Using The Health Center Dental Dashboard© for Tracking, Measuring, and Improvement

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(© Delta Dental of Colorado Foundation and Arcora Foundation 2015)
NNOHA’s Mission

To improve the oral health of underserved populations and contribute to overall health through leadership, advocacy, and support to oral health providers in safety-net systems.
Thank you for joining our webinar!

Before we begin...

✓ Share
✓ Chat
✓ Be courteous
✓ You’re being recorded
✓ Tell us: “To be able to apply what I learned today, what I need from NNOHA is...”
Polling Question

Where do you work?
- Health Center?
- PCA?
- Health Center Controlled Network?
- Other

Thank you!
Learning Objectives

• Discuss ways to use the Health Center Dental Dashboard to identify targeted areas for improvement and develop improvement goals.
• Recognize the 15 measures that make up the Health Center Dental Dashboard©
• Understand how safety net dental clinics can monitor and measure oral health data
# Session Overview

## Agenda

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<td>History of the Project</td>
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<td>Measurement for Success: The 15 Dashboard© Measures &amp; Why</td>
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<td>The Dashboard© in Action: NNOHA Collaborative &amp; Benchmarking Data</td>
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<td>Applying the Science of Improvement</td>
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<td>Upcoming opportunities through NNOHA:</td>
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<td>• Collaborative</td>
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<td>• NNOHA Annual Conference</td>
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<td>• What do you need?</td>
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HISTORY OF THE PROJECT
NNOHA Member Benefits

- Discounted Annual Conference Registration
- Educational Opportunities
- High-quality resources
- Networking opportunities
- Technical assistance
- Active ListServ updated daily

For more information, contact info@nnoha.org
History

2013
Convening of Expert Advisors

2015
Launch of Health Center Dental Dashboard© User’s Guide and data collection tool

2017
Updates to User’s Guide and new data collection tool developed
Development

Participants from:

- CMS
- NNOHA
- Institute for Oral Health
- Colorado and Washington CHCs working on oral health
- Arcora Foundation
- Delta Dental of Colorado Foundation
- Primary Care Associations
Vision For This Work

Health Centers are sustainable, high-performing healthcare providers with strong operations to ensure high productivity and health improvements (including oral health improvements) among their patients.
MEASUREMENT FOR SUCCESS: THE 15 HEALTH CENTER DENTAL DASHBOARD© MEASURES
Quality Improvement And Data

• HRSA Requirement\(^1\): Health Centers are required to have an ongoing Quality Improvement/Quality Assurance (QI/QA) program that includes clinical services and management

Source:

• HRSA UDS sealants measure – starting 2015

\(^1\)HRSA Health Center Program Compliance Manual – Chapter 10: Quality Improvement/Accurance
Attention To Dental Metrics Expanding

National Level

- National Quality Forum (NQF)-Endorsed® Standard
- National Network for Oral Health Access (NNOHA)
- Meaningful Use Measures
- Medicaid/CHIPRA
- Healthcare Effectiveness Data and Information Set (HEDIS)
- Healthy People 2020 Oral Health Objectives

State Level

- Oregon CCO Metrics

Practice Level

- Dental Quality Alliance
- Health Center Dental Dashboard® Measures
Percentage of children age 6-9 years of age at elevated caries risk, who received a dental sealant on a first permanent molar by state UDS 2016
Why Use A Dashboard

- Status updates
- Monitor data
- Uses:
  - Facilitate communication
  - Demonstrate strategic successes
  - Maintain QI momentum
  - Identify opportunities for improvement

A tool to take action!
Why We Measure

System management
- Prediction
- Consistency
# Three Faces of Performance Measurement

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<th>Aspect</th>
<th>Improvement</th>
<th>Accountability</th>
<th>Research</th>
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<tr>
<td><strong>Aim</strong></td>
<td>Improvement of care</td>
<td>Comparison, choice, performance management</td>
<td>New knowledge (efficacy)</td>
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<td><strong>Methods</strong></td>
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<tr>
<td>Test Observability</td>
<td>Tests are observable</td>
<td>No test, evaluate current performance</td>
<td>Test blinded or controlled</td>
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<tr>
<td>Bias</td>
<td>Accept consistent bias</td>
<td>Measure and adjust to reduce bias</td>
<td>Design to eliminate bias</td>
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<tr>
<td>Sample Size</td>
<td>“Just enough” data, small sequential samples</td>
<td>Obtain 100% of available, relevant data</td>
<td>“Just in case” data</td>
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<td>Flexibility of Hypothesis</td>
<td>Flexible hypotheses, change as learning takes place</td>
<td>No hypothesis</td>
<td>Fixed hypothesis (null hypothesis)</td>
</tr>
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<td>Testing Strategy</td>
<td>Sequential tests</td>
<td>No tests</td>
<td>One large test</td>
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<td>Determining if a change is an improvement</td>
<td>Run charts or Shewhart control charts (statistical process control)</td>
<td>No change focus (maybe compute a percent change or rank order)</td>
<td>Hypothesis, statistical tests (t-test, F-test, chi square, p-values)</td>
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<td>Confidentiality of the data</td>
<td>Data used only by those involved with improvement</td>
<td>Data available for public consumption and review</td>
<td>Research subjects’ identities protected</td>
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Question 2 of the Model for Improvement

The most basic understanding of this is: **Measurement**
### The Health Center Dental Dashboard ©

#### Measures

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The Health Center Dental Dashboard© Tools
“If I had to reduce my message for management to just a few words, I’d say it all had to with reducing variation.”

– W. Edwards Deming
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?

**do the math**

\[
\text{Number of Patients with a Periodic Exam Who Also Have a Diagnosis Code Indicating Caries} \\
\text{Number of Patients with a Completed Periodic Exam}
\]
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.

# of Dental Patients with Completed Risk Assessments

# of All Unique Dental Patients with a Periodic or Comprehensive Exam

AFL ENTERPRISES DESIGNING SOLUTIONS

NNOHA National Network for Oral Health Access
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?

### do the math

- **# 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
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?

# 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
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?

**# 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

**# 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
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?**

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

**# of All Unique Pediatric Patients**
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
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?

**Do the math**

- # 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
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?**

**# of Patients with Phase I Treatment Plans Completed Within 6 Months After Exam**

**# of Exams Performed 6 Months Ago**
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.
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?

# of Patients
Who Do Not Show Up for Scheduled Dental Visits

# of Patients Scheduled for a Dental Visit
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?

**Total $ for Procedures in Dental Department**

**# of All Dental Encounters**
13

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?

do the math

# of Encounters for dentists or dental hygienists

# of Hours in clinic
The Direct Cost Per Visit measure tracks the actual cost of a dental encounter. Tracking this measure helps centers understand: the actual cost of patient care.
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?**

---

The image mentions:

- **# of Patients that Indicate They Would Recommend the Health Center Services to Family and Friends**
- **# of Patients Who Complete a Satisfaction Survey**

These metrics are likely used to assess the patient's satisfaction and the likelihood of them recommending the health center to others.
Polling Question

What dental data are you already collecting?

1. Caries at recall
2. Risk assessment of all dental patients
3. Oral evaluation and/or risk assessment
4. Sealants (6-9 year olds)
5. Sealants (10-14 year olds)
THE HEALTH CENTER DENTAL DASHBOARD© IN ACTION
Summary of NNOHA Initiatives Utilizing the Dashboard©

- **2016**
  - Learning Collaborative Pilot
  - 5 Health Centers

- **2017**
  - Benchmarking Initiative
  - 20 Health Centers

- **2017-2018**
  - Oral Health Improvement Collaborative
  - 39 Health Centers

- **2016-2017**
  - Dashboard Learning Collaborative
  - 26 Health Centers

- **2017**
  - NNOHA Annual Conference Sessions
  - 311 Attendees

- **2018**
  - Healthy Smiles Healthy Children
  - 6 Practices
Overall Design of the NNOHA Dashboard Collaborative

**Goal:** Enhance the quality of oral health services currently provided by implementing the Institute for Healthcare Improvement Breakthrough Series Collaborative methodology to *train health center oral health programs in the Model for Improvement*, creating the foundation for monitoring, reporting and improving on a specific set of dashboard measures that includes the HRSA sealant measure.
Key Learning: PDSA Example

Decided that best practice would be to always try to apply sealants at the time of the periodic exam/prophy visit. We will also try to make scheduling changes so that if it can be determined in advance that a child is eligible for sealants, we add 10 minutes to the scheduled visit so that there is always time to complete.

We are using Fuji Triage for sealant material as it is much quicker and easier to apply. It hasn’t impacted our schedule because of the ease of use. We do want to continue to follow these patients to make sure the retention is as good as the traditional sealants. Also, from initial chart auditing it looks as though our sealant rate did greatly improve in October and Nov.

To improve the rate of sealants being applied, we decided to try applying them at the visit they were diagnosed (prophy, periodic exam) rather than scheduling them to return for treatment. We predicted this would improve our rate completed, but may have a negative impact on the schedule (could make us run behind).

We tried to keep track of how long it took to do the sealants and if it impacted our schedules. We also looked at the change in the rate of sealants in the months we implemented this change. 
High Leverage Changes

“We are prioritizing the Sealants over the cleanings now. We made some waiting room posters to communicate the message of why we may prioritize sealants over cleanings, as well as downloaded handouts from one of the e-mails that came from NNOHA.”

– A NNOHA Collaborative Participant
Benchmarking Initiative Goals

At least **65** health center dental programs self-report using at least 3 measures from the NNOHA Dashboard by June 2017

At least **20** health center dental programs are reporting to a centralized database and receiving comparison reports

First revision of the November 2015 Health Center Dental Dashboard User’s Guide® is completed and available for dissemination

By June 2017
Polling Question

What dental data are you already collecting?

1. Topical fluoride
2. Self-management goal setting
3. Self-management goal review
4. Treatment plan completion
5. Recall rates
Results: Improvement Data from Phase II Dashboard Collaborative 2016-2017 & Benchmarking Initiative 2017

APPLYING THE SCIENCE OF IMPROVEMENT
HRSA Sealant Measure

“We just completed our HRSA UDS reports for 2016 and had a yearly average of 60% Sealant Completion rate (up from 42% in 2015), and it’s looking like we are geared to surpass that significantly for 2017 if we can sustain these changes we have made with NNOHA! It’s definitely been a success!”

- A NNOHA Collaborative Participant
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Caries Risk Assessment (CRA) Data
Dashboard Learning Collaborative

Able to report on CRA monthly

Reported CRA levels at or above 95%

Substantially increased CRA levels from baseline period (Jan-Sep 2017)

By Summer 2017

Median # of patients receiving CRA increased

26

17

5
Caries Risk Assessment (CRA) Data
Dashboard Learning Collaborative
Sealants 6-9 years Data
Dashboard Learning Collaborative

Able to report on the Sealants for 6-9 year olds measure monthly

Showed strong signals of improvement

By Summer 2017

Majority reported sealant rates above the national median
Sealants 6-9 years Data
Dashboard Learning Collaborative

- Series median: dashed line
- Goal: solid line
Grounding the Work

Reduced caries at recall from 64% to 59% in Year 1

Video Link: http://mountainparkhealth.org/free-dental-screenings-reduce-tooth-decay-rates/
Impact

- Evidence-based, patient-centered practices
- Early detection, prevention and management of dental caries
- 26 health centers served approximately 249,000 dental patients in 2016
- An estimated 70,000 unique patients less than 21 years impacted

249,000 patients
70,000 Patients <21

Health centers served approximately 249,000 dental patients in 2016. An estimated 70,000 unique patients less than 21 years impacted.
Benchmarking Initiative Goals

1. **At least 65 health center dental programs** self-report using at least 3 measures from the NNOHA Dashboard by June 2017

2. **At least 20 health center dental programs** are reporting to a centralized database and receiving comparison reports

3. First revision of the November 2015 Health Center Dental Dashboard User’s Guide© is completed and available for dissemination

By June 2017
## Dental Dashboard© Measures for Benchmarking Initiative

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Users Guide & Dental Quality Alliance Specifications

Measures list inspired by the 2015 NNOHA Dashboard Version 1.0

http://www.nnoha.org/resources/dental-dashboard-information/users-guide/

Measure specifications for clinical measures and no-shows developed by Dental Quality Alliance
Polling Question

What dental data are you already collecting?

1. No shows
2. Gross charges (production) per encounter
3. Encounters per hour
4. Direct cost per visit
5. Patient satisfaction/recommendation to family and friends
Challenges

- Electronic dental records and clinic management systems
- Evidence-based clinical practices
- Technical assistance support
- QI resources for dental
- Administrative support

Opportunities

- National interest in measures
- Demand for national standards
- Further refining metrics
UPCOMING OPPORTUNITIES
Next Steps

- Some PCAs are working with their members to report on 1 or 2 Dashboard© measures
- Check out the Health Center Dental Dashboard©
- NNOHA Annual Conference: November 11-14, 2018
  [http://www.nnoha.org/events/conference/](http://www.nnoha.org/events/conference/)
- 4th NNOHA Collaborative will launch in Fall 2018
  - Interested in participating? Contact: Rachel@nnoha.org or rebeccalipman@afl-enterprises.com
Chat in or Discussion
Questions/Comments/Ideas
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