perform the oral health tasks specified in the Framework. If staffing resources cannot support some of these actions, it may be reasonable to limit the scope of the program to those actions that are required or feasible within the specified timeframe. Taking steps to begin addressing oral health in primary care is important, even if a care team cannot do every action described in the Framework; the idea is to start somewhere and move forward.

"Keep it broken down into simple and small steps, and don't get bogged down trying to make too many changes at once. We focused on what was feasible and meaningful to the clinic as a whole, to clinicians and staff, and also to patients."

—Samantha Jordan, DMD, MPH,
Lowell Community Health Center

Build the Will to Change

Once a practice has determined it is ready to begin planning an oral health integration program, the next step is to "build will" among staff, patients, and other stakeholders for the changes required to achieve integrated care. As with any care delivery redesign, staff need to:

- Understand why change must occur, in this case, why oral health should be an essential component of primary care.
- Understand the intended outcomes of change.
- Have effective implementation strategies.
- Understand their role in the change process.
- Understand the benefits for patients, other staff, and themselves.

Identifying a clinical champion for oral health integration can help the practice gain momentum. For an example of how a clinical champion inspired staff to increase their fluoride varnish application rate, refer to Expanding Oral Health Access for Children: Early Experience from the Bluegrass Community Health Center.

"You really need to find an internal champion, someone who is interested in integration and can follow up and make sure it's happening."

—Leondra Weiss, RN, Harborview Medical Center–Women's Clinic

"Get buy-in from staff and start with the teams that are most excited to learn the skills of doing oral exams and painting on varnish—from there you'll be able to get others to buy in." —Cheri Gregson, PA-C, Grand Coulee Medical Center

Oral health integration will be a new concept for many staff. Practice leadership should be prepared to explain the value of integration and how it might look in the practice. This will help practice staff members who are not on the initial pilot team understand the importance of the work and feel that they are part of the larger program, which can help facilitate spread in the future. The Case for Change: Incorporating Oral Health in Routine Medical Care PowerPoint tool can be used to make a compelling argument for why the practice should offer preventive oral healthcare.

Strategies for Engaging Patients and Families in Oral Health Integration

An important early step in planning an oral health integration program is to understand the specific oral health needs of the patient population, overall health conditions (including chronic conditions), and the patients' and families' highest priorities for oral healthcare.

- Patient age: Does the practice serve mainly pediatric patients or young families? If so, preventive interventions such as fluoride varnish and culturally appropriate dietary counseling may be a high priority. If the practice serves mainly older adults, be aware that many may have already lost teeth due to dental disease and may need focused support for periodontal disease or denture sores. If the practice is planning an initial partial implementation of the Framework, consider what interventions are likely to be of highest value to patients.
- Literacy level: How do patients generally prefer to access health education services at the practice (in person, via video, or via print materials)? What literacy level do educational materials need to be at in order to effectively reach the patient population?
- Language preference: What languages are spoken in the practice's patient population?
- Past experience with dental care: Some patients may not have had regular access to dental care or oral health education in the past. These patients may need additional support or may have concerns (such as cost, access, or fear) about seeking dental care.

For additional considerations, refer to the National Standards for Culturally and Linguistically Appropriate Services in Health and Health Care (National CLAS Standards).

Case Vignette: HealthCore Clinic Lesson Learned: The Importance of Communication

At Healthcore Clinic, an urban federally qualified health center located in Wichita, KS (population 390,000), the clinical assistants are offering fluoride varnish as part of the planned future state workflow for oral health integration. Initially, many patients were refusing the service. One day, when a member of the program leadership team happened to be in the patient room and fielded a question about the cost of fluoride varnish, she realized this was likely a perceived barrier for the clinic's patients. Diane Peltier, PhD, chief operating officer, explains, "We hadn't educated the clinical assistants to inform the patient that fluoride varnish is a free service. We just assumed that they would know to tell the patient that there was no additional charge for the fluoride. It's really important to convey the same message to the whole team so you're not taking anything for granted." Following this discovery, the leadership team made a change. Peltier says, "We made sure to communicate to all of the clinical assistants that they need to tell the patients there is no cost when they are offering the varnish. Because of this new information, we expect to see our rates increase. It can't be overstated how important communication is with the whole team to make sure everyone is on the same page."

Preference of patients and caregivers

The best way to understand the priorities and preferences of the patient population is to ask directly. There are several ways to do this:

- Conduct a patient survey: Most organizations do patient satisfaction surveys. A set of questions, such as the following, can reveal unmet needs and give an indication of how to design a program that would meet the needs of patients. These questions could be asked at some point during the primary care visit (such as when the patient checks in for the visit), or included in an annual patient assessment or independent patient survey focused on oral health.
    - Do you have a regular dentist?
    - Have you seen a dentist in the past year?
    - Have you had a toothache in the past year?
- Host focus groups: An organization can use formal focus groups to gauge the level of patient interest in oral health and which aspects of oral health patients see as most important to them.
- Ask for guidance from patients who serve on an advisory council or improvement team for the practice: Including a patient representative on the program team for oral health integration will provide a perspective that is often missing and can help prevent mistakes.

The American Academy of Family Medicine has created a sample patient satisfaction survey that could be modified to include questions to determine how patients feel about having their oral health addressed in the primary care setting.

In addition, consider the following strategies to inform the planning:

- Refer to an existing community health needs assessment. Many counties do periodic assessments of unmet health needs. Hospitals are also required to regularly assess community health needs and may be a resource for local information. The American Dental Association has developed Oral Health and Well-Being in the United States, which summarizes self-reported oral health status data on a state level.
- Determine which local municipalities in the community have fluoridated water and which do not. My Water's Fluoride is a national tool maintained by the Centers for Disease Control and Prevention and allows individuals to search by state and by county to view their community's water system fluoridation. Forty states report information to this tool. Even in communities with fluoridated water, patients may be drinking water from non-public sources that are not fluoridated. Those without fluoridated water will be at higher risk for caries.
- Review the insurance status of the practice's patient population and look at census tract data to determine income levels. Populations without insurance and those without commercial health insurance are unlikely to have private dental insurance. These populations may be at higher risk for oral disease and are less likely to have a private dentist. Low-income populations are at higher risk for oral disease regardless of their insurance status.
    - Engage with local resources such as schools, churches, and other community organizations that may support oral health.

Case Vignette: Rinehart Clinic Community Partnerships

Rinehart Clinic is a small, rural federally qualified health center located in Wheeler (population <425) on the north Oregon coast. In implementing their oral health integration program, their program leadership team initially chose to focus on their pediatric population, and their staff received training on fluoride varnish application from the Oregon Oral Health Coalition, which also provided them with health education materials to share with patients. Rinehart Clinic already had a history of building community partnerships, and Keri Scott, director of quality, describes how they used this skill to introduce their program to the community: "Our greatest success has been the school kickoff events—we have done two so far. In the first workflow session, we identified that our outreach coordinator would come up with a kickoff event, and she had already been working with the schools, so she reached out and asked them what they might need. They suggested an assembly." The clinic's nurse did some research online and discovered a video on YouTube of a skit that a dental clinic had performed. The Rinehart staff re-worked the skit to develop one that aligned with what they planned to implement. Members of the pilot team and clinic staff played roles in the skit, such as Tooth Fairy and Plaque Monster. Scott explains, "We had been working on nontraditional community partnerships for a while and already had a connection with The Little Apple grocery store. They had told us previously that anything we're involved with in the community they'd like to be involved in too, so they offered to send a representative from the store dressed as an apple and participate in our skit. We also sent home information packets with all students. We shared the video in our social media, on the school website, and the grocery store website." The reaction from the students and school community has been very positive, and has created excitement about the oral health services offered at Rinehart. Scott shares her advice: "Focus on something that makes everyone excited—we got so excited to be in the schools; it just built everything up. When I go into the grocery store, people recognize me and call me the tooth fairy—it keeps the energy up around the program when you have something fun. Finding something that your team is excited about is key." View the Rinehart Clinic's oral health integration school video here.

Alert patients and families

Remember that integrated oral healthcare will be new for many patients. Consider using a variety of ways to alert patients and families to the program goals and how attention to oral health will positively impact their overall health, and ensure they know what to expect in their clinical encounters. For example, practices could use a poster, wall-board, waiting room video, or flyer to inform patients and families that the care team is implementing a new way to provide comprehensive care. These materials will let patients know how improved oral health will benefit their overall health, and what to expect during clinic visits (e.g., their clinician may ask to look in their mouth to see if their teeth and gums are healthy). A list of general oral health education materials and specific patient education resources on a variety of topics is available in the Summary of Patient Education Resources tool.

"We put together a local presentation at a conference to show what we are doing with oral health integration, and now we're putting it up on the wall at the clinic because we're all proud of what we're doing." —Leondra Weiss, RN, Harborview Medical Center–Women's Clinic

Get regular feedback and improvement ideas

Patient and family input is important at the beginning of any change initiative and throughout. Eliciting patient and family input can be accomplished through patient and family advisory boards, participation as members of the oral health integration team, patient experience surveys, or focus groups. Experienced patient and family advisors can also partner with practice staff to support community education on the importance of oral health. For more ideas on soliciting patient input and feedback over time, refer to the Patient-Centered Interactions: Engaging Patients in Health and Healthcare Implementation Guide.

The Oral Health Pilot

The program leadership team includes the clinical champion. That clinician and their care team will lead the pilot team and develop an operational plan to test the oral health integration program on a small scale in their practice. This allows the pilot team to try new workflows and processes, identify obstacles or barriers, work out solutions, and achieve a stable and efficient new workflow that can be easily shared with other care teams during spread. To do so they will need the support and content expertise of others, who may or may not be part of the program leadership team. Those content roles include:

- Quality improvement/population management.
- HIT.
- Referral coordinator.
- Operations supervisor.
- Patient perspective.

Care teams often lack experience, including patient perspectives, as they are developing new initiatives. When a patient or patient representative participates, they will often share valuable observations about patient experience that the care team may not have considered.

The pilot team will modify and develop the action steps that are essential for meeting the aim of the oral health integration program. This work is likely to entail structural modification of the electronic health record (EHR) user interface, adaptation of the workflow, and development of clinical protocols.

Larger primary care systems might choose to have two pilot teams, each focusing on a different target population (for example, pregnant women and pediatrics), so that an optimal workflow can be determined for different types of visits.

Pilot initiation

The pilot begins with three initiation activities, all three of which require time for the primary care pilot team to be out of the clinic and focused on these events. It is important for leadership to support this so that all of the pilot team members can be present at the initiation activities:

- Kickoff event.
- Clinical content training.
- Workflow optimization mapping.

Depending on scheduling priorities, the initiation activities can be combined into one or more events. Many of the sites field-testing the Framework were creative with the timing for these events, starting early before clinic hours began, or late after clinic hours ended. Some brought multiple sites together for a shared event that combined the kickoff and clinical content trainings. Each practice or system will need to determine the most efficient way to organize these three events to ensure adequate time is reserved while minimizing the impact on clinic time.

The kickoff

The kickoff serves several important purposes:

- It is an event marking the creation of the pilot team, which is larger than the clinical care team in which the pilot will be tested, and includes individuals such as a patient care representative with whom the care team may not have previously worked.
- It is a formal handoff from the program leadership team to the pilot team. This handoff includes a clear statement that the organizational leadership endorses the work the pilot team will do as "strategically important" and plans to implement it system-wide.
- It is an opportunity to present the case for change so everyone on the pilot team understands why oral health is a strategic priority.
- It ensures that pilot team members who were not part of the program leadership team understand the purpose of the work and how it will unfold.

The kickoff can be done in a one-hour, in-person meeting. A sample kickoff agenda detailing objectives and session content is available here. The Case for Change: Incorporating Oral Health in Routine Medical Care PowerPoint tool can be used to support this event.

Steps for the pilot test of change

1. Include care team members and other content roles representing expertise needed as the pilot and program are developed.
2. Conduct a kickoff meeting and clinical content training for the care team.
3. Conduct workflow mapping to evaluate current workflow and plan a future state for oral health integration.
4. Complete pre-pilot tasks identified during the mapping.
5. Test and evaluate the future state.
6. Once the workflow and processes are stable, spread the program to other teams, patient populations, or practice sites.

Clinical content training

The purpose of clinical content training is to:

- Ensure that each care team member has a basic understanding of caries and periodontal disease as chronic infectious diseases, and is able to distinguish a normal mouth from an abnormal mouth.
- Create a shared understanding of the clinical context for the work the pilot team is doing.

This can be done in a one-hour didactic introduction. Clinical content training presentations and associated case studies focused on the three high-risk target populations selected by the field-testing sites (diabetes, pregnancy, pediatrics) are offered in the Oral Health Integration Toolset here. These trainings describe the essential clinical information a care team needs to know to implement the Framework, and describe how the Framework can be implemented in primary care. We recommend that care team members also complete the relevant modules of Smiles for Life. Both sets of tools can be reviewed online, and can be downloaded with speaker notes for a clinical champion to present to their practice team in person. Although it is possible to carry out clinical content training remotely, the experience of the 19 clinics in which the Framework was tested was that in-person training was more effective.

"We made the Smiles for Life curriculum required for staff as part of their onboarding, and then annually for all staff."

—Donna Agee, Clinic Nurse Manager, Bluegrass Community Health Center

Developing clinical confidence

Clinical competence means having a command of the most effective interventions that slow or arrest disease progression, and recognizing when it is appropriate to refer for restorative procedures. Although clinicians will have a deeper understanding of pathophysiology than non-clinicians, presenting the clinical material to all team members together can help foster a shared sense of clinical responsibility within the team and develop the team's confidence in preventive oral healthcare.

Needs of non-clinicians

Non-clinicians need to hear that this is information they already know, although it is likely to be from the perspective of having had personal experience with caries or periodontal disease, or with children and other family members who have had a history of oral disease. For non-clinical staff, the goal is to give them a view into the disease processes so that they can appreciate the importance of their roles, as they assess patients and provide them with information on oral hygiene and diet, with a solid understanding of the context for the message. Didactic instruction is most effective when it is presented as in-service training by an internal clinical champion or a local dentist. Onsite didactic instruction provides an introduction to the clinical content, which can be augmented at greater depth with the Smiles for Life curriculum.

Needs of clinicians

Clinical content can be best presented by a respected member of the care team. The message for clinicians is that oral health is not new, and the mouth is part of the body. It involves the same biologic systems in which they are already experts:

- Anatomical structure and characteristics of different body tissue.
- Immune system and inflammatory response to infection.
- Glandular function and its autonomic nervous system control.

It helps to cover these topics at a high level to assure clinicians they are based on familiar concepts, and to highlight the interaction between oral and systemic disease as much as possible.

"We did the First Tooth Training through the Oregon Oral Health Coalition on fluoride varnish application. This was a free training, and they supplied informational tools, guides, and education materials for patients—they have been a great resource for us."

— Keri Scott, Director of Quality, Rinehart Clinic



The clinical content

The clinical content for clinicians and their care teams can be divided into three general areas:

1. Anatomy, physiology, and pathophysiology of the following structures:
    - Saliva's role in protecting oral health and the risks that some medications pose to normal salivary function.
    - Teeth.
    - Gums and soft tissue of the mouth.

2. Oral health in target populations: Additional focused content relevant to the target population chosen for the pilot:
    - Children: Emphasis on development of deciduous and permanent teeth; focus on caries; emphasis on diet, fluoride varnish, and oral hygiene of entire family to reduce exposure to cariogenic bacteria; and referral to dentistry for sealants on molars in older children.
    - Adults with diabetes: Emphasis on positive feedback loop between diabetes and periodontal disease; focus on oral hygiene, glycemic control, and measures to reduce bacterial growth; and referral to dentistry to treat active periodontal disease.
    - Pregnant women: Emphasis on periodontal disease and acid reflux, as well as referral to dentistry for preventive dental care during pregnancy.

3. The Oral Health Delivery Framework: The oral health clinical content introduces primary care clinicians and non-clinical care team members to the anatomy and physiology of the mouth in a way that makes caries and periodontal disease understandable on a big-picture level. The clinical content overview provides a context for the Framework, which defines what can be done in primary care to protect and promote oral health.

Potential for maximizing clinical assistants

Oral health integration offers many opportunities to maximize the role of the clinical assistant and share the work among members of the care team to ensure efficient clinic operations are maintained. Among the sites that field-tested the Framework, clinical assistants often took lead roles in the implementation of the Framework and ownership of the oral health integration work and were crucial to the success of the program.

"Our workflow process is heavily dependent on the clinical assistants, and they have reacted very positively to the additional work. Our clinical assistants have always been pretty involved clinically, particularly with the referral process. This wasn't something new, but it is something they enjoy doing so it is a really good fit."

—Michael Purdy, MD, Hilltown Community Health Center

1. The clinical assistant(s) supporting the pilot clinician are key members of the pilot team and need to be included in the workflow optimization mapping.
2. Clinical assistants are frequently responsible for more tasks than the rest of the care team realizes; sharing this information during the workflow optimization mapping is important to ensure that the Framework components can be integrated successfully.
3. Clinical assistants can perform many aspects of the Framework, including gathering information by asking questions, applying fluoride varnish, and providing oral health education and counseling. Clinics can create streamlined protocols to minimize clinician workload (such as automatic fluoride varnish application for eligible pediatric patients) depending on their need.
4. Clinical assistants may be responsible for setting up referral orders for the clinician to sign. They may also be responsible for ensuring the necessary information to support the referral is entered into the EHR, such as entering the patient's regular dentist.
5. Clinical assistants may be responsible for making sure the patient leaves with the necessary information about their referral, including the date and time of their appointment if it is made in the office, information about how to schedule their referral appointment, and reinforcing the importance of making and keeping the referral appointment.
6. Depending on the role of the clinical assistant in the implementation of the Framework, it may be helpful to have the clinical assistant involved in workflow training of the other care teams to ensure successful spread.

"The clinician impact has been minimal because I do almost everything. I try to make it as easy as possible on the clinician."

—Sheila Lien, MA, Community Health Centers of Benton and Linn Counties

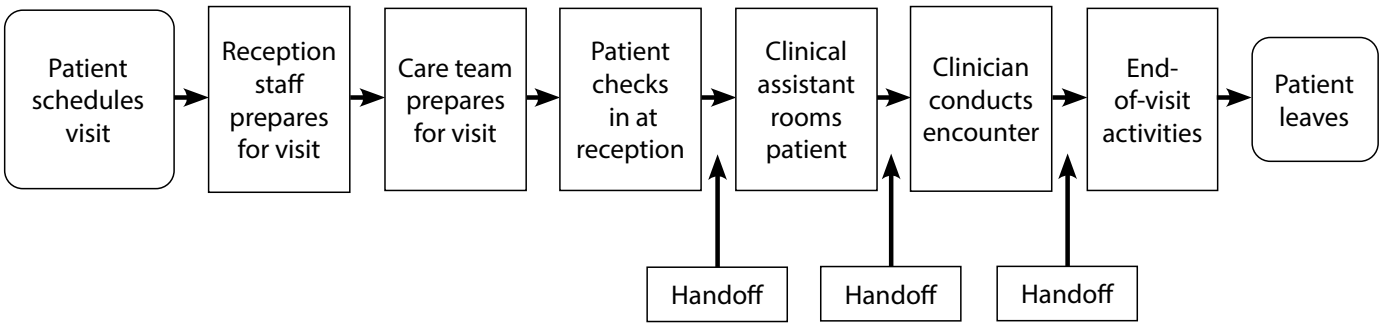
Workflow optimization mapping

Workflow optimization mapping is the initial focal point of the pilot team's effort. In this event, the pilot team agrees on the structural components, the processes, and the operational norms that will define the future state in which oral health will be integrated into primary care. The full mapping session needs to accomplish the following:

- Map the current state.
- Design a future state.
- Identify the tasks necessary to operationalize the future state, and develop a concrete plan to complete them.
- Set a date to test the future state.

Qualis Health has developed a set of tools for interactive workflow optimization that can be applied to oral health integration efforts. This technique is based on the observation that at a macro level, a standard primary care office visit workflow consists of eight separate, basic steps with handoffs between several key steps. Those steps are shown in Figure 4.3.

Figure 4.3: The steps of a primary care office visit



Each step and handoff can be accomplished in a number of ways, and can incorporate any number of other activities. Practices with experience in workflow redesign processes will likely recognize the principles described below and will be able to use an internal team member to facilitate the session. Practices that have not engaged in workflow redesign previously may need to seek assistance from an outside facilitator. The interactive workflow optimization technique was used in the sites field-testing the Framework with outside facilitators, and the sessions consistently took four hours with a small break in the middle. During this time, the care team first maps its current state, and then develops a future state that includes the minimal number of additional tasks required to accomplish a stated goal.

"Everyone understood the importance of good oral care in diabetes, so that is the population we started with. The dental director came and gave a clinical training for the primary care clinicians following the kickoff event, and that really helped to generate buy-in. Everyone was concerned about adding more work to a patient visit, so we worked carefully to make sure we could accomplish the oral healthcare efficiently within a 15-minute visit." —Dawn West, DDS, Community Health Center of Cape Cod

Mapping the current state

A primer on workflow optimization is included in the toolset that accompanies this implementation guide. The tool titled Oral Health Integration Workflow Optimization: A Streamlined Guide for Primary Care Practices is a step-by-step set of instructions for the interactive workflow optimization PowerPoint tool for mapping both current and future state workflows titled Workflow Optimization for Oral Health Integration. The tool addresses topics like defining goals, determining the right people to participate in the mapping, the time commitment, and how to use this tool successfully. Having the right mix of attendees is essential for success and should include all care team members who will be testing the new workflow during the pilot, as well as representatives from other roles involved in the new future state, such as HIT or a referral coordinator.

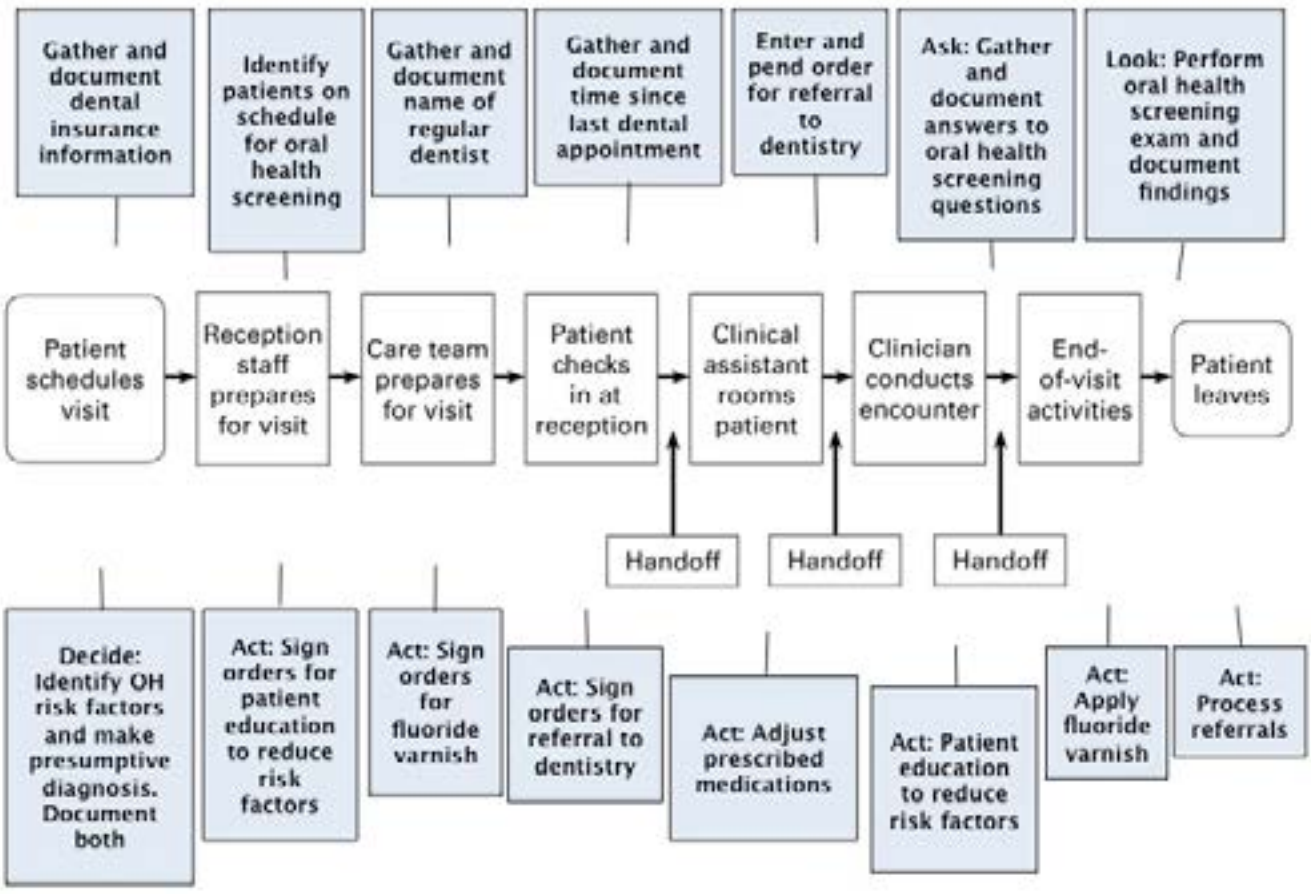
Designing a future state

The technique for creating a future state is similar to the process used to map the current state. For this portion of the mapping, the entire eight-step sequence comprising the office visit workflow, as shown in Figure 4.2, is displayed, surrounded by call-outs that together constitute all the activities other clinics have added to their workflow in their efforts to integrate oral health into an office visit. These call-outs reflect the possible oral health integration activities that a clinic may choose to add to their workflow. The goal is to select, from the total list of potential activities, those the pilot team decides they are able to include in their future state workflow. By connecting each activity to the appropriate workflow step, the resulting graphic visually displays the team member responsible for carrying out each activity.

The job of the workflow optimization mapping participants is to:

- Consider each potential additional activity, and decide if it is an important component of the future state.
- For each activity selected, decide in which workflow step it best fits.
- Specify, if necessary, the role or person who will perform the new activity.
- Think about what that person will need (training, tools, and information) to perform the added activity.
- Determine a timeline for completing training, tools, and information needed to implement new oral health activities.

Figure 4.4: Interactive workflow optimization tool for creating oral health integration future state



To download and use the interactive workflow tools for current and future state, click here.

"We mapped out exactly, to the smallest detail, what the patient was doing from start to finish. That helped us take a look at the reality of an appointment, and then we worked out exactly where we could implement the Framework, and who would do what. Being that detailed in the planning up front helped us be successful in implementation. We all thought we'd have to give something up to fit in oral health, but once we got the workflow worked out we were all surprised to see it really didn't take that much time, and we didn't have to lose anything to get it done." —Tina Moore, APRN, FNP-C, Rodgers Health

Make a list of tasks necessary to operationalize the future state, and develop a concrete plan to complete them.

The future state workflow will invariably require structural changes for it to function as intended. Examples include:

- EHR changes in how information is entered, organized, and presented to the end user.
- A physical place to apply fluoride varnish and a supply chain to ensure it is available.
- Patient education materials and ways to get them to patients.
- Formation of a collaborative dental referral network.

The future state may also require creating new operational norms, such as:

- Agreements on what is considered normal or abnormal in an oral health screening.
- Protocols for interventions based on abnormal oral health findings.
- New ways of interacting with dental colleagues.

Once the future state is mapped, it is important to make a list of identified tasks. For each task, designate a person responsible and a realistic date for its completion.

Post-workflow mapping phases

Once the workflow optimization mapping is completed, the real work begins. That work consists of:

- Completing tasks from the mapping.
- Testing and evaluating the future state and modifying as needed.
- Spreading the program to the rest of the delivery system.

"Find a clinician who is really interested, and then take a soft approach. Take your time, brainstorm, fit it in, and set yourself an internal team deadline to continue checking in on the process. Start small with something that you can grow. We had one piece of education, one handout, and an assessment."
—Heather Hicks, RN, Heart of Kansas Clinic

Task completion: Many of the tasks identified during development of the future state will be related to HIT modifications. These will be discussed in detail in the HIT section. During the task completion phase, the program leadership team will need to work closely with the pilot team to ensure that tasks are completed on schedule to the greatest extent possible. This may require interventions to remove barriers and shift resources to complete specific tasks.

Test and evaluate the future state: As soon as the tasks have been completed, the pilot team should begin to use the future state workflow. Like all quality improvement efforts, the key to success is a series of Plan-Do-Study-Act (PDSA) cycles. The strategy is to test the new workflow, measure to make sure it is working as intended, and then modify it as needed before testing it again. Measures used for PDSA cycles like this should be simple and easy to collect, for example, an end-of-the-day review of the charts of patients in the target population who were seen that day to count how many of them were screened and whether positive findings were treated according to the protocol. During this testing phase, the process measure reports will be turned on to begin collecting data for run charts as described in detail in Section 7: Using Data for Quality Improvement.

Spreading a successful pilot: The purpose of the pilot is to ensure that it works as intended and accomplishes its stated goal before rolling the program out to the entire delivery system. Data demonstrating a successful pilot are the foundation for successful spread. Spread does not happen overnight, nor does it need to happen all at once. The program leadership team will help determine the best way to spread—to one clinic care team at a time, to the full clinic team, to teams in other clinics in the same system, to other target populations, or to other interventions. This process is described in detail in Section 8: Leveraging Success: Spreading and Sustaining.

The Institute for Healthcare Improvement's Improvement Project Roadmap worksheet is a helpful tool for practices to track the full program development and pilot process from the beginning through spread.

Overcoming Workflow Optimization Challenges

Change management issues

Primary care is no stranger to change, and it should come as no surprise that a change on the magnitude of oral health integration may encounter challenges that could threaten the success of the effort.

"There has been some pushback around the question of, 'Whose job is it?' but I think that if the administrative leadership guidance continues to be that we are here to serve the patients, it's in your scope of practice, and this needs to happen, it will improve."

—Wendy Hughes, ARNP,
Grand Coulee Medical Center

Lack of shared understanding of the importance of oral health integration in meeting an organizational strategic priority

If the pilot team does not share the sense that the organization is committed to the program, team members are less likely to participate fully and follow through on tasks necessary to test the future state workflow.

Lack of continuity in pilot team members

It is important to begin a pilot by testing the process for oral health integration on a small scale with a clinical champion and highly functioning care team. The learning curve for success even on this small scale is significant. In conducting the workflow optimization mapping, not only must all the right people be present, but it is also a good idea to avoid having people present who are not part of the pilot team. In particular, clinicians who have not participated from the beginning of the pilot can be disruptive and use up valuable time with requests to back up and explain the Framework and the clinical content. It is the job of leadership to ensure not only that everyone on the care team participates fully in each stage of the pilot, but also that people are not brought into the pilot partway through without adequate preparation.

Competing priorities

Competing priorities are a daily fact of life in primary care. There are several ways to minimize the risk that oral health integration will be undermined by this reality.

- Ensure the pilot team understands their key role in the workflow optimization mapping.
- Acknowledge competing priorities in the daily work life of the care team, and help them develop tactics to deal with this competition, including accepting the fact that sometimes not all care gaps, including oral health, can be addressed by the care team in a single visit. Often other issues take priority. The goal is to have a plan to bring patients back to deal with unmet needs.
- During a workflow optimization mapping, listen to care team members and understand that what may sound like resistance may be a realistic appraisal of inadequate resources and competing priorities.
    - Be prepared to scale back the scope and additional work of the future state.
    - Ask "What would it take?" to understand underlying concerns.

"We're focusing on the integration of oral health and behavioral health in primary care, and it is challenging for clinicians from all three disciplines to come together with an EHR administrator and agree on the necessary modifications to make sure they all have what they need to serve the patient in a meaningful way."

—Turner House Children's Clinic

Adequate referral capacity

Clinicians may be reluctant to begin offering screening assessments or preventive interventions if they do not have confidence that there are resources available to provide treatment if they identify an oral health problem. Referral capacity will vary by community and clinical setting. Frequently the number of referrals is small initially, and the capacity of community dentists often grows as the relationship with a medical practice is strengthened over time through consistent ongoing communication between the designated contacts on the primary care and dental teams. Section 6: Structuring Referrals to Dentistry explores the goals of structured referrals and offers practical advice on how to build and sustain a dental referral network.



Addressing common concerns

Primary care teams frequently operate in a stressful environment in which they have inadequate time to address all of the health issues during office visits for which they are accountable. Additionally, workflow optimization often forces changing operational norms that can be challenging for care teams and patients alike.

Clinicians:

- Many clinicians feel they are too busy to address oral health. It helps to let the pilot team pick the oral health tasks they think they can incorporate into their workflow. Many of the tasks can be delegated to clinical assistants on the care team.

"There was more initial pushback from the clinicians, though it seems like we have turned a corner now. The pushback was due to changing a workflow that they felt was working. It seemed initially like we were asking them to do more work to achieve the same result. Now they're seeing that data supports funding, so they're seeing a benefit to doing this in a more structured way. The initial chart audit we did showed almost no referrals following a positive screening, since the clinicians were not making structured referrals at that point. That was a big motivator for them to start making the structured referrals, since they wanted to get credit for what they were doing."

—Michael Purdy, MD, Hilltown Community Health Center

- Oral health preventive messages can be woven into other health education conducted during adult primary care visits with very little impact on clinician time.
- Clinicians usually understand the value of oral health to their patients. They come to work expecting to be able to solve problems for their patients, and they dislike having to tell a patient, "You have a dental problem. I have nothing to offer. You need to see a dentist." One of the most compelling ways to engage clinicians is to present integrated oral health as a solution to that situation, so the clinician can instead say, "I know someone who can help. Let me set it up for you."
- Clinicians often have an understandable desire to stay within the boundaries of their clinical competence. The best way to help clinicians overcome their concern that they are not trained to recognize and treat the teeth and gums is to present it as material they already know. It is the same mucosa, the same neuroglandular function, the same immune system, and the same bacteria about which they have expert knowledge. Their primary responsibility is to recognize abnormalities, provide preventive interventions as possible, and refer if needed.

"When you're in our clinic and you see all those children with caries or crowns, that's pretty motivating! Initially, we didn't know what to do about it, but now we have something we can actually do to address it."

—Nandini Sengupta, MD, Dimock Community Health Center

Clinical assistants:

- Clinical assistants frequently are trying to do more tasks across a number of clinical topics while rooming patients than time allows. One way to manage this heavy workload is to have clinical assistants review charts prior to the huddle, so the care team can use the huddle to prioritize the additional clinical tasks that could be done while rooming each patient. The clinical assistant can then work down the prioritization list as far as time permits. Oral health integration must respect the care team's need to stay on schedule. In time, they will discover how little additional time addressing oral health actually takes.
- The concern about competing demands is often best addressed by adhering to a workflow optimization process in which the care team participates in decisions about which components of the Framework will be included in the workflow, and ways to minimize the additional work that this entails.
- Clinical assistants frequently relate to oral health issues from a personal health perspective, being either a parent of, or someone with, oral health concerns. It helps to emphasize the impact of improved oral health on patients and their families, as well as the positive impact of getting personal guidance for preventive interventions and assistance with referrals.

Administrative leaders:

- Administrative leaders are often concerned about the financial implications of integrated care. As a practice considers an integrated oral health program, be prepared to speak to this concern. Payment varies by state and by payer, but is generally available for children. Refer to the American Academy of Pediatrics (AAP) Oral Health Reimbursement Chart for state-specific information about Medicaid reimbursement. Moving forward, more payers will be using value-based reimbursement models, making the use of a population health management approach even more important for primary care. More detail is provided in Section 8: Leveraging Success: Spreading and Sustaining. There is often a tension between a deeply felt desire to be doing everything possible for patients and the reality of the fee-for-service reimbursement system in which clinics struggle to survive with little financial reserve.
- It's possible that the anticipated financial impact is greater than the reality.

For more ideas on building will, and on the role of leaders in guiding change, refer to Engaged Leadership Implementation Guide.

Patient and family members:

Although most patients appreciate the attention paid to oral health, others may find the new emphasis surprising or even concerning.

- For patients or caregivers who express a reservation, the clinician or clinical assistant should explain what they are looking for and why. Additional explanation is usually sufficient to address patient concerns.
- In some communities, there is resistance to the use of fluoride in drinking water. Clinicians should remember that most patients respond well when scientific information is presented in frequent positive messages. Even patients who have concerns about fluoridated community water may be open to fluoride varnish and fluoridated toothpaste once safety information is provided. Including a patient representative in the planning process can help prepare care teams to address common concerns.

Case Vignette: Patient Reactions to Field-Testing

Steve Wrightson, MD, describes how the Bluegrass Community Health Center handles patient concerns. "One of the biggest challenges the clinicians face is if someone doesn't want fluoride varnish. Refusal usually comes from a lack of understanding about what fluoride varnish is, and what benefit it provides. This is a familiar situation for clinicians, with patients often initially refusing other procedures like HIV testing. Patients initially refuse, the clinical assistant provides additional education, and if they still refuse the clinician can go in and give them information about the importance. That usually works." To learn more about the work of the Bluegrass Community Health Center, refer to their case example.

"Patients have really loved, across the board, having the dental assistant do the fluoride for them. He's making a really good connection with families, and is able to answer all of their questions in Spanish in depth. Patients ask questions about oral health in general, why restorations would be needed in baby teeth, the value of baby teeth, and so on. No one has declined fluoride varnish over concerns about it, only if they had just recently received it at the dentist. —Turner House Children's Clinic

"Patients are sometimes surprised and they ask, 'Why do you want to look at my teeth?' They don't see the value of oral health. When you talk to them about the importance of seeing the dentist, you have to really sell the importance of dental care. Insurance is the biggest barrier, especially for patients with Medicare. Our dental clinic has a sliding scale, but when you're struggling to make rent every month, even low-cost dental care seems like a luxury.

"I had one patient where I hadn't looked at his teeth in a while and when I did I was horrified; he had horrible dentition. I said he had to go to the dentist, but he was afraid they would do extractions and didn't want to go. I was able to get him to understand the importance of getting dental treatment, and they did have to do extractions. His mouth was terrible but now is healing up." —Benjamin Lightfoot, MD, Brockton Neighborhood Health Center

"The very first thing I say before I ask the screening question is 'We focus on the whole person and oral health is included in that, so if you don't mind I have a few questions I'd like to ask you about your dental hygiene.' No one has said no. I explain that it is still important to see the dentist. Dental care is so connected to teeth, and people don't understand it's more about oral health overall."—Sheila Lien, MA, Community Health Centers of Benton and Linn Counties

"The patients are very appreciative and grateful. We had a patient who was very high functioning, it was her second baby, and she had been trying for months to get seen by a dentist. We called for her and were initially told that a new patient couldn't be seen for six months. We kept working with them, and I was able to help her get an appointment before her due date. We've been given permission to address this need—before, we felt like there wasn't really anything we could do. We've been doing a lot of active care coordination that has been benefiting our patients."—Leondra Weiss, RN, Harborview Medical Center- Women's Clinic

Where to start with the Oral Health Delivery Framework

If a practice lacks the resources to implement the Framework in full, consider taking an incremental approach to implementation and plan a staged implementation effort. How might this look?

Begin with screening and referral: If a practice has a well-tuned medical/surgical referral process but has not yet invested in the clinical skills of medical assistants or trained staff in effective health education strategies, consider beginning the oral health integration effort with screening and referral. Develop a plan to add preventive interventions (such as dietary counseling and oral hygiene training) over time as the practice works to enhance its ability to deliver effective team care.

Begin with risk assessment and risk reduction: If a practice has well-functioning care teams and staff trained in goal setting and self-management support but has not yet committed to tracking medical/surgical referrals, consider focusing first on risk assessment and risk reduction and plan to add structured referrals as referral capacity for all specialists is enhanced.

Health Information Technology
Assess and Build Capacity

Work-arounds

Many healthcare 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 years, 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.

Assessing the HIT Environment

When assessing the HIT environment before starting an oral health integration program, one of the most important tasks is to determine whether the organization has the ability to modify its EHR by creating data entry templates to support this work. It is equally important to understand how the information captured in the ASK and LOOK data entry fields is stored, and to assess what it will take to use that information to build quality reports for process measures. The use of HIT for population reporting as it pertains to oral health will be discussed in greater detail in Section 7: Using Data for Quality Improvement. The key points for assessment of the capacity of an organization's HIT to support oral health integration, both in terms of data entry and quality process measure reporting, are shown in Table 4.1. Download the modifiable Oral Health Information Technology Assessment tool to assess practice HIT capacity.

Table 4.1: HIT assessment for oral health integration

Required Features	Technical capability to modify the EHR	Organizational willingness to modify the EHR
User interface changes: • Data entry • Alert to care team that oral health assessment is due	• Access to programming • Someone capable of programming changes	• Organizational priority • Adequate resources • Collaboration between care team and HIT
Population reporting: • Definition of target population • Point prevalence reports (See Section 7: Using Data for Quality Improvement} • Numerators and denominators by clinician • Run charts	• Reporting data base • Query writing software • Database analyst to write queries • Clinician/QI team for report validation	• Organizational priority • Resources allocated • Collaboration between quality improvement staff and HIT staff to ensure report methodology supports population reporting

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 defined in Section 3: The Oral Health Delivery Framework. 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.

Starting small: Select one measure, and run one report to test the process. From there, more measures can be added and the process can be automated and included in regular reports reviewed by the clinic team.

It may be tempting to try and create clinical reports and user interface changes before the care team maps out exactly how it wants to implement the Framework. However, until the care team has agreed on a future state workflow, there is usually no shared vision for how the program will work and how the information system should be modified to support it. Tip: Make HIT modifications after the future state workflow has been determined.

To learn more about field-testing sites' experiences with data collection and HIT work-arounds, see Section 9: Field-Testing Results and Case Examples.

Supporting Materials for Section 4

Oral Health Practice Readiness Assessment: This PDF tool walks through the key practice components that are necessary to support oral health integration, and describes conditions that may support full implementation, as well as conditions that may indicate that additional technical assistance may be required to achieve full implementation.

Sample Oral Health Integration Kickoff Meeting Agenda: This modifiable Word tool presents a draft agenda used by field-testing sites to guide the kick off meeting for the oral health integration program. The agenda suggests timing and topics for discussion, and includes resources to share with attendees.

These clinical content presentations were designed for the sites field-testing the Framework with the goal of providing the necessary information a primary care practice would need to understand the 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. They are designed for a clinical champion to provide to a care team at the beginning of the oral health integration work, and they include two case studies on each topic that can be used to engage a care team and begin the conversation about how the work can be done.

Clinical Content Presentation and Case Studies: Pregnancy

Clinical Content Presentation and Case Studies: Diabetes

Clinical Content Presentation and Case Studies: Pediatrics

Oral Health Integration Workflow Optimization: A Streamlined Guide for Primary Care Practices: This PDF tool provides a detailed guide for anyone who is planning to conduct a workflow optimization mapping session to integrate oral health into primary care. It reviews the seven key steps in the workflow optimization process, and describes in detail how to execute each step including time commitment, supplies needed, and tools to support the mapping.

Workflow Optimization for Oral Health Integration: This interactive PowerPoint tool was developed to streamline the traditional workflow redesign process. It allows a practice to walk through the standard steps of a primary care practice visit and determine where to fit in the components of the Framework they plan to implement, and determine who should carry out each component.

Oral Health Information Technology Assessment: This PDF tool guides a practice through the process of identifying their practice's technical capabilities and organizational willingness to modify their EHR to support oral health integration. Assessing existing barriers is helpful to determine what work-arounds may be needed.