Measure Details
Individual Dashboard Measures

The dashboard consists of 15 measures that are organized into three categories:

» Population health.
» Fiscal and operational sustainability.
» Patient satisfaction.

This section provides detailed information about each measure, highlighting specific data tracking and collection requirements, the numerators and denominators, clinical and operational considerations and how each measure can be used to drive performance.

Population Health

Caries at Recall
» % of patients who complete a periodic oral evaluation and have a caries diagnosis.

Risk Assessment of all Dental Patients
» % of all dental patients who have had an oral health risk assessment.

Oral Evaluation and/or Risk Assessment of all Primary Care Patients
» % of all health center patients who have an oral evaluation and/or risk assessment performed by a medical provider.

Sealants (6-9 year olds)
» % of 6-9 year old children, at moderate to high risk, who receive a sealant on one or more permanent first molar teeth.

Sealants (10-14 year olds)
» % of 10-14 year old children, at moderate to high risk, who receive a sealant on one or more permanent molar teeth.

Topical Fluoride
» % of 0-5 year old children (dental and medical) who receive topical fluoride application.

Fiscal & Operational Sustainability

Recall Rates

No Shows

Gross Charges (Production) per Encounter

Encounters per Hour

Direct Cost per Visit

Self-Management Goal Setting
» % of dental patients who have at least one oral health self-management goal set by their care team.

Self-Management Goal Review
» % of health center patients who have oral health self-management goals reviewed by their care team.

Treatment Plan Completion
» % of dental patients who have Phase I treatment plan completed within six months.

Patient Satisfaction

Recommendation to Family and Friends
» % of patients who would recommend health center services to family and friends.
CARIES AT RECALL
The *Caries at Recall* measure assesses the percent of patients who complete a periodic oral evaluation and have a caries diagnosis. Tracking this measure answers the question: *How well is the patient’s dental disease being managed?*

**CARIES AT RECALL**

**# of Patients with a Periodic Exam**
Who Also Have a Diagnosis Code Indicating Caries

**# of Patients with a Completed Periodic Exam**
MEASURE 1: Caries at Recall

WHY IS THIS MEASURE SIGNIFICANT?

Caries at Recall assists health centers and providers by tracking progress in dental disease prevention, which improves the oral and overall health of patients, reduces the need for additional treatment, opens access for additional patients and reduces unnecessary healthcare expenditures. By selecting patients who have received a periodic exam, this measure focuses on patients who have been in the health center’s system of care.

FACTORS THAT COULD BE ADDRESSED BY THE HEALTH CENTER THAT MAY IMPACT THE MEASURE CARIES AT RECALL:

Delivery of preventive services – Application of fluoride treatments, sealants, cleaning and periodontal maintenance.

Risk assessment – Identification of patients who could benefit from more intensive patient education, self-management goal setting and more frequent recalls for preventive services.

Recall success rate – Patients seeking and accessing recall appointments on the frequency determined by the risk assessment (may be impacted by access).

Accomplishment of self-management goals – Dental teams, medical team care managers and outreach workers engaging at-risk patients in setting behavior change goals and supporting their progress toward achieving these goals by providing tools, tips and regular check-ins.

Treatment plan completion – Patients who have not completed recommended treatment prior to recall may present with active caries that are not “new”; therefore, a low treatment plan completion rate may blur the new caries rate due to previously untreated decay. This may also be impacted by the availability of appointments to complete the treatment plan.

Relevant ICD-10 Diagnosis Codes and ADA CDT Codes:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>K02.52</td>
<td>Pit &amp; fissure dentin caries OR</td>
</tr>
<tr>
<td>K02.53</td>
<td>Pit &amp; fissure pulp caries OR</td>
</tr>
<tr>
<td>K02.62</td>
<td>K02.62 smooth surface dentin caries OR</td>
</tr>
<tr>
<td>K02.63</td>
<td>K02.63 smooth surface pulp caries OR</td>
</tr>
<tr>
<td>K02.9</td>
<td>Unspecified caries</td>
</tr>
<tr>
<td>D0120</td>
<td>Periodic oral examination</td>
</tr>
<tr>
<td>D0145</td>
<td>Oral evaluation for a patient under three years of age and counseling with primary caregiver</td>
</tr>
<tr>
<td>D0601</td>
<td>Caries risk assessment, low risk</td>
</tr>
<tr>
<td>D0602</td>
<td>Caries risk assessment, moderate risk</td>
</tr>
<tr>
<td>D0603</td>
<td>Caries risk assessment, high risk</td>
</tr>
</tbody>
</table>

*New Zero “dummy” service code to identify caries
HOW TO COLLECT DATA ON CARIES AT RECALL DATA:

Option 1
Within the EDR when periodic exams are charted, if caries are detected, the ICD-10 code to select is one indicating Dental Caries, K02.60-K02.63, K02.51, K02.7, and K02.8. Query the system for patients with both periodic exams and any of the caries codes.

Option 2
Within the EDR, setup a new Zero (“dummy”) service code having a $0 charge. Set it up in such a way that it does not go out on the claims.

Example of new Zero service code from the NextGen File Maintenance used with QSI EDR:
If the patient has caries at recall, chart the new Zero code and the recall code so both codes are completed for the encounter. To accomplish this, set up choices within the EDR charting to support a standardized assessment tool, so that when new decay is detected, it is charted in a note and adds the Zero code as a completed service.

You can use either method to chart these codes in the EDR. They then can be queried and reported using the numerators and denominators previously described.

Example of the selections with yellow boxes resulting in the Zero code in the chart:

![Image of charting software screenshot]

Example of the resulting codes in the chart:

<table>
<thead>
<tr>
<th>Date</th>
<th>User</th>
<th>Grp</th>
<th>P</th>
<th>Prov</th>
<th>Code</th>
<th>Description</th>
<th>Tooth</th>
<th>Surface</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>07/23/14</td>
<td>brip</td>
<td>3144</td>
<td></td>
<td></td>
<td>03150</td>
<td>Recall w/CAT &gt;8</td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>07/23/14</td>
<td>brip</td>
<td>3144</td>
<td></td>
<td></td>
<td>06005</td>
<td>SM Goals Reviewed</td>
<td></td>
<td></td>
<td>Completed</td>
</tr>
<tr>
<td>07/23/14</td>
<td>brip</td>
<td>3144</td>
<td></td>
<td></td>
<td>06662</td>
<td>Caries Risk Assessment And Document W/Mod Risk</td>
<td></td>
<td></td>
<td>Completed</td>
</tr>
<tr>
<td>07/23/14</td>
<td>brip</td>
<td>3144</td>
<td></td>
<td></td>
<td>06659</td>
<td>CRA &gt;6 Part I</td>
<td></td>
<td></td>
<td>Note</td>
</tr>
</tbody>
</table>
HOW TO USE CARIES AT RECALL DATA:

Data gathered for Caries at Recall, and the other measures, are tools health centers use to highlight successes, areas in need of improvement and the course of the community’s health.

Track monthly caries at recall rates for at least a six-month period to identify average caries at recall rates. Identify trends and set targets.

Segmentation – Consider segmenting data by age to compare adults and children separately. In states with limited coverage for adults, reducing new disease among them is more difficult. If feasible, consider segmenting by patient risk status to determine if the new caries rate among patients at high risk is successfully trending down over time.

Analyze with other metrics:

» Risk Assessment – Look for a relationship between the percent of patients who are high risk and the untreated caries rate. As the untreated caries rate goes down, does the percent of patients at high risk also go down?

» Recall Rate – If the percent of patients who are up-to-date with recall appointments is low, could this be impacting new caries rate (given the delay in preventive services)? Test strategies to improve recall rates to see if this also improves new caries rate.

» Self-Management Goal Setting – Does the percent of patients who have oral health self-management goals align with the percent of patients who are determined to be at-risk? If not, does increasing the percent of at-risk patients who have self-management goals set over time reduce the new caries rate?

» Self-Management Goal Review – Are medical colleagues supporting dental patients in achieving their oral health self-management goals? Do a high percent of patients with oral health goals discuss them with their care team during medical visits? If not, does increasing the engagement with the care team to support this work result in a lower new caries rate over time?

MEASURE ADAPTATIONS AND EXTENSIONS:

Health centers might also consider tracking the recall rate of periodontal disease diagnoses. This data may be particularly relevant to pregnant women or diabetes patients.
2. Risk Assessment of All Dental Patients
The Risk Assessment of all Dental Patients measure identifies how many dental patients have been evaluated for caries risk. This measure helps a health center manage patient care according to risk.

**RISK ASSESSMENT OF ALL DENTAL PATIENTS**

**# of Dental Patients**
with Completed Risk Assessments

**# of All Unique Dental Patients**
with a Periodic or Comprehensive Exam
MEASURE 2: Risk Assessment of all Dental Patients

WHY IS THIS MEASURE SIGNIFICANT?

RISK ASSESSMENT is a way to identify individual patient habits, exposures, and/or health status that impact disease. It helps providers understand clinical, patient behavior and other factors that support or threaten oral health. Risk assessment is the first step in determining treatment plans tailored to each patient. Measuring the percentage of patients with completed risk assessments can determine the thoroughness of dental evaluations and support risk-based oral health care.

FACTORS THAT COULD BE ADDRESSED BY THE HEALTH CENTER THAT MAY IMPACT THE MEASURE CARIES AT RECALL:

Risk assessment tools - Staff will need to determine which risk assessment tool to use (e.g. CAMBRA, American Academy of Pediatrics) and determine any modifications.

Health information technology updates - The software in use by the health center may need to be amended to include the 2014 oral health risk assessment codes and to conduct the corresponding data collection. Providers may also need to change how they enter the data for risk assessments.

Division of Labor/Workflow - For the most efficient and consistent risk assessments and evaluations, there needs to be a clear distinction of the staff required for each task. For example, dental assistants might conduct a risk assessment as a part of gathering a patient’s history, or a dentist might do an oral health evaluation. If conducting risk assessments are new to a staff member’s workflow, there may need to be a period of reinforcing the new system.

Assessments - If primary care medical providers are also conducting oral health risk assessments, health center staff will need to determine how to use information received from medical partners and how to follow-up with primary care referrals.

Next steps - The dental department will need to have a system in place to address a care plan for high- and moderate-risk patients.

Relevant ICD-10 Diagnosis Codes and ADA CDT Codes:

<table>
<thead>
<tr>
<th>ICD-10 Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z01.20</td>
<td>Encounter for dental examination and cleaning without abnormal findings</td>
</tr>
<tr>
<td>Z01.21</td>
<td>Encounter for dental examination and cleaning with abnormal findings</td>
</tr>
<tr>
<td>*This code requires additional codes to identify abnormal findings, please refer to the ICD-10 manual.</td>
<td></td>
</tr>
<tr>
<td>D0120</td>
<td>Periodic oral examination</td>
</tr>
<tr>
<td>D0145</td>
<td>Oral evaluation for a patient under three years of age and counseling with primary caregiver</td>
</tr>
<tr>
<td>D0150</td>
<td>Comprehensive oral evaluation (initial exam)</td>
</tr>
<tr>
<td>D0190</td>
<td>Screening of a patient</td>
</tr>
<tr>
<td>D0601</td>
<td>Caries risk assessment, low risk</td>
</tr>
<tr>
<td>D0602</td>
<td>Caries risk assessment, moderate risk</td>
</tr>
<tr>
<td>D0603</td>
<td>Caries risk assessment, high risk</td>
</tr>
</tbody>
</table>
HOW TO COLLECT DATA ON RISK ASSESSMENT OF ALL DENTAL PATIENTS:

The best way to collect data on risk assessments is to use the new CDT risk assessment codes D0601-603. By comparing the data for all patients and those who have been assigned these codes in the chosen timeframe (the codes became active in 2014 but there may have been a transition period in each center while other codes were still being used), one can determine how many patients have completed risk assessment. Challenges will arise when reviewing data prior to 2014, before those codes were enacted, and when taking into account patients who received risk assessments by their primary medical care providers.

Determine the implementation date when the new D0601-603 codes were added to the service code file in the EDR along with the date providers were notified. To report the measure, select a time frame after this implementation date. The numerator will be the unduplicated patients with D0601-603 during the timeframe. The denominator will be unduplicated patients with a periodic or comprehensive exam coded as D0120 or D0150.

HOW TO USE RISK ASSESSMENT OF ALL DENTAL PATIENTS DATA:

» Collect baseline data and set a target for improvement.

» Compare the data to the total number of patients at the health center. How much of an impact is the dental department making on the total population?

» Use the data to focus on specific populations, such as pregnant women, diabetics or children for focused outcomes.

» Utilize the data to highlight common risks in the community.

» Over time, are patients able to change their behaviors enough to move from high to medium to low risk?

» Analyze with other metrics:

› Make oral health a part of the patient satisfaction surveys. Are patients satisfied with their oral health status and the care they receive? Does conducting risk assessment change this?

› Analyze the data in conjunction with the Completed Treatment Plan measure. Are patients more willing to follow through when they understand the big picture and goal of treatment?

MEASURE ADAPTATIONS AND EXTENSIONS:

Health center staff will need to determine how to address patients who arrive for emergency visits but do not return for periodic exams.

Health centers will need to adopt and record the D601-603 risk assessment codes for all patients.
3. Oral Evaluation and/or Risk Assessment
ORAL EVALUATION AND/OR RISK ASSESSMENT OF ALL PRIMARY CARE PATIENTS

Oral evaluation and/or risk assessment measures the percent of patients who receive an oral health evaluation and/or risk assessment in a primary care setting. Tracking this measure answers the question: Are primary care medical providers delivering basic oral health screenings as a part of their patients’ general wellness?

### of Primary Care Clinic Patients that Receive an Oral Health Evaluation and/or Risk Assessment by a Medical Provider

### of Unique Primary Care Patients with an Office Visit in Medical Setting
MEASURE 3: Oral Evaluation and/or Risk Assessment of all Primary Care Patients

WHY IS THIS MEASURE SIGNIFICANT?

GOOD ORAL HEALTH is important for overall health. More health center patients have access to primary medical care than dental care. When an oral health evaluation or risk assessment is included as a part of the primary care medical provider’s regular screenings, patients and providers are better able to identify current dental problems, address risk of future disease and establish appropriate patient care to prevent future oral health problems.

There are overlapping medical and dental concerns for many patients (e.g., diabetic or pregnant patients). This primary care screening is also the first step toward referring patients, especially those in need of dental treatment and/or close monitoring, to the dental clinic where they can establish a permanent dental home. The general process includes assessing the patient’s health history and activities related to oral health and a basic exam of the patient’s mouth and teeth. Frequently fluoride varnish applications may be conducted following risk assessment and evaluations as part of a whole prevention program. Addressing oral health in the primary care medical department is an efficient and cost effective way to determine how it impacts overall health.

Relevant ICD-10 Diagnosis Codes and ADA CDT Codes:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z00.12</td>
<td>Encounter for routine health examination</td>
</tr>
<tr>
<td>Z00.121</td>
<td>Encounter for routine child health examination with abnormal findings</td>
</tr>
<tr>
<td></td>
<td>*This code requires additional codes to identify abnormal findings, please refer to the ICD-10 manual.</td>
</tr>
<tr>
<td>Z00.129</td>
<td>Encounter for routine child health examination without abnormal findings</td>
</tr>
<tr>
<td>Z01.20</td>
<td>Encounter for dental examination and cleaning without abnormal findings</td>
</tr>
<tr>
<td>Z01.21</td>
<td>Encounter for dental examination and cleaning with abnormal findings</td>
</tr>
<tr>
<td></td>
<td>*This code requires additional codes to identify abnormal findings, please refer to the ICD-10 manual.</td>
</tr>
<tr>
<td>D0145</td>
<td>Oral evaluation for a patient under three years of age and counseling with primary caregiver</td>
</tr>
<tr>
<td>D1206</td>
<td>Topical application of fluoride varnish</td>
</tr>
<tr>
<td>D0190</td>
<td>Screening of a patient</td>
</tr>
<tr>
<td>D0601</td>
<td>Caries risk assessment, low risk</td>
</tr>
<tr>
<td>D0602</td>
<td>Caries risk assessment, moderate risk</td>
</tr>
<tr>
<td>D0603</td>
<td>Caries risk assessment, high risk</td>
</tr>
</tbody>
</table>

Note: As the trend toward providing dental care services in the primary care medical setting develops, providers should note that there are differences in the coding and reimbursable activities by state and that these coding options are evolving. The American Academy of Pediatrics keeps an updated sheet of codes and reimbursements: http://www2.aap.org/commpeds/dochs/oralhealth/State.html
FACTORS THAT COULD BE ADDRESSED BY THE HEALTH CENTER THAT MAY IMPACT THE MEASURE ORAL EVALUATION AND/OR RISK ASSESSMENT BY A PRIMARY CARE PROVIDER:

Education of the primary care medical providers – Primary care medical providers will need additional training to further understand the importance of oral health and to learn basic screening techniques and common dental issues.

Risk assessment tools – Staff will need to determine which risk assessment tool to use (e.g. Caries Management By Risk Assessment – CAMBRA, or the American Academy of Pediatrics and determine modifications.

Health information technology updates – The software in use by the health center may need to be amended to include the oral health risk assessment and to conduct data collection.

Dental referrals – A system of referring patients to the dental clinic will need to be in place to establish dental homes.

Division of labor – For the most efficient and consistent risk assessment and evaluations, there needs to be clear roles assigned to staff members (e.g., medical assistants might conduct the risk assessment as a part of gathering the patient’s history and a provider might do the oral health screening in conjunction with the other wellness exams).

Connecting departments – Some medical and dental departments have a lack of connection, either geographically or institutionally. Some groundwork may need to be established for introductions, training and establishing common goals.

HOW TO COLLECT DATA ON ORAL EVALUATION AND/OR RISK ASSESSMENT BY A PRIMARY CARE PROVIDER:

Two numbers are needed to find the percent of health center patients who have received an oral health evaluation and/or risk assessment:

#1 The numerator is the number of primary care patients who have received the evaluation or risk assessment in the primary care clinic.

#2 The denominator is the total number of unduplicated primary care patients seen in the clinic.

Generally, health centers are able to easily collect the number of unduplicated patients. So this data are a refinement of the number of selected patients, based on clinic location, the type of visit, provider or some other combination of these.
The more challenging task will be to determine how to collect data on those who receive the assessments. Some dental data are not charted in the electronic dental record (EDR), but instead in the electronic health record (EHR). Some options could be:

» Changing software to allow ‘check boxes’ for providers to chart an assessment or evaluation in the EHR.

» Connect data collection to a well-child check or annual exam. During general physical exams, staff generally conducts a HEENT, or head, eye, ear, nose and throat exam. Add the “O” for oral cavity to HEENT, making it HEENOT. This change will make it part of the standard procedure and also will provide a location to track the data.

» Conduct risk assessment at a well-child visit and record the risk-assessment codes.

Some health centers have opted to devote resources to change their software to track the risk assessment and evaluations. Before making software or EHR programming changes, conduct research and test cycles to determine what works for each individual center. Health centers may also decide if urgent visits for trauma or illness should be excluded from the denominator if general wellness exams are not conducted during those appointments.

HOW TO USE ORAL EVALUATION AND/OR RISK ASSESSMENT BY PRIMARY CARE PROVIDER DATA:

» Collect baseline data and set a target for improvement.

» Assure that patients with chronic conditions are assessed and referred to the dental department. Use this population to determine if oral evaluations, risk assessment and referrals improve their overall health.

» Use the baseline as a starting point for increased collaboration between the medical and dental departments.

» Follow up with patients who were identified as high risk. Are high-risk patients getting dental care?

» Analyze with other metrics:
  › Make oral health a part of your patient satisfaction surveys. Do patients like primary care medical providers addressing oral health?
  › Analyze the data in conjunction with sealant and fluoride varnish measures. Do primary care prevention measures emphasizing the use of fluoride varnish increase its use in patients?
  › Compare the data to the number of patients who receive a comprehensive dental exam. Do the number of patients increase when oral health is emphasized in a primary care setting?
  › Analyze the data in conjunction with the Caries at Recall Rate. Does increased prevention in primary care lead to a reduced rate of new caries?
SEALANTS (6-9 YEAR OLDS)
The Sealants measure helps identify how many pediatric patients in the 6-9 year old age range have received sealants on at least one permanent first molar tooth. Tracking this measure addresses the question: How many pediatric patients are receiving recommended preventive treatments?

**Sealants (6-9 Year-olds)**

The Sealants measure helps identify how many pediatric patients in the 6-9 year old age range have received sealants on at least one permanent first molar tooth. Tracking this measure addresses the question: How many pediatric patients are receiving recommended preventive treatments?

**Do the math**

- **# of 6-9 Year Old Pediatric Patients at Moderate to High Risk for Caries Who Received a Sealant on One or More Permanent First Molar Teeth**

- **# of Unique 6-9 Year Old Pediatric Patients with an Oral Assessment or Comprehensive Periodic Oral Evaluation who are at Moderate to High Risk for Caries and Have Sealable First Molars**
MEASURE 4: Sealants (6-9 Year Olds)

WHY IS THIS MEASURE SIGNIFICANT?

SEALANTS have been shown to help prevent and control caries. Sealing the rocky terrain of molars – where most cavities occur – protects this vulnerable area from food, acids and plaque. Early application of sealants on a child’s molar teeth, especially in those considered moderate to high risk for caries, can be an important part of an overall prevention plan.

Tracking this measure allows health center staff to determine how well they have established early prevention programs for their young patients. Preventive treatments, like sealants, can help keep children’s teeth and mouths healthy.

FACTORS THAT COULD BE ADDRESSED BY THE HEALTH CENTER THAT MAY IMPACT THE SEALANTS (6-9 YEAR OLDS) MEASURE:

Division of labor – Application of dental sealants is a fast procedure, taking only a couple minutes of a provider’s time. The main barrier will be in assuring it is a part of a regular routine and determining who does the application (e.g. dental hygienist, dental assistant or dentist).

Training the dental care team – All care team members may need periodic training on the latest evidence-based recommendations related to sealants for high-risk children.¹

Education – Parents may need education about the basic facts and goals of placing sealants. Children may need some explanation on what the sealants will look and feel like in their mouths.

Relevant ADA CDT Codes:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1351</td>
<td>Sealant – per tooth</td>
</tr>
<tr>
<td>D1352</td>
<td>Preventive resin restoration in a moderate to high caries risk patient – permanent tooth</td>
</tr>
<tr>
<td>D0120</td>
<td>Periodic oral examination</td>
</tr>
<tr>
<td>D0150</td>
<td>Comprehensive oral evaluation (Initial Exam)</td>
</tr>
<tr>
<td>D0190</td>
<td>Screening of a patient</td>
</tr>
<tr>
<td>D0602</td>
<td>Caries risk assessment, moderate risk</td>
</tr>
<tr>
<td>D0603</td>
<td>Caries risk assessment, high risk</td>
</tr>
</tbody>
</table>

¹ http://jada.ada.org/article/S0002-8177%2814%2961434-3/pdf
HOW TO COLLECT DATA ON SEALANTS:
Sealants can by tracked by using Code D1351 or D1352. To determine the numerator, run a report, which counts all dental 6-9 year old unduplicated patients where a sealant code was posted during the timeframe. The denominator is a count of all dental 6-9 year-old unduplicated patients seen for a comprehensive or periodic exam within the measurement period who had received a caries risk assessment of D0602 (moderate risk) or D0603 (high risk) and also had at least one permanent sealable molar.

If you are unable to use the EDR to collect data see Appendix B for a note on manual data collection.

HOW TO USE SEALANT DATA:
High numbers of children without sealants may help identify if a community sealant program is warranted.

Analyze with other metrics:
» Analyze the data in conjunction with the Caries at Recall measure. Are the children with sealants experiencing a lower caries rate?
» Do parents indicate greater satisfaction when their children receive sealants?

MEASURE ADAPTATIONS AND EXTENSIONS:
» Health centers may wish to modify the denominator to only track those patients in the age range who have received a comprehensive oral health exam (D0150) or a periodic oral health exam (D0120) during the reporting period.

» Health center staff will need to be aware that the percentage of children with sealants will never be 100%. Some children who have sealants would not show up on the report if their treatment were more than 12 months prior, as sealants last for several years.

» Assure that sealant application and fluoride varnish are included in the center’s definition of a complete treatment plan.
5. Sealants (10-14 year olds)
The Sealants measure helps identify the percent of pediatric patients in the 10- to 14-year-old age range who are at “elevated” risk (“moderate” or “high” in risk assessments) who have received sealants on at least one permanent molar tooth. Tracking this measure addresses the question: **How many pediatric patients are receiving recommended preventive treatments?**

### SEALANTS (10-14 YEAR OLDS)

<table>
<thead>
<tr>
<th># of Unique 10-14 Year Old Pediatric Patients with an Oral Assessment or Comprehensive Periodic Oral Evaluation who are at Moderate to High Risk for Caries and Have Sealable Molars</th>
</tr>
</thead>
<tbody>
<tr>
<td># of 10-14 Year Old Pediatric Patients at Moderate to High Risk for Caries Who Received a Sealant on One or More Permanent Molar Teeth</td>
</tr>
</tbody>
</table>

*Sealants*
MEASURE 5: Sealants (10-14 Year Olds)

WHY IS THIS MEASURE SIGNIFICANT?

All of the reasons why SEALANTS are important for children ages 6-9 years old are still in play for teen-agers. Sealants help prevent and control cavities. Placing the thin barrier over the molars protects them from food, acids and plaque.

Application of sealants on a teen-ager’s permanent molar teeth, especially in those children considered moderate to high risk for caries, can be an important part of an overall prevention plan. Tracking this measure allows health center staff to determine how well they are establishing early prevention programs for their patients.

FACTORS THAT MAY IMPACT THE SEALANTS (10-14 YEAR OLDS) MEASURE:

Division of labor – Application of dental sealants is a fast procedure, taking only a couple minutes of a provider’s time. The main barrier will be in assuring it is a part of a regular routine and determining who does the application (e.g. dental hygienist, dental assistant or dentist).

Training dental care team – All care team members may need periodic training on the latest evidence-based recommendations related to sealants for high-risk children.2

Education – Parents may need education about the basic facts and goals of placing sealants. Children may need some explanation on what the sealants will look and feel like in their mouths.

Relevant ADA CDT Codes:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1351</td>
<td>Sealant – per tooth</td>
</tr>
<tr>
<td>D1352</td>
<td>Preventive resin restoration in a moderate to high caries risk patient – permanent tooth</td>
</tr>
<tr>
<td>D0120</td>
<td>Periodic oral examination</td>
</tr>
<tr>
<td>D0150</td>
<td>Comprehensive oral evaluation (Initial Exam)</td>
</tr>
<tr>
<td>D0190</td>
<td>Screening of a patient</td>
</tr>
<tr>
<td>D0602</td>
<td>Caries risk assessment, moderate risk</td>
</tr>
<tr>
<td>D0603</td>
<td>Caries risk assessment, high risk</td>
</tr>
</tbody>
</table>

2 http://jada.ada.org/article/S0002-8177%2814%2961434-3/pdf

“The placement of sealants is one of the most impactful, evidence-based ways we know to prevent and reduce caries rates. By observing the rates of sealant placement, we can help drive provider behavior in clinically appropriate ways to improve health outcomes for our patients.”

-Dr. An Nguyen, Clinica Family Health Services
HOW TO COLLECT DATA ON SEALANTS (10-14 YEAR OLDS):

Sealants can be tracked by using CDT Code D1351 or D1252. To determine the numerator, run a report, which counts all 10-14 year old unduplicated dental patients where a sealant code was posted during the same timeframe as the numerator. The denominator is a count of all 10- to 14-year-old unduplicated dental patients seen for a comprehensive or periodic exam within the measurement period who received a caries risk assessment of D0602 (moderate risk) or D0603 (high risk) AND also had at least one permanent molar that was sealable.

For health centers unable to use the EDR to collect data see Appendix B for a note on manual data collection.

HOW TO USE SEALANTS (10-14 YEAR OLDS) DATA:

High numbers of children without sealants may help identify if a community sealant program is warranted.

Analyze with other metrics:

» Analyze the data in conjunction with the Caries at Recall measure. Are the children with sealants experiencing a lower caries rate?

» Do parents indicate greater satisfaction when their children receive sealants?

MEASURE ADAPTATIONS AND EXTENSIONS:

» Health center staff will need to be aware that the percent of children with sealants will never be 100%. Some children who do have sealants would not show up on the report if their treatment was more than 12 months prior, as sealants last for several years.

» Some health centers elect to track the number of available teeth in this age range and the number of teeth with sealants instead of number of patients with sealants to avoid tooth eruption conflicts.

» If you do not currently utilize the risk assessment codes, a method for determining risk will need to be developed or risk assessment codes adopted.
6. Topical Fluoride
TOPICAL FLUORIDE

This measure tracks the percent of pediatric patients in both the medical and dental clinics who receive a topical fluoride application (e.g., fluoride varnish). This measure answers the question: **How many pediatric patients receive recommended preventive treatments?**

**do the math**

# of Pediatric Patients (0-5 years)  
Who Receive Topical Fluoride Application

# of All Unique Pediatric Patients
MEASURE 6: Topical Fluoride

WHY IS THIS MEASURE SIGNIFICANT?

TOOTH DECAY is one of the most common preventable diseases in children. Fluoride has been proven to be one of the most effective public health preventive measures. Early applications of fluoride, such as fluoride varnish, can reduce and prevent dental caries. It’s quick, cost-effective and improves a patient’s health.

This measure also tracks the application of topical fluoride on children’s teeth in both the medical and dental departments. The U.S. Preventive Services Task Force recommends that primary care clinicians apply fluoride varnish to the primary teeth for all infants and children starting at the age of primary tooth eruption through age five. Although the measure is focused on 0-5 years of age, health centers could expand the age range based on the recommendations by the American Dental Association Center for Evidence-Based Dentistry.

FACTORS THAT MAY IMPACT THE TOPICAL FLUORIDE MEASURE:

Training – Primary care providers may need additional training on fluoride varnish application and common patient questions. Timing of patient visits may need to be extended until all providers are comfortable with the process of fluoride varnish applications.

Software updates – Health centers may need to develop ways to track fluoride applications.

Relevant ADA CDT Codes and CPT Codes:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1206</td>
<td>Topical fluoride varnish</td>
</tr>
<tr>
<td>D1208</td>
<td>Topical application of fluoride</td>
</tr>
<tr>
<td>99188</td>
<td>Application of topical fluoride (CPT code)</td>
</tr>
</tbody>
</table>

Note: As the trend toward providing dental care services in primary care settings develops, providers should note that coding and reimbursable activities differ by state. These coding options are evolving. The American Academy of Pediatrics keeps an updated sheet of codes and reimbursements: http://www2.aap.org/commpeds/dochs/oralhealth/State.html

across both the medical and dental systems to avoid exceeding recommended or reimbursable applications if the software packages do not communicate with each other.

**Education** – Parents may need education on the value of fluoride if this is a new treatment offered by the health center.

**Supplies** – Though a low-cost treatment, topical fluoride will need to be ordered and maintained as part of the supply inventory. Infant oral care kits can be ordered through: [http://www.bayaudenterprises.org/cavity-free-at-three/](http://www.bayaudenterprises.org/cavity-free-at-three/)

**School-based programs** – Health center staff may need to determine if pediatric patients have received fluoride varnish through school-based programs.

**Frequency of visits** – Patient visits are not generally evenly spaced throughout the year so it is unlikely the varnish applications will be applied to meet timing protocols. Alerts, similar to tracking immunizations, may need to be developed to ensure that patients receive fluoride varnish as recommended.

**HOW TO COLLECT DATA ON TOPICAL FLUORIDE:**

The primary challenge in collecting topical fluoride data is that the measure is tracked in both primary medical care and dental departments. Frequently there are different software systems in use that may, or may not, have the ability to coordinate data.

Two numbers are needed to track Topical Fluoride:

1. **The numerator is the number of unduplicated pediatric patients who have received at least one topical fluoride application. General recommendations range from 2-4 annual applications so at least one application would be expected.**

2. **The denominator is the number of unduplicated pediatric patients (ages 0-5). This number may end up being a composite of medical and dental department reporting.**

Ideally, you would select all the unduplicated pediatric patients seen in primary medical and dental during the selected timeframe with code 99188, D1206 or D1208. For the denominator, if the medical and dental data are combined with unique account numbers, you can easily count the unduplicated pediatric patients seen within the timeframe. For both numbers, selection criteria for patients is needed so the age group is consistently captured.

Likely scenarios for collecting data include:

- Tracking the CPT 99188, D1206 or D1208.
- Changing the software to allow ‘check boxes’ for providers to mark once the topical fluoride has been applied.
HOW TO USE TOPICAL FLUORIDE DATA:

» Collect baseline data and set a target.

» If the baseline numbers are low, use the data to support the expansion of prevention programs.

» For this, and all measures that require changing practices, consider running Plan, Do, Study, Act (PDSA) cycles to test small changes. This will help you plan larger system-wide changes.

» Over time, do you see a noticeable shift in the type of exams toward more preventive and fewer restorative appointments?

» Analyze with other metrics:
  › Over time, analyze the data in conjunction with the untreated caries rates measure. Do children who receive topical fluoride have lower caries rates? Do family members of children who have received varnish have lower untreated caries rates?
  › Compare fluoride varnish measures to the patient satisfaction measure on the dashboard. When the numbers of fluoride varnish applications go up, does patient satisfaction go up as well?

MEASURE ADAPTATIONS AND EXTENSIONS:

Health centers may consider restricting the denominator to only include pediatric patients who have received a comprehensive oral exam (D0150) or a periodic oral health exam (D0120) during the reporting period.

Health centers may consider focusing efforts on a specific population, such as high-risk children or certain age ranges.
SELF-MANAGEMENT GOAL SETTING

7. Self-Management Goal Setting
SELF-MANAGEMENT GOAL SETTING

The measure for *Self-Management Goal Setting* identifies the percent of dental patients who have at least one oral health self-management goal set with their care team. This measure answers the question: **How well are we supporting patients in managing their own health?**

**# of Dental Patients**
Who Have an Oral Health Self-Management Goal Set with Their Care Team

**# of Unique Dental Patients**
Who had a Comprehensive or Periodic Exam Within the Measurement Period
MEASURE 7: Self-Management Goal Setting

WHY IS THIS MEASURE SIGNIFICANT?

AN INFORMED, ACTIVE PATIENT is part of a successful patient-care team interaction. Self-management goal setting allows patients to be actively involved in their health care by determining self-management priorities that fit within their own life patterns and prepare them to make effective health decisions day-to-day.

Goal setting is generally about assessing current health status and its consequences, then setting specific, achievable goals. Motivational interviewing is one tool often used to help identify and establish goals. The care team’s role is to share their expertise, advise the patients and to assist them with resources or information needed to achieve their goal, but ideally the patient selects the goal that is most important to them.

FACTORS THAT MAY IMPACT THE MEASURE SELF-MANAGEMENT GOAL SETTING:

Training – Staff may need training on how to identify the types of goals and input them into the EDR. Staff may need training in self-management goal setting and motivational interviewing. Many resources are available to help staff members engage patients and emphasize the patient’s priorities, values and interests when setting goals.

› Learn more from the resources and tools offered by the Centre for Collaboration, Motivation and Innovation: (www.centrecmi.ca/learn) and the Center for Patient and Consumer Engagement (www.aircpce.org)

Education – Patients may need additional information if it’s the first time they have been introduced to goal setting. When care teams help patients select goals they are confident in achieving, they are more likely to be successful in adopting behaviors that will lead to improved outcomes.

Relevant ICD-10 Diagnosis Codes and ADA CDT Codes:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z01.20</td>
<td>Encounter for dental examination and cleaning without abnormal findings</td>
</tr>
<tr>
<td>Z01.21</td>
<td>Encounter for dental examination and cleaning with abnormal findings *This code requires additional codes to identify abnormal findings, please refer to the ICD-10 manual.</td>
</tr>
<tr>
<td>D0120</td>
<td>Periodic oral examination</td>
</tr>
<tr>
<td>D0145</td>
<td>Oral evaluation for a patient under three years of age and counseling with primary caregiver</td>
</tr>
<tr>
<td>D0150</td>
<td>Comprehensive oral evaluation (initial exam)</td>
</tr>
<tr>
<td>D0190</td>
<td>Screening of a patient</td>
</tr>
</tbody>
</table>

*Codes specific to self-management goal setting do not currently exist.
Information - Patients may need supporting materials to assist in selecting and following through with goals.

Information Technology - You may need to develop ways to document these goals in the software/charts. If dummy codes are utilized, there needs to be a process for entering consistent and accurate data.

Coordination of care - A system will need to be established for sharing this information with the primary care medical provider.

HOW TO COLLECT DATA ON SELF-MANAGEMENT GOAL SETTING:

Self-management goal setting is not currently a coded item in ICD-10 or CDT codes and therefore not a regular part of dental records software. To track this measure, staff will need to develop a code for use in their EDR. See example below. Within the EDR services, setup a new Zero (“dummy”) service code having a $0 charge. Set it up so that it does not go out on claims. Once this is established, reports can be run based on the dummy code. The numerator is the count of unduplicated patients with the dummy code posted during the timeframe. The denominator is the count of unduplicated dental patients served in the timeframe.

Example of setup for Zero code:
HOW TO USE SELF-MANAGEMENT GOAL SETTING DATA:

Does self-management goal setting and oral health self-management goals lead to improved rates in caries rates or treatment plan completions?

Analyze with other metrics:

» Compare the patients who have established goals with no-show rates. When patients receive individualized care are they more likely to prioritize their appointments?

» Do patients with self-management goals indicate higher satisfaction?

MEASURE ADAPTATIONS AND EXTENSIONS:

» Health center staff will need to consider how pediatric patients can utilize this measure. Should all patients be included? At what age do parents set goals and at what age should children set goals for themselves? Strategies for engaging the parent-child relationship should be considered.

» Staff will need to determine how often these goals should be reviewed. See the measure Self-Management Goal Review for guidance. Consider collaborating and sharing with your medical department, so there is constant reinforcement.

“The evidence for improved health outcomes for patients who set self-management goals is compelling. When that evidence is combined with the anecdotal clinical experience, it quickly becomes obvious that empowering a patient to set self-management goals and collaborating with them to achieve those goals truly does make a world of difference.”

-Dr. Matt Allen, Dental Director, Clinica Family Health Services
SELF-MANAGEMENT GOAL REVIEW
SELF-MANAGEMENT GOAL REVIEW

Self-Management Goal Review tracks the percent of health center patients who have established oral health self-management goals and reviewed them with their care team. Tracking this measure answers the question: How well are the medical and dental teams working collaboratively with their patients to improve their patients’ health?

# of All Health Center Patients Who Have Oral Health Self-Management Goals Reviewed with Their Care Team

# of All Unique Dental Patients With Established Self-Management Goals
MEASURE 8: Self-Management Goal Review

WHY IS THIS MEASURE SIGNIFICANT?

MEDICAL AND DENTAL INTEGRATION is part of an important comprehensive health care. Engaging medical providers in oral health care utilizes the full health care system to support patient health. Collaboration among providers in both medical and dental in goal setting for patients helps create patient-centered health homes.

Setting self-management goals promotes patient engagement in their own health care. Sharing the oral health goals with the medical provider activates the whole team to work together.

FACTORS THAT MAY IMPACT THE MEASURE SELF-MANAGEMENT GOAL REVIEW:

Interoperable records – The most important aspect of this measure is being able to share the information. There will need to be a system for communicating and documenting the self-management goals across departments and possibly software systems.

Workflow integration – Staff will need to determine who conducts the goal review, where this fits into a regular visit, if it is part of the health history review, and if there are ways to identify whether patients have a dental provider.

Education – Medical providers may need encouragement in tracking another measure and understanding the value of collaborating on these goals.

Increased collaboration – If the health center’s medical and dental departments are not used to working together, it may require staff collaboration and education.

Relevant ICD-10 Diagnosis Codes, ADA CDT Codes, and CPT Codes:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z00.00</td>
<td>Encounter for general adult medical examination without abnormal findings</td>
</tr>
<tr>
<td>Z00.01</td>
<td>Encounter for general adult medical examination with abnormal findings *This code requires additional codes to identify abnormal findings, please refer to the ICD-10 manual.</td>
</tr>
<tr>
<td>D0120</td>
<td>Periodic oral examination</td>
</tr>
<tr>
<td>D0145</td>
<td>Oral evaluation for a patient under three years of age and counseling with primary caregiver</td>
</tr>
<tr>
<td>D0150</td>
<td>Comprehensive oral evaluation (initial exam)</td>
</tr>
<tr>
<td>D0190</td>
<td>Screening of a patient</td>
</tr>
<tr>
<td>99396</td>
<td>Periodic comprehensive preventive medicine reevaluation *Codes specific to self-management goal review do not currently exist. May need to develop internal “dummy” service code.</td>
</tr>
</tbody>
</table>
HOW TO COLLECT DATA ON SELF-MANAGEMENT GOAL REVIEW:

Tracking data on self-management goal review can be difficult. Typically dental providers chart exclusively in either an EDR or additionally in the EHR, while medical providers typically don’t use the EDR. These differences require providers to have access to both record systems. Dental departments should establish goals documented in the EHR that would allow medical providers access to review and chart. The ease of this collaboration depends on how well the dental and medical records are integrated and how well care teams incorporate this in their normal workflow. You will need to be creative in developing alternative methods using other tracking systems or dummy codes.

HOW TO USE SELF-MANAGEMENT GOAL REVIEW DATA:

» Collect baseline data and set an initial target. Most centers will start from zero so there is great potential for growth.

» Use the data to emphasize collaboration between medical and dental departments and to be an example of patient-centered care.

» Analyze with other metrics:
  › Compare your data with the oral health risk assessment done in the medical department. As risk assessments increase, do referrals and subsequent development of self-management goals increase?
  › Compare the data with patient satisfaction surveys. Do patients appreciate having all of their providers familiar with and involved in supporting all of their health issues and goals?

MEASURE ADAPTATIONS AND EXTENSIONS:

Since patient visits are inconsistent between medical and dental providers, it’s possible that goals could be achieved before a provider has been able to review them with the patient. Timing may be a challenge.
Treatment Plan Completion
TREATMENT PLAN COMPLETION

The Treatment Plan Completion measure assesses the percent of patients who complete their recommended treatment within a six-month time frame. Tracking this measure answers the question: to what extent are patients completing recommended treatment?

**Do the math**

<table>
<thead>
<tr>
<th># of Patients with Phase I Treatment Plans Completed Within 6 Months After Exam</th>
<th># of Exams Performed 6 Months Ago</th>
</tr>
</thead>
</table>
MEASURE 9: Treatment Plan Completion

WHY IS THIS MEASURE SIGNIFICANT?

TREATMENT PLAN COMPLETION measures the degree to which a patient’s oral health treatment needs are being met. Completing treatment improves a patient’s health, satisfaction with their Health Center experience, and allows them to focus on prevention rather than restoration.

FACTORS THAT MAY IMPACT THE TREATMENT PLAN COMPLETION RATE:

Access to appointments for current patients - For patients to finish a treatment plan, they must be able to access a dental provider. Access may be affected by:

- Coverage limitations. Many states limit Medicaid dental coverage for adults including frequency allowed for certain services. In addition if a co-pay or non-covered procedure is required for completion of treatment (e.g., posterior root canals or crowns), patients may desire to delay treatment.

- Length of time until available appointments.

- No shows.

- Patient Mix. The degree to which the dental clinic is accepting new patients versus holding appointment slots for current patients.

Treatment plan complexity - The complexity of the treatment plan for the clinic’s patient population can vary (e.g. adult treatment plans are typically more complex than pediatric, including procedures such as dentures and implants).

Patient comprehension of treatment plan - The degree to which the patient understands and has committed to the prescribed treatment plan will affect completion.

Alignment between dentist and dental hygienist - The dental team’s understanding and coordination of treatment goals for the patient affects completion.

Relevant ICD-10 Diagnosis Codes and ADA CDT Codes:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z01.20</td>
<td>Encounter for dental examination and cleaning without abnormal findings</td>
</tr>
<tr>
<td>Z01.21</td>
<td>Encounter for dental examination and cleaning with abnormal findings</td>
</tr>
<tr>
<td></td>
<td>*This code requires additional codes to identify abnormal findings, please refer to the ICD-10 manual.</td>
</tr>
<tr>
<td>D0120</td>
<td>Periodic oral examination</td>
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<td>D0145</td>
<td>Oral evaluation for a patient under three years of age and counseling with primary caregiver</td>
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<tr>
<td>D0150</td>
<td>Comprehensive oral evaluation</td>
</tr>
<tr>
<td>D0190</td>
<td>Screening of a patient</td>
</tr>
<tr>
<td></td>
<td>*Codes specific to completed treatment plans do not currently exist. May need to develop internal “dummy” service code.</td>
</tr>
</tbody>
</table>
Data continuity – If the electronic dental record (EDR) has the capability to capture recommended recall visits, providers may need training to use this function. Providers will need additional training and support to input dummy codes for treatment completion.

**HOW TO COLLECT DATA ON TREATMENT PLAN COMPLETION:**

To collect data on this measure, look for all patients who had an exam 6 months prior to the measurement month and had their Phase 1 (as defined in the NNOHA Operations Manual) Treatment plan completed on or before the last day of the measurement month.5

Steps to calculate Treatment Plan Completion rate:

1. Specify the measurement month.

2. Go back six months prior to the measurement month to find the index month.

3. Count the number of patients in the index month with exam. This is your denominator.

4. Of the patients in the denominator (result of step 3), count the number of patients with Phase 1 treatment plan completed by the last day of the measurement month. This is your numerator.

5. Treatment Plan Completion rate is $100 \times \frac{\text{numerator}}{\text{denominator}}$.

For example:

1. March 2017 is the measurement month.

2. Go back 6 months (February, January, December, November, October, September). September is the index month.

3. Count the number of patients in September 2016 with exam.

4. Of the patients in step 3, count the patients with treatment plan completed by 31 March 2017.

5. Treatment Plan Completion rate is $100 \times \frac{\text{numerator}}{\text{denominator}}$.

For example:

- March 2017 is the measurement month.
- Go back 6 months (February, January, December, November, October, September).
- September is the index month.
- Count the number of patients in September 2016 with exam.
- Of the patients in step 3, count the patients with treatment plan completed by 31 March 2017.
- Treatment Plan Completion rate is $100 \times \frac{\text{numerator}}{\text{denominator}}$.

**Tip:**

The CDT Code does not have a specific code for treatment plan completion. Although a programmer may be able to look for this information by identifying which CDT services were treatment planned and whether they were provided within the next 6 months; it may be easier to simply institute a SMART CODE indicative of treatment plan completion. IT staff should consult with Clinical Champion to determine which code to use for the numerator.

---

HOW TO USE TREATMENT PLAN COMPLETION DATA:

Identify any trends and set a target – Track treatment plan completion rate for at least a six-month period to identify the average current rate of completion.

Segmentation – Given typical differences in access issues for adults and children, health centers may elect to segment this metric by special population. Given the importance of pregnant patients to complete their treatment prior to delivery, health centers may elect to track treatment plan completion among this patient population.

Analyze with other metrics:

» No shows – If strategies to reduce no shows are successful, is there an increase over time in treatment plan completion?

» If more treatment plans are completed, does the Encounters per Hour measure also improve as providers are able to focus more on prevention?

» Patient Satisfaction – If strategies to increase patient satisfaction with their health center experience are successful, is there an increase over time in patients showing up for their appointments and completing treatment?

» Analyze how much each provider gets done at visits. Are all providers following the quadrant dentistry standards?

For a detailed example of how one Health Center addressed treatment plan completion, visit:

“This metric has the possibility of [prompting] incredible change in how we deliver care.”

-Dr. Mark Koday, Yakima Valley Farmworkers Clinic
RECALL RATES
The Recall Rates measure tracks the percentage of patients who have returned for a recommended recall visit established during a previous dental appointment. This measure tracks continuity of care.
MEASURE 10: Recall Rates

WHY IS THIS MEASURE SIGNIFICANT?

During comprehensive dental appointments, providers will determine when the next examination should take place. These rates are based on many factors such as severity of risk factors, need to monitor disease processes, family dental health and overall oral health. RECALLS are important because they establish a continuum of care for the patient, allow the care team to address issues early in the disease process and allow providers to emphasize prevention.

Having good follow-through with recall appointments can also improve the provider-patient relationship. Recall appointments should be based on a patient's disease risk, and in accordance with risk-based guidelines. Recall visits may be more frequent for more severe periodontal or dental needs and high-risk patients, or less frequent for those at low-risk.

FACTORS THAT COULD BE ADDRESSED BY THE HEALTH CENTER THAT MAY IMPACT THE MEASURE RECALL RATES:

Risk assessment – Utilizing risk assessment allows providers to determine the ideal frequency of visits.

No-show rates – Patients who do not show for appointments will obviously have an impact on this rate. Suggestions for addressing this issue can be found in the No Show measure section.

Scheduling next visits – Ease and availability for patients to schedule recall visits may be an issue.

Insurance coverage – Depending on the plan, insurance may have limits on the frequency of some covered benefits, but some patients may need to be seen every three to six months, based on risk and disease status.

Support services – Availability of enabling services and support by the staff will benefit the recall rate and support patients to return.

Patient education – Emphasize recall and regular visits for the whole family.

Relevant ICD-10 Diagnosis Codes and ADA CDT Codes:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z01.20</td>
<td>Encounter for dental examination and cleaning without abnormal findings</td>
</tr>
<tr>
<td>Z01.21</td>
<td>Encounter for dental examination and cleaning with abnormal findings</td>
</tr>
<tr>
<td></td>
<td>*This code requires additional codes to identify abnormal findings, please refer to the ICD-10 manual.</td>
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<td>Oral evaluation for a patient under three years of age and counseling with primary caregiver</td>
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<tr>
<td>D0150</td>
<td>Comprehensive oral evaluation (initial exam)</td>
</tr>
</tbody>
</table>
HOW TO COLLECT DATA ON RECALL RATES:

First, query the system for patients who have had either a comprehensive oral evaluation (D0150), or a periodic oral exam (D0120) during the data period. Health centers will need to know which patients are due for recall in a certain month and how many complete their appointments. As each patient will have different treatment plans and recommended recall, the date for recall will vary by patient. Your practice may also have an electronic recall system, which generates notices to patients based on a recall note having been added to the patient chart at their previous visit. If that is the case, then reports could be run to count which patients had a recall notice sent to them and subsequently who had a visit with a D0150 or D0120 within 30-45 days of notification. Staff may need to do a chart audit to compare recommended recall dates versus the next actual visit, depending on what systems are available. While the goal of measuring recall visits is to support risk-based dental care, some organizations may experience challenges with collecting data this way. Another way to address this measure is to look at recall on an overall population level. For example, six months ago we did X number of exams (new and recall), how many did we see again as recalls in the measurement period?

HOW TO USE RECALL RATES DATA:

» Recall rates work in conjunction with completed treatment plans. Do patients who meet their recall dates also have higher success rates with completed treatments?

» Compare the data with caries rates. Are patients with better recall rates experiencing fewer caries?

» Compare data with other disease experiences. (e.g. do patients with diabetes have a low recall rate and would they benefit from outreach?)

» Is there a financial benefit to improved recall rates? As the recall rate improves, are providers more productive?

For example: # of D0120 from June 1-June 30, 2016/ # of D0120 and D0150 from December 1-December 31, 2015 for looking at 6 months recall

Example:  85  (Jun 2016 # of D0120)

110  (Dec 2015 # of D0120 + D0150)

= 77.2%
NO SHOWS
The No Shows measure tracks the percent of patients who do not show up for an appointment or call to cancel. Tracking this measure addresses the question: How well is the system of patient appointments and reminders functioning?

<table>
<thead>
<tr>
<th># of Patients</th>
<th>Scheduled for a Dental Visit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># of Patients Who Do Not Show Up for Scheduled Dental Visits</td>
</tr>
<tr>
<td>11</td>
<td># of Patients Scheduled for a Dental Visit</td>
</tr>
</tbody>
</table>
MEASURE 11: No Shows

WHY IS THIS MEASURE SIGNIFICANT?

Booking patients in advance helps a clinic organize the day and allot for the correct staffing and supplies. When patients do not show up, it can wreak havoc with the organization and scheduling. Absent patients mean that providers aren’t being fully utilized, the patient isn’t receiving the care they need. Clinics then rely more on people walking in for same day appointments, while the original patients will likely need to be rescheduled.

Lower no-show rates speak to patients receiving services, providers using their expertise appropriately, and the overall value of services provided. Identifying, and possibly reducing, the number of no shows is one way a health center dental program can ensure they are working to their maximum efficiency.

FACTORS THAT MAY IMPACT THE NO SHOWS MEASURE:

Redesign – The health center team may need to go through a formal redesign process to assure they are being efficient.

Scheduling – Assure that appointments are necessary, that the scheduling times are not too far in the future, and that the appointments respect patients’ time. (Include non-traditional hours, such as nights and weekends for patient-centered access.)

Confirmations – Establish a system for reminding the patients of upcoming appointments, confirm if the visit is still necessary and give them an easy opportunity to cancel if needed.

Patient satisfaction – Survey patients to determine if they believe the follow-up appointments were useful. Interview patients with multiple no shows to ask why they miss appointments, and how health center staff could help.

Supporting services – If there are common themes for missed appointments (e.g. child care, transportation) the health center could work on solutions.

Relevant ICD-10 Diagnosis Codes and ADA CDT Codes:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>D9986</td>
<td>Missed appointment</td>
</tr>
<tr>
<td>D9987</td>
<td>Canceled appointment</td>
</tr>
<tr>
<td></td>
<td>Not applicable. No billing codes are utilized for No Shows.</td>
</tr>
</tbody>
</table>
HOW TO COLLECT DATA ON NO SHOWS:

Collecting no show data is a simple math problem. Identify the number of patients who were scheduled for dental visits as the denominator and how many of those actually made it to the office as the numerator. Most electronic scheduling systems have ways to identify missed appointments. Front desk staff can also make calculations by reviewing the daily schedule when immediate feedback is desired. Staff will need to determine how to track missed appointments vs. late appointments, vs. missed appointments that were filled with same-day patients.

HOW TO USE NO SHOWS DATA:

» Establish baseline data on no shows.

» Share the data with staff and patients to emphasize the problem.

» Determine key factors through patient surveys, chart reviews and staff input.

» Identify trends in no-show appointments, e.g. days of week, time of month, yearly events.

No shows are likely due to a variety of factors. Each health center may need to experiment with different modifications to find out what is most useful in their community: changing confirmation tactics, enhancing enabling services, streamlining patient visits, establishing new no show policies, etc.

Analyze with other metrics:

» Compare the numbers to the need for same-day appointments: High no-show rates may not be an issue if the demand for same-day appointments is consistent and comparable.

MEASURE ADAPTATIONS AND EXTENSIONS:

Health centers may need to determine how to calculate cancellations. One possibility: Cancellations with fewer than 24 hours notice also count as no shows, more than 24 hours notice do not.
GROSS CHARGES (PRODUCTION) PER ENCOUNTER
The Gross Charges per Encounter measure tracks the actual charges established from dental patient visits. Tracking this measure answers the question: How much dentistry is being done at each visit over time?
WHY IS THIS MEASURE SIGNIFICANT?

IMPROVED ORAL HEALTH for the community is the main goal for all oral health programs. One way to achieve this goal is to maximize the care a patient receives at each visit. By doing this, patients will need fewer appointments (and the related time off from work, child care and travel issues). Staff will spend less time scheduling, and providers will make the most of their time.

The current standard of production is quadrant dentistry where patients who need a great deal of treatment have all of their issues addressed in one section of their mouth at a visit. This allows the providers to maximize production while allowing some respite between treatments. The Gross Charges per Encounter is a piece of the financial picture of a center but also provides a snapshot of the amount of dentistry performed at each patient’s visit.

FACTORS THAT MAY IMPACT THE MEASURE GROSS CHARGES PER ENCOUNTER:

- Patients must receive appropriate services and standard acceptable treatment options.
- Health center leadership may focus on payer mixes, populations of focus and competition for patients to emphasize different financial expectations.
- Fee schedules, claims submission, coding processing and data entry also impact gross charges per encounter.
- Providers could emphasize to patients that they will receive same-day treatment allowing them to avoid a return visit.
- Providers will need appropriate numbers of chairs and assistants to have optimal productivity.

HOW TO COLLECT DATA ON GROSS CHARGES PER ENCOUNTER:

Generate a report of the total financial charges for the dental department or location and divide it by the number of unduplicated patient encounters. This is most likely a shipped report with the practice...
There are many touch points to engage with a patient throughout his or her healthcare experience, with many opportunities to encourage health promoting behaviors outside of the four walls of the dental practice. Coordinating with other members of a patient’s health care team, utilizing all the primary care, enabling, or wrap around services designed to support a patient’s health, optimizes resources and is essential to support the kind of behavior change needed to address the chronic diseases that we see every day.”

-Dr. An Nguyen, Clinica Family Health Services, Colorado
ENCOUNTERS PER HOUR
ENCOUNTERS PER HOUR

The Encounters Per Hour measure tracks the average number of patients a provider sees per hour. This measure answers the question: Are providers meeting general productivity standards?

\[
\text{ENCOUNTERS PER HOUR} = \frac{\text{# of Encounters for dentists or dental hygienists}}{\text{# of Hours in clinic}}
\]

Do the math.
MEASURE 13: Encounters Per Hour

WHY IS THIS MEASURE SIGNIFICANT?

This measure gives a GENERAL SNAPSHOT OF PROVIDER PRODUCTIVITY. Encounters per hour are not the only factor that should be considered, but it can be a helpful tool to get a broad picture of how each provider performs.

Generally accepted recommendations are 2,500 to 2,700 encounters per year for dentists and 1,300 encounters per year for dental hygienists.\(^6\)

Important variables such as provider specialties, needs of the community and clinic efficiency will also be a part of the equation.

FACTORS THAT COULD BE ADDRESSED BY THE HEALTH CENTER THAT MAY IMPACT THE MEASURE ENCOUNTERS PER HOUR:

- **Clinic redesign** - The dental clinic may need to address operational efficiencies in scheduling, the number of exam rooms, available equipment, available support staff and patient visit flow to assure each provider has the best opportunity to work at the top of their licensure. General recommendations include a minimum of two chairs and 1.5 dental assistants per provider.\(^7\)

- **Utilizing staff** - Assure that all staff are working to the maximum of their training, capabilities and scope allowed.

- **No shows** - High no-show rates will affect provider productivity and may need to be addressed in tandem.

- **Recognition of limitations** - Even though there are recommendations for productivity, each community and health center is unique, so expectations will need to account for needs of the patients (e.g., number of pediatric patients, patients with complex treatment needs, participation in training of dental students or residents, high disease rates, etc.).

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\(^7\) [http://bphc.hrsa.gov/archive/technicalassistance/resourcecenter/services/dentalprogramprocedures.pdf](http://bphc.hrsa.gov/archive/technicalassistance/resourcecenter/services/dentalprogramprocedures.pdf)

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**Relevant ICD-10 Diagnosis Codes and ADA CDT Codes:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z01.20</td>
<td>Encounter for dental examination and cleaning without abnormal findings</td>
</tr>
<tr>
<td>Z01.21</td>
<td>Encounter for dental examination and cleaning with abnormal findings</td>
</tr>
<tr>
<td></td>
<td><em>This code requires additional codes to identify abnormal findings, please refer to the ICD-10 manual.</em></td>
</tr>
<tr>
<td>D0120</td>
<td>Periodic oral examination</td>
</tr>
<tr>
<td>D0140</td>
<td>Limited oral evaluation</td>
</tr>
<tr>
<td>D0145</td>
<td>Oral evaluation for a patient under three years of age and counseling with primary caregiver</td>
</tr>
<tr>
<td>D0150</td>
<td>Comprehensive oral evaluation (initial exam)</td>
</tr>
<tr>
<td>D0190</td>
<td>Screening of a patient</td>
</tr>
</tbody>
</table>
HOW TO COLLECT DATA ON ENCOUNTERS PER HOUR:

Most software systems can easily track the data for encounters per hour. Different clinics may not have clinical hours tracked in the system, so in those cases the hours need to be calculated separately. The report would need to include the numerator as the number of encounters posted in a given time frame (e.g. one month), and the denominator as the total number of clinical hours worked by the provider. Ideally, you would do this monthly to enable comparison across months. If exact clinical hours worked are not known, a rough figure for full time is 1,600 work hours per year after accounting for holidays and vacations.

Use a consistent definition of an encounter when calculating total encounters per hour and the previous measure, Gross Charges per Encounter.

HOW TO USE ENCOUNTERS PER HOUR DATA:

» Benchmark current rates and compare to national averages. Evaluate if improvements can be made.

» Compare these results with Relative Value Unit (RVU) reports. If RVUs per visit are low and encounters per hour are high, that may indicate that providers are completing a high number of visits but not getting much done at each visit.

» Use the data to determine if operational redesign would be beneficial.

» Analyze with other metrics: Present this data alongside the Gross Charges per Encounter and Direct Cost Per Visit measures as a snapshot of financial health.

» There should be a balance between gross charges and encounters per hour to equalize quality of care and provider production.

MEASURE ADAPTATIONS AND EXTENSIONS:

» This equation provides numbers for each provider individually. Staff may want to run numbers for different teams or the department as a whole.

» Attempts to increase encounters per hour should not be at the expense of ignoring one type of care or a particular patient population.
DIRECT COST PER VISIT
### DIRECT COST PER VISIT

The Direct Cost Per Visit measure tracks the actual cost of a dental encounter. Tracking this measure helps centers understand: the actual cost of private care.

<table>
<thead>
<tr>
<th>Total Direct Expenses</th>
<th># of Encounters</th>
</tr>
</thead>
<tbody>
<tr>
<td>62</td>
<td>14</td>
</tr>
</tbody>
</table>
MEASURE 14: Direct Cost Per Visit

WHY IS THIS MEASURE SIGNIFICANT?

DIRECT COST PER VISIT gives an average cost of a patient visit to the health center dental department. Direct costs in the dental department include all costs for the provision of dental services. This includes staff, fringe benefits, supplies, equipment depreciation, related travel, dental lab services and dental x-ray. Non-clinical support services and facility costs associated with the dental practice should also be included. See the UDS manual for specific instructions for collecting this measure.8

Indirect costs that are shared by the health center as a whole such as marketing, or administrative and general support staff salaries are not included.

Administrative overhead usually is not included in direct cost and usually accounts for 20-25% of expenses. Tracking this cost measure is important as it allows management to identify areas that require additional support and to make sound financial decisions for the future.

FACTORS THAT MAY IMPACT THE DIRECT COST PER VISIT MEASURE:

Division of labor – Since provider time is generally the most costly part of a patient visit, assure that all support staff are being used to the full extent of their capabilities and training.

Office efficiency – Consider office redesign if the office-flow is not already maximized.

Needs analysis – Some communities have higher needs and extent of care (e.g., high percent of restorations, patients with complex treatment needs, etc.)

Review purchasing – Regularly analyzing office expenditures will assure that the health center is utilizing cost-effective options and taking advantage of all discounts.

Relevant ICD-10 Diagnosis Codes and ADA CDT Codes:

Not applicable. Tracking direct costs does not require ICD-10 or CDT codes.

HOW TO COLLECT DATA ON DIRECT COST PER VISIT:

Start by determining all costs associated with the dental department. Yearly analysis may be more easily conducted as far as salaries and expenditures. Include every direct cost possible from staff salaries (clinical and clerical), fringe benefits, supplies, equipment depreciation, related travel, dental lab services and dental x-ray. Do not include indirect costs shared by the health center, such as insurance, general support staff, utilities and administrative overhead.

Divide the total by the total number of patient visits during the same time frame. The resulting number is the direct cost per visit.

HOW TO USE DIRECT COST PER VISIT DATA:

» Collect baseline data and set realistic financial and productivity goals.

» Utilize the data to develop budget forecasts, demonstrate program successes, plan for future expansions or to show the need for additional support.

» Analyze with other metrics: The direct cost measure works in conjunction with the other financial and productivity measures.

MEASURE ADAPTATIONS AND EXTENSION:

Consider segmenting the report by different procedures, for example, fillings versus dentures and review it in the context of the community and other quality metrics. This measure could help determine what the clinic’s scope of practice is to serve the needs of the population.
Recommendations to Family and Friends
RECOMMENDATION TO FAMILY AND FRIENDS

This measure tracks the percentage of patients who have completed a satisfaction survey and would recommend the health center’s services to their family and friends. Tracking this measure answers the question: Do the patients perceive that the health center provides valuable, quality services?

# of Patients that Indicate They Would Recommend the Health Center Services to Family and Friends

# of Patients Who Complete a Satisfaction Survey
MEASURE 15: Recommendation to Family and Friends

WHY IS THIS MEASURE SIGNIFICANT?

Health Resources and Services Administration’s (HRSA’s) health center program grantees must measure and assess patient satisfaction, which has become an important measure in determining the quality of patient-centered care. Satisfaction may be centered on providers’ technical skills, staff interpersonal skills, the center’s equipment and building and/or available services.

Some benefits of satisfied patients include less staff time spent on complaints, more compliant patients, increased positive word-of-mouth advertising and additional patient referrals. The degree to which a patient would recommend their provider or health center to the people closest to them is an indication of how much they value and trust them. Low satisfaction or a lack of willingness to recommend the center can indicate a need for improvement.

FACTORS THAT MAY IMPACT THE MEASURE RECOMMENDATION TO FAMILY AND FRIENDS:

Survey standards – Develop standard practices for surveying patients to assure it occurs regularly and for a broad sample of patients.

Staff training – Interpersonal skills are one of the most influential factors in patient satisfaction. Make sure that all providers have the necessary skills to show patients they care, listen respectfully and provide appropriate levels of information.

Efficiency of patient visits from check-in to checkout – Regularly review patient wait times and ease of visits to make sure their time is being respected.

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</tr>
<tr>
<td></td>
<td>*Codes specifically for patient satisfaction surveys do not currently exist.</td>
</tr>
</tbody>
</table>
Data dissemination – Assure that the data is shared regularly with staff.

Complaint resolution – Provide ways for patients to easily address complaints or provide feedback in addition to surveys. Display American Medical Association (AMA) posters, offer anonymous feedback lines and provide contact information for people who can assist patients with concerns.

Patient education – Assure that patients are aware of the systems in place, get the relevant information to their diagnosis and provide answers to their questions.

HOW TO COLLECT DATA ON RECOMMENDATION TO FAMILY AND FRIENDS:

For detailed information on patient satisfaction and experience in health centers, visit:


Your health center most likely already conducts patient satisfaction surveys. Determine if any dental questions are included. If no oral health questions are included, consider adding some.

Designate staff to compile and share and input data, depending on the methods selected.

Example of Report:
HOW TO USE RECOMMENDATION TO FAMILY AND FRIENDS DATA:

» Collect baseline data and set a target for improvement.

» Low satisfaction or recommendation scores identify areas that need improvement. Use patient satisfaction responses as part of quality improvement programs.

» Low scores may also indicate whether patients are aware or educated about available services. The surveys may reveal the need for promotional or educational activities.

» Compare satisfaction rates across departments. Do some departments need more resources for education or staffing?

» Consider developing ways for satisfied clients to actually refer their family and friends: collect contact information, provide postcards, share ways new patients can receive services.

» Analyze with other metrics:

  › Patient satisfaction can be a useful comparison with other measures. Some suggested in this document include determining if satisfaction links to sealants, topical fluoride, self-management goals and risk assessment.

MEASURE ADAPTATIONS AND EXTENSIONS:

Some studies have determined that patient satisfaction is not always directly related to ‘willingness to make recommendations’ so the surveyors are encouraged to track scores for both patient satisfaction and ‘willingness to make recommendations.’