Introduction

“Workflow optimization mapping” is a major event in quality improvement methodology. The intent of this work may be to reduce the effort required to achieve a specific outcome or to improve the outcome itself. The goal may also be to add additional tasks to an existing workflow with the least possible disruption, identify issues that need to be addressed, or determine clear action steps to move forward. The coach’s goal is to assist with the details of each step to ensure that the overall effort of oral health integration is properly planned, focused, and executed, so the clinic can be successful in achieving its desired goal.

Pre-work

Planning the Effort: To be successful, workflow optimization must be well planned. This means meeting with leadership to ensure that the effort is aligned with the organization’s highest priorities and that it has the resources and support required to ensure success.

The coach’s role in planning the workflow optimization effort is to facilitate a 60–90 minute meeting of the program leadership team (someone from clinic leadership, a clinical quality improvement leader, and someone from health information technology [HIT]) in order to obtain agreement on answers to the following questions:

1. What is the scope of the pilot?
2. How will we measure the impact of workflow optimization?
3. What location and clinical team will test the future state workflow?
4. Who are the six to ten members of the pilot team, including the team leader?
5. What is the initial plan for sustaining and spreading the future state through the organization? What kind of data from the pilot would be most useful in supporting spread efforts?
**Planning the Workflow Optimization Mapping Event**

The total process of workflow optimization mapping takes between three and five hours, broken into the following segment times:

- Current state mapping: 1–2.0 hours
- Short break: 0.5 hours (this time will vary, depending upon event structure)
- Future state mapping: 1–2.0 hours
- Planning to test future state: 0.5 hours

**Time Commitment:** The total time spent on the process of workflow optimization mapping depends on the coach’s experience, as well as the clinic’s prior experience with quality improvement methodology, the complexity of the problem to be addressed, and whether the appropriate team members are participating. There are a few options for reducing the burden of this time commitment on the clinic, including breaking the event into smaller one- or two-hour segments and scheduling them at times that limit the impact on clinic productivity (for example, before or after clinic hours). Some of the orientation activities can potentially be done in advance using virtual conference technology. The remaining activities should be done in person with clinics and optimization teams new to the process, although an experienced optimization team may be coached remotely for some uncomplicated workflows. Reducing the event time below the recommended segment times is likely to come at a cost of less time for team members to understand the current state and explore creative options for the future state.

**The Optimization Team:** The 6–10 members of the optimization team should include:

- One representative for each role in the workflow, including clinician, clinical support staff, and clerical office staff.
- All members of the care team in which the future state workflow will be tested.
- Someone from clinic leadership.
- A representative for any role that may be involved in a future state for the workflow.
- A person with detailed knowledge of the information system’s user interface and its modification potential, who can address the HIT needs of the pilot.
- Someone who can represent the patient perspective.

In addition to representing roles involved in the workflow, the optimization team should be a mix of people who have been with the organization for a number of years and bring “institutional memory” to the process and others new to the organization who can bring a fresh perspective and question assumptions.

It is important for the coach to get a sense of the optimization team’s likely level of enthusiasm for the project. A team that has undergone multiple recent workflow redesign efforts may be more responsive to an accelerated current state mapping approach (further described below). A team that has never mapped their workflow before is likely to respond to, and benefit from, a full, in-depth interactive workflow mapping exercise.
Maximizing the Efficiency of the Mapping Event: While the Readiness Assessment can assist in determining whether the practice is ready to begin oral health integration, there are specific questions that can help the oral health integration coach make sure the practice is prepared for workflow mapping and designing a future state that incorporates the steps of the Framework. Until responses to these questions are affirmative and confident, the practice may not be ready to begin the workflow optimization mapping required for oral health integration. (See Appendix A for pre-questions for workflow optimization mapping.)

There are several additional things that can be done to maximize the efficiency of the event.

Assessing Health Information Technology in Advance: The coach must understand the optimization team’s ability to ask for and obtain modifications to the electronic health record (EHR) to support the future state workflow. HIT is used to manage information for clinical activity using three types of tool sets.

1. Documentation: These are tools used to document, in templates and structured data fields, what patients say and what care team members find when examining patients. Documentation also records decisions made by clinicians in observation of oral problems as well as orders for tests, treatments, and referrals. Completed orders serve as documentation of completed actions.

2. Clinical decision support: These are tools that organize information previously documented as structured data, to guide the decisions that the care team and patients make.

3. Reporting functionality: These are tools used to measure outcomes. See Figure 1.

Figure 1. The flow of information in the course of delivering care

Clinical decision support and reporting tools can only use information that has been entered in the EHR as structured data. Information entered as free text is unavailable for use by these tools. The more coaches understand about the ability of the clinic to modify its electronic tool sets, the more easily they will be able to focus on realistic ways the information technology can be leveraged to measure and describe what the workflow is accomplishing. Refer to the Data Flow for Oral Health Reporting coaching tool for more detailed information about the reporting process.

The Oral Health Information Technology Assessment tool is designed to be used prior to the workflow optimization mapping event by a coach in conversation with someone in the practice who is knowledgeable about the capabilities of the HIT platform.

Documentation at the User Interface: The ability of the healthcare organization to modify its information tools at the local level is determined by both technological and organizational factors. The most important technology factor to know about a documentation tool (usually an EHR) is whether it is possible to modify it at a local level to document new information as structured data. If it is possible to modify at the local level, it’s also important to know whether the resources are available to support this modification. The most important organizational factor to know is whether the technology service vendor allows modification of information tools at a local level and, if so, whether the modification is an organizational priority. To capture new information as structured data, HIT modification must be both technologically and organizationally feasible. This assessment tool is designed to quickly identify barriers to capturing new information, and guide efforts toward solutions that are most likely to be successful.

Clinical Decision Support: The Oral Health Information Technology Assessment tool also allows a coach to determine, prior to the workflow mapping, which clinical decision support tools can be modified at a local level to support workflow optimization. The same technological and organizational criteria apply as in the discussion of documentation, with the understanding that clinical decision support tools can only use structured data.

Reporting: Clinical reporting capability is determined by whether data captured in modified documentation templates or data entry fields are included in a reporting database, whether there are analytic tools robust enough to allow customized reporting, and whether there is someone capable of using the analytic tools to write new reports.

Assessing Practice Transformation in Advance: It is advisable for the coach to have some sense of where the practice stands with each of the foundational Change Concepts for Practice Transformation prior to the workflow optimization event. Integration of oral health touches on all of the change concepts. Although a formal PCMH Assessment may not be necessary, it is important to understand the level of commitment the organization’s leadership has for the effort, how much experience the clinic has with quality improvement methodology, whether they have empaneled their practices, and how the care teams are functioning and communicating.
**Referral Networks and Care Coordination:** Coordinating referrals is a challenging activity requiring high-level functioning with the foundational change concepts. Oral health screening assessment and referral to dentistry for many practices means creating a structure for dental referrals where none existed previously. There are two specific aspects to this challenge:

1. Identifying a network of dentists willing to accept referrals, and setting up referral agreements with them.
2. Developing formal orders for referrals to dentistry that are no different in structure than referrals to an otolaryngologist (ear, nose and throat) specialist.

If the clinic has a functioning referral system for medical-surgical referrals that includes referral tracking, dental referrals can fit into this system. Frequently, however, efforts to create structured referrals to dentistry uncover major problems with the usual referral system. These problems include bottlenecks in getting insurance authorization, long waits before patients are offered appointments with a consultant, and no system to identify which referrals have been completed (i.e., results/notes are in the EHR and receipt has been acknowledged by the ordering clinician). In addition, often there is poor communication between the referring clinician and specialists, resulting in specialists frequently not understanding the context for the referral, and referring clinicians frequently not receiving a consultation report before they next see the patient. The most effective way to address a problematic referral process is to pick a single specialty, which could be referrals to dentistry, and use the standard quality improvement methodology to 1) define the goals of the process, 2) select metrics by which to gauge improvement, and 3) map the current workflow and then create and test a future state workflow designed to result in improvement.

Coaches should consider identifying, in advance of the mapping event, local resources for dental referrals, including dental stakeholder organizations (e.g., state dental associations) and community health centers with dental services on site. Coaches may need to proactively introduce primary care teams to dentists and dental offices willing to accept formal referrals in order for structured referral relationships to take hold.
The Workflow Optimization Mapping Event

The Workflow Optimization Mapping Planning Checklist (Appendix B) can be a useful tool to assist a coach in making sure all is ready for the mapping session, and all steps have been completed during the mapping event and in follow-up. Failure of optimization team members to complete clinical content training during the kickoff meeting decreases the probability that they will fully understand the context for the workflow optimization mapping event, which may jeopardize its success.

Current State Mapping: The purpose of current state mapping is to give the optimization team a common understanding in detail of the workflow they are planning to modify. Frequently, care team members have a limited understanding of the parts of a workflow in which they are not directly involved. By mapping the workflow, the optimization team prepares 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.

Time Requirement: Most workflows can be mapped in 60–90 minutes. This allows time for team members to become familiar with the process without being rushed to complete the task, and creates time for a creative dynamic to develop among team members who may not talk to each other very much during a normal clinic day. Team members are given a forum in which to explain to others what they do in their part of the workflow, as well as learn about the roles of others. It allows time for sufficient detail to emerge about steps that may otherwise be overlooked. It also allows time for ideas to be formulated and discussed that may be relevant in developing the future state.

A Streamlined Current State Workflow Mapping Process

For practices in which the streamlined PowerPoint process cannot be used because of technology or facility issues, a more traditional paper-based mapping process may be conducted. The following reference may be useful for coaches who have not conducted paper-based workflow mapping: AHRQ Practice Facilitation Handbook, Module 5 Trainer’s Guide: Mapping and Redesigning Workflow

Oral health integration often entails inserting several new steps into an already well-functioning workflow. Particularly if a practice site has prior experience in workflow optimization, a streamlined approach to this phase may prove effective. This approach is based on the observation that most primary care visits can be divided into the segments shown in Figure 2, although the actual tasks involved in each segment may vary widely.
Figure 2. Segments of a primary care office visit

Rather than going through the traditional process of mapping out each step of the current state by writing on sticky notes attached to butcher paper, the streamlined approach uses a PowerPoint tool, which displays each segment of the workflow along with all of the things that primary care practices could do during that segment displayed as callouts, as shown in Figure 3. The optimization team identifies the tasks they perform during the segment, and the coach drags the connector to the icon for the segment. This allows the coach to point out to the optimization team tasks other primary care groups are doing during this segment that they are not doing, and encourage a corresponding discussion. One box is intentionally left blank so the care team can easily add any new tasks not shown on the slide.

Figure 3. Visual display of the tasks some primary care teams do to prepare for an office visit
Physical Requirements: The optimal space for workflow mapping is one that will accommodate the optimization team around a screen or a blank wall where the PowerPoint can be projected. Ideally, the computer and projector configuration should support the coach sitting at the computer, while facing the participants to facilitate the discussion. The coach will simultaneously connect the callouts to the icon or enter new information in the callouts as the team identifies the things done in the practice.

Materials: A flip chart and medium-tipped felt pen can be used for the parking lot. Bring a digital camera or use a smart phone to capture a permanent image of the parking lot at the end of the event.

Food: Team members appreciate food and drink to sustain their energy. This may be as simple as a healthy trail mix and bottled water or may involve lunch if the event continues through lunchtime. Plan according to budget, convenience, and preferences.

Getting Started: Start with a welcome to the participants and a round robin of introductions, including roles on the team. This should be done even though team members may feel they already know each other. The coach can explain this as “important to help me get to know your team.” Review the purpose of the project, pointing out that the workflow is being mapped not because there is anything wrong with it but because mapping is the most effective way for the care team to decide where the oral health tasks best fit into the current workflow. Finally, outline how the mapping exercise is organized. It is important that the leadership of the organization make a statement during this introduction underscoring the organization’s support for the project. This overview should then be followed by a brief introduction to how the workflows are mapped, as many staff have not mapped a workflow electronically. This will include:

• Documenting a step using subject, predicate, noun structure (e.g., “Clinical assistant escorts patient to exam room” rather than “Patient roomed”).
• Explaining the purpose of the “parking lot” (described further below).
• Defining ground rules for the event, including the importance of each team member describing their own role rather than having it explained for them and giving everyone an opportunity to contribute.

Mapping the Current State: There may be multiple ways for each segment of the primary care visit to happen, such as the starting point “Patient makes an appointment.” The coach needs to make crucial decisions about the level of detail at which to document each step. A balance must be struck between documenting sufficient detail for the entire team to understand the essential components of the workflow and wasting effort documenting details unrelated to the task. Consider applying the 80 percent rule to keep the team on track. Guide the team to focus on what happens 80 percent of the time. With experience, the coach becomes adept at drilling into steps in the workflow that are likely to be important in designing the future state. These drill-down steps are likely to include opportunities in the workflow to give the patient, reception staff, or clinical staff information to help them prepare for a more productive visit. Frequently, someone recognizes that a prior task was missed; the coach needs to recognize when this happens and assist with inserting the missing step(s).

The process of making a referral and following it through to completion, while very important, is completed in a separate mapping exercise where current state and future state can be studied in detail. See Oral Health Integration Referral Mapping: A Coach’s Guide for more information.
The process of editing PowerPoint callouts and dragging lines to connect to the workflow segment can only be done when the PowerPoint presentation is in “normal” view. Use the “slide show” view to present the workflow overview content, switching to the “normal” view when you begin mapping the workflow. The workflow segment slides can be maximized for best viewing by participants by minimizing the left-hand side of the screen.

**The Parking Lot:** The parking lot captures ideas that don’t directly contribute to mapping the current state but may be relevant to the future state. Examples include observations about problems with the current state workflow, and/or potential solutions to those problems. Documenting an idea on the parking lot is also a diplomatic way to bring the optimization team back to the task of mapping the current state when the discussion starts going off topic.

**Ending the Current State Mapping Session:** After the current state workflow has been mapped to the end of the process, the following steps are useful in helping the coach to conclude this portion of the event.

- Go through the entire PowerPoint workflow and read it step by step to the entire optimization team to make sure it has been correctly documented. Often, missing steps or errors in some detail can be picked up at this point.
- Remind the optimization team that the work they just did was to prepare for creating a future state, and review with them what the future state will need to accomplish.
- Review with the optimization team the items on the parking lot to see if they offer any ideas that may be of use in the future state workflow.
- Instruct the optimization team to think about the current state workflow they have just mapped and see what additional ideas they can come up with for ways to modify it to become the future state.
- When the current state mapping is complete, the optimization team members are free to leave. The coach should take a photo of the parking lot list, take down the flip chart, and leave the work area in the condition the clinic needs for normal operation.

**Task Allocation During the Mapping Event:** Workflow optimization mapping events are easiest when two people share the work of setting up and cleaning up afterwards. The breakdown of tasks related to workflow mapping itself depends on the preferences of the coaches. It may be easiest for the coach leading the discussion of the workflow to manipulate the PowerPoint callouts, but if the space configuration is not ideal, one coach may need to manage the PowerPoint documentation while the other leads discussion and documents on the parking lot.

Some coaches prefer to be the one primarily responsible for the parking lot because they are sensitive to the nuances of the conversation among the optimization team. Even in this case it is useful to have the second coach taking notes and adding notes to the parking lot when appropriate.
Between the Current State and Future State Mapping: Workflow optimization mapping events seem to work best when there is a break between mapping the current state and creating a future state. (This break can be as short as 30 minutes or as long as overnight.) An overnight break gives team members a chance to rest, sleep, perhaps see patients and contemplate ways to modify the workflow to create the future state. A break also gives coaches an opportunity to review the current state workflow in detail and plan for the future state mapping event by looking for opportunities to insert new tasks, bearing in mind how information moves through the system and how information can support the goals of the future state workflow. If a break is not possible, be prepared to move straight to mapping the future state.

Mapping the Future State: Mapping the future state usually takes 60–90 minutes. The purpose of this section of the workflow is to develop a visual plan for a future workflow, which can be tested by the optimization team and modified as necessary to accomplish the goals of the workflow. Usually, future state mapping requires adding new tasks that may include gathering additional information. It often means identifying information tools that need to be modified to support the new workflow. The future state may also entail removing steps from the current state that represent waste or changing how tasks are done to improve efficiency, safety, quality, or patient satisfaction.

Starting the Future State Mapping Session: The coach can use the following structure to get the future state mapping session off to an organized start:

- Review the purpose of the project.
- Review the work the optimization team did at the current state mapping session, preferably with printed copies of the completed workflow PowerPoint.
- Review the goals of the future state workflow, including identifying metrics to use to tell if the future state is achieving its stated goal.
- Help the team develop an aim statement, preferably using SMART methodology—specific, measureable, actionable, realistic, and time-bound.
- Review items from the parking lot that were designated as potential parts of the future state.
- Ask optimization team members to report on any ideas that occurred to them about what should be included in the future state. The coach should add these ideas to the parking lot list.

Mapping the Future State: Future state mapping is based on the current state, and many (if not most) of the steps in the future state may be unchanged. The job of the coach is to moderate the discussion, bring out ideas from all members of the optimization team, and help the optimization team make decisions about changes to include in the future state. There are several tactics that can help with this:

- Keep the team focused on a perspective of the workflow as a whole and the perspective of the patient.
- Make sure the person on the team most affected by a change is heard from during the discussion.
- If there is disagreement between optimization team members, try to find points on which agreement can be reached.
- If there appears to be agreement, verify it and get the team to help with the wording of the task callout before moving to the next step.
- If the discussion makes clear that a previously agreed-upon step is still controversial, consider ways to test the step to see if it is feasible.
A Streamlined Future State Workflow Mapping Process

The future state in oral health also lends itself to a streamlined process, as shown in Figure 4. In this case, the team is given a visual display in PowerPoint of the tasks other primary care teams have chosen to include for oral health integration. The coach uses this graphic to lead a discussion of each potential task, allowing the team to decide 1) if they want to adopt the new task, and 2) where in the workflow the new task will take place. For each task the team elects to keep, the coach drags the callout line to link to the appropriate step in the workflow.

Figure 4. Future state workflow tool for identifying tasks to include in the future state, and where in the workflow they will be performed

Make sure to note “who” (what role) will do each task in the task box, if this is not clear from the workflow segment you are connecting to, e.g., “Clinical assistant applies fluoride varnish.” This will assist in writing the workflow summary report and help the optimization team remember their decisions.
Making a Task List: Many of the changes envisioned for the future state require action before the future state can be tested. With experience, the coach can recognize some of these tasks as the future state workflow is developed. Although a task list can be created after the future state is complete, it is often more efficient to start generating that list of tasks as soon as the coach realizes what the task is. For example, if one of the steps in the future state is for the reception staff to give patients a form with information on it when they check in, a decision will need to be made about the information to be included on the form, and the wording for the instructions about what to do with the information. Additionally, a printer may need to be freed up and moved to support the task; there may also need to be scripting for reception staff to use with patients when giving them the form. All of these tasks can be added to the task list while mapping the future state.

Ending the Future State Mapping Session: The coach may find the following steps useful in transitioning from future state mapping to the task of preparing to test the future state.

- Verify with the team that they have reached the end of the workflow and congratulate them for the work they did.
- Read through the future state workflow to make sure everyone on the optimization team agrees that it was correctly documented. Make a note for steps in the future state at which structured data will be generated that can be used to monitor or describe how it works.
- Identify any areas in the workflow where data can be collected to ensure change(s) result in an improvement.
- Read through the parking lot to see if all the ideas listed there were at least considered in creating the future state.
- Explain that the future state the team created now needs to be tested to find out whether it will work as intended and whether it is effective in accomplishing its purpose.
- Explain that most future states need some form of modification, and that is what the testing process will allow them to do.

Planning to Test the Future State: It takes 20–30 minutes to complete the task list and develop a plan to test the future state. The coach must manage the future state mapping event in a way that leaves sufficient time for this final activity of the event. Many optimization teams may not realize that it requires additional work before they are able to test the future state. Start this portion of the future state session by reviewing the task list. This may require explanation that some of the tasks entail changes to the user interface of the electronic health record and others require creating informational content, while still others may involve physical changes to how equipment is positioned in the clinic.

Finalizing the Task List: Review the future state with the optimization team to look for additional tasks that were missed initially. Once the list is complete:

- Go through the task list item by item and ensure each one has a “by whom” and “by when” noted, even if it is a best guess.
- Review the task list and be sure there is a:
  - Process champion who will communicate the change to those affected by the new workflow.
  - Process owner who will follow the task list to be sure all tasks get done.
- Query the team on their degree of confidence that the change will be sustainable, and identify key factors to hardwire the change(s).
The shorter the timeframe in which the clinic can accomplish the tasks, the greater the likelihood that the future state can be tested before the team forgets the details and the pilot loses momentum. Often, pure workflow components of a future state can be tested before all of the corresponding HIT modifications have been completed.

**Ending the Mapping Event:** Once the task list is completed:
- Review the future state workflow at a high level one last time.
- Clarify with the optimization team where the future state will be tested and when.
- Go over the task list one last time by role to make clear who is responsible for which tasks and by when.
- Schedule time for a follow-up phone call with members of the workflow optimization team in one to two weeks to check in on progress.
- Be sure to save copies of both workflows, remaining parking lot ideas, and the task list to document your work and progress.

Taking a picture of the parking lot and task list is a quick way to capture this information for inclusion in the workflow optimization summary report.

**The Workflow Optimization Mapping Report:** The Workflow Optimization Mapping Report is simple and succinct. A template has been developed for use in writing the summary report that includes drawings of the current and futures states as well as the task list and next steps. In the report, callouts developed by the team for each segment of the current state must be shown on a single slide for simplicity. This can be accomplished by summarizing all tasks for each segment in a yellow callout box or a text box that is displayed with a connector attached to the appropriate segment of the workflow. (See Appendix C for an example of a completed workflow mapping effort.)

It is a good idea to send a draft version of the report around among the coaches (if there are multiple) to look for errors. It is also helpful to send a draft copy to the leader of the optimization team for feedback before it is distributed to the entire workflow optimization team.

**Troubleshooting Common Challenges:**

**Attendance:** The individuals attending the workflow optimization mapping event are not the ones expected, key members of the team are absent, or all roles are not reflected.

The coach can reduce the risk of this happening by being explicit during the planning session as to the necessary roles and documenting them in follow-up communication. It is also helpful to have a check-in call several days before the workflow event to verify that all necessary roles will be represented. On the day of the event, if an important role is absent it is not unreasonable to request that the missing role be filled, if not by the ideal person, at least by someone from the clinic who has a direct knowledge of the role. In the worst case, the coach simply has to proceed with the role not represented, which will diminish the value of the workflow mapping to the clinic.
Engagement: A member of the workflow optimization team is silent and you sense discomfort.

Make an effort to encourage silent team members to share their perspectives. Use your best judgment about how to do this. Usually, friendly inquiries about what a quiet team member thinks or would like to add will suffice. If a team member appears truly uncomfortable with the process, it may make sense to talk to the person one-on-one during a break to try to get some insight into the reason for non-participation.

Control: One member of the team is acting as the spokesperson for everyone on the team.

This can be challenging, because often it is the result of a chronic power dynamic within the clinic that is not easy to change. The best approach is to actively seek out input from the appropriate individuals for the tasks being discussed. It may sometimes require overtly asking the dominant person to give others a chance to share their observations. Try to avoid a damaging confrontation with a power figure in the clinic. The coach must sometimes just accept the fact that given a particular dynamic, the value of the mapping event to the clinic will be less than its potential.

Disagreement: A member of the workflow optimization team has a negative reaction to the future state workflow.

A team member who has an interest in preventing the success of a workflow optimization effort can disrupt the entire process. This is more likely to be the case when there is inadequate leadership support for the project. It is important to understand what is behind the negative reaction. Oral health integration work may encounter resistance from dental or medical personnel who do not think it is appropriate for medical care team members to be doing any oral health assessment or preventive care at all. This attitude can impede progress, so it is advisable for the coach to assess the dental team’s support for the integration effort in advance of the event itself. It may be possible to come to an agreement before the workflow mapping on the list of tasks a primary care team can do so this disagreement does not derail the team’s efforts during the event.

A negative reaction to a future state workflow may be the result of too much additional work being allocated to an overworked staff person. This may require rethinking a task or reconsidering resource allocation, and it is important that each person’s perspective is heard. Another reason for a negative reaction to a future state plan may be that a person believes that the information technology system cannot support the workflow being proposed but may not be able to articulate that concern. Again, it is usually only possible to identify such reasons for resistance by probing. HIT limitations can usually be identified in advance by performing the Oral Health Information Technology Assessment, to understand the types of changes that are reasonable to expect and those that are not.
Appendix A: Practice Pre-Assessment for Workflow Optimization Mapping

<table>
<thead>
<tr>
<th>Question</th>
<th>Coach Notes</th>
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| **Program Team**  
• Who will serve as the overall practice leader for the oral health program?  
• Has a backup person been identified for this program leader? | |
| **Patient Population**  
• Have you identified a pilot population?  
• What is this patient population?  
• Approximately how many patients are there in the pilot population? | |
| **Pilot Team**  
• Who is on your pilot team?  
• What roles do they represent? (At a minimum, this should be the clinician, clinical assistant, nurse, reception staff)  
• How was the pilot team identified (appointed, voluntary, other?)  
• Do team members seem excited to begin this work? | |
| **Workflow Optimization Mapping Attendees**  
• Who will be attending the workflow event?  
• Do attendee roles include:  
  o All members of the pilot care team  
  o An administrative representative who is prepared to “launch” the pilot and explain the importance of oral health integration to the practice’s vision or mission  
  o Someone from the HIT department  
  o A reception staff member, if not a member of the pilot team  
  o Quality improvement (QI) representative  
  o Referral coordinator or someone who serves in this capacity  
  o Dental leadership, if practice has a co-located dental practice or dental professionals on staff  
• Are there representatives of other care teams or other sites where the practice plans to spread?  
• Have attendees been informed of the time involved in the mapping event, and that they should plan to attend for the entire time? | |
## Appendix A: Practice Pre-Assessment for Workflow Optimization Mapping

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<thead>
<tr>
<th>Question</th>
<th>Coach Notes</th>
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<tbody>
<tr>
<td><strong>HIT Assessment</strong></td>
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<tr>
<td>• Has the HIT pre-assessment been completed?</td>
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<td>• Is there an HIT person identified to attend the mapping event who is knowledgeable about how to make modifications to the practice’s EHR?</td>
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<td><strong>Data and Reporting</strong></td>
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<tr>
<td>• Is there a QI person identified to attend the mapping event who has knowledge of data and how to run QI reports?</td>
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<tr>
<td><strong>Performance Improvement Assessment</strong></td>
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<td>• How much experience does the practice have with quality improvement methodology?</td>
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<td>• Are care team patient panels established?</td>
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<tr>
<td><strong>Referral Network/Care Coordination</strong></td>
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<td>• Does the practice have care coordination for medical-surgical referrals?</td>
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<td>• How well does the current medical-surgical referral system work?</td>
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<td>• Does the practice track referrals?</td>
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## Appendix B: Planning Checklist for Workflow Optimization Mapping

| Planning the workflow optimization mapping event | Plan with program leadership team | • Meet with leadership to plan event  
• Identify leadership representatives to attend event: executive leader, clinical QI leader, HIT staff member  
• Identify workflow optimization team members, including who from leadership will attend event |
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<tr>
<td>Assess HIT in advance</td>
<td>Assess HIT in advance</td>
<td>• Use the Oral Health Information Technology Assessment to determine HIT modification capabilities</td>
</tr>
</tbody>
</table>
| Who will be there? | Clinical team | • Clinician (from pilot team)  
• Clinical support staff (from pilot team)  
• Clerical office staff  
• Leadership representatives  
• HIT staff member |
| What do you need to have on hand? | HIT-supported (streamlined) mapping | Clinic AV capabilities  
• Computer, projector, and screen in meeting room  
  o Blank wall can be used for projection  
• If you’re bringing your own computer, determine whether you need to bring cables to connect to their projector |
| | | • Workflow Optimization PowerPoint presentation on jump stick |
| | | Sharpies  
• Medium tip  
• Black |
| | | Painter’s tape (blue)  
• 1” wide  
• One roll |
| | | Flip chart  
• Adhesive back, no stand needed |
| | | Digital camera or smart phone |
| | | Food and drink |
| What do you need to do at the end? And when? | IT-Supported (Streamlined) Mapping | • Remember: Save PowerPoint workflows frequently during mapping event! |
| | | • Take picture(s) of task list, parking lot |
| | | • Leave work area cleaned for clinic operation |
| | | • Use report template to write report |
| | | • Send draft report to other coach, if any, for edits |
| | | • Send draft report to optimization team leader for feedback within one week of event |
| | | • Distribute report to entire workflow optimization team (team leader may choose to do this) |
If a site does not have the AV capabilities needed to use the Streamlined Workflow PowerPoint, a traditional paper-based workflow mapping method can be used. Additional supplies needed for this method include:

- Blank wall with space to tape 8’–10’ of butcher paper
- One large, long roll of butcher tape
- Scissors
- Post-its
  - Square 3”x3”
  - Rectangular 4”x6”
  - Adhesive
  - Six pads of each
- Clear tape
Appendix C: Example of Workflow Optimization Mapping Report

Happy Health Home Clinic—Oral Health Mapping—2016.01.28

Current State:
Appendix C: Example of Workflow Optimization Mapping Report

Happy Health Home Clinic—Oral Health Mapping—2016.01.28

Future State:

The future state incorporates the Framework (Ask, Look, Decide, Act, Document) steps during the office visit workflow for patients with diabetes.

1. Target population: children 6 to 12

2. Planned screening interval: six months
   - Oral health screening will be part of every well-child exam.
   - Oral health screening status will be reviewed before every office visit and conducted during the visit if fewer than six months have passed since the most recent oral health screening exam.
   - Oral health assessment will be done every six months, and a protocol for an oral health group visit at six-month intervals will be developed to ensure this happens.

3. Future state workflow is for the office visits between well-child exams in which screening status will be assessed and repeated if overdue, and in which intervention for risk factors and referral for active disease are the goals.
4. Key features of future state:
   • Clinical assistant will identify patients due for oral health screening before huddle.
   • Clinician and clinical assistant will prioritize oral health screening in the huddle.
   • Clinical assistant will do the Ask, Look initial assessment and document using white board.
     o For suspected decay she will order and pend:
       ▪ Referral to dentist.
       ▪ Fluoride varnish.
       ▪ Oral health coaching with nurse educator.
     o For high risk of decay based on oral hygiene or diet she will order and pend:
       ▪ Fluoride varnish.
       ▪ Oral health coaching with nurse educator.
   • Clinician will review findings and sign orders if in agreement.
   • Referrals to dentistry will go to referral coordinator and be handled like any medical-surgical referral.
   • Fluoride varnish will be administered in the exam room at the end of the visit.
   • Referrals for oral health coaching will be worked out depending on availability of nurse educator.
     Options include:
     o In exam room at the end of the visit.
     o In teaching appointment with nurse educator.
     o In group visits for oral health.
     o Other?

**Measures to evaluate for the future state workflow**

1. Total target population.
2. Number assessed for oral health in past six months.
3. Number identified as high risk for tooth decay.
4. Number identified as having active tooth decay.
5. Of those identified as high risk for tooth decay, number receiving:
   a. Fluoride varnish.
   b. Oral health coaching.
6. Of those identified as having active tooth decay, number receiving:
   a. Fluoride varnish.
   b. Referral to dentist.
7. Of those referred to dentist, number with report back from dentist.
### Task List

<table>
<thead>
<tr>
<th>Task</th>
<th>Who is responsible?</th>
<th>By when</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create rules for clinical assistant for Framework</td>
<td>Nurse and clinical assistant</td>
<td>2/4/16</td>
</tr>
<tr>
<td>Implement huddles</td>
<td>Pilot clinician</td>
<td>2/12/16</td>
</tr>
<tr>
<td>Send huddle info to team</td>
<td>Pilot clinician</td>
<td>2/2/16</td>
</tr>
<tr>
<td>Develop group model</td>
<td>Leadership</td>
<td>2/29/16</td>
</tr>
<tr>
<td>Build smart phrase for well-child (time since last dental exam)</td>
<td>HIT</td>
<td>2/12/16</td>
</tr>
<tr>
<td>Smart phrase for health screening and assessment</td>
<td>HIT</td>
<td>2/12/16</td>
</tr>
<tr>
<td>Build order for health education</td>
<td>HIT</td>
<td>2/12/16</td>
</tr>
<tr>
<td>Materials needed for health education (pathways, supplies, tools)</td>
<td>Nurse and Referral coordinator</td>
<td>2/12/16</td>
</tr>
<tr>
<td>Plaque revealer</td>
<td>Clinical assistant</td>
<td>2/12/16</td>
</tr>
<tr>
<td>Insurance education</td>
<td>Quality improvement</td>
<td>2/12/16</td>
</tr>
<tr>
<td>Patient/public oral health kickoff</td>
<td>Referral coordinator</td>
<td>3/15/16</td>
</tr>
<tr>
<td>Fluoride varnish training and supplies</td>
<td>Nurse and clinical assistant</td>
<td>2/12/16</td>
</tr>
</tbody>
</table>
About the Oral Health Integration in Primary Care Project

Organized, Evidence-Based Care Supplement: Oral Health Integration joins the Safety Net Medical Home Initiative Implementation Guide Series.

The goal of the Oral Health Integration in Primary Care Project was to prepare primary care teams to address oral health and to improve referrals to dentistry through the development and testing of a framework and toolset. The project was administered by Qualis Health and built upon the learnings from 19 field-testing sites in Washington, Oregon, Kansas, Missouri, and Massachusetts, who received implementation support from their primary care association. Organized, Evidence-Based Care Supplement: Oral Health Integration built upon the Oral Health Delivery Framework published in Oral Health: An Essential Component of Primary Care, and was informed by the field-testing sites’ work, experiences, and feedback. Field-testing sites in Kansas, Massachusetts, and Oregon also received technical assistance from their state’s primary care association.

The Oral Health Integration in Primary Care Project was sponsored by the National Interprofessional Initiative on Oral Health, a consortium of funders and health professionals who share a vision that dental disease can be eradicated, and funded by the DentaQuest Foundation, the REACH Healthcare Foundation, and the Washington Dental Service Foundation.

For more information about the project sponsors and funders, refer to:
DentaQuest Foundation: www.dentaquestfoundation.org.

The guide has been added to a series published by the Safety Net Medical Home Initiative, which was sponsored by The Commonwealth Fund, supported by local and regional foundations, and administered by Qualis Health in partnership with the MacColl Center for Health Care Innovation.

For more information about the Safety Net Medical Home Initiative, refer to www.safetynetmedicalhome.org.