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

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"Measure what is measurable, and make measurable what is not so."

- Galileo Galilei

(© 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.
NNOHA Member Benefits

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

For more information, contact info@nnoha.org
Thank you for joining our webinar!

Before we begin...

✓ Share
✓ Chat
✓ Be courteous
✓ This is being recorded
✓ Please 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 Controlled Network?
- Health Center?
- PCA?
- Other

Thank you!
Learning Objectives

- Recognize the 15 measures that make up the Health Center Dental Dashboard and know where to find resources for measurement.
- Understand how safety net dental clinics can monitor and measure oral health data.
- Discuss ways to use the Health Center Dental Dashboard to monitor and improve performance.
# Session Overview

## Agenda

<table>
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<tr>
<th>The History of the Project</th>
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<td><strong>Measurement for Success: The 15 Dashboard® Measures &amp; Why</strong></td>
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<td><strong>The Dashboard® in Action: Applying the Science of Improvement</strong></td>
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<td>- CHAS QI Journey</td>
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<td>- Denver Health QI Journey</td>
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<td><strong>Facilitated Discussion</strong></td>
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<td><strong>Upcoming opportunities through NNOHA:</strong></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 HC Dental Dashboard®

AFL Enterprises and NNOHA have been working with Delta Dental of Colorado Foundation and Arcora – The Foundation of Delta Dental of Washington since 2013:

- 2013 - convened expert advisors to develop a set of recommended oral health measures for High-Performing Health Centers
- 2015 - original launch of Health Center Dental Dashboard User’s Guide and SharePoint Collection Tool
- 2017 - developed Excel data tool to graph data for each of the measures
  - updates to Health Center Dental Dashboard User’s Guide
- 2018 - NNOHA Benchmarking Collaborative
- 2015-2020 - NNOHA Dashboard Collaborative to improve sealants rates
Vision For This Work

High performing health center dental programs use a dashboard to focus on a few measures they see as critical for quality.

The Health Center Dental Dashboard® serves as a resource for what to measure to monitor performance in a dental setting, and includes 15 measures to drive operational, financial and clinical improvements over time.
APPLYING THE SCIENCE OF IMPROVEMENT

Results: Improvement Data from the Dashboard Collaboratives 2016-2018 & Benchmarking Initiative 2017
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/Assurance
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
- WI Collaborative for Healthcare Quality (3 measures)

Practice Level

- Dental Quality Alliance
- Health Center Dental Dashboard® Measures
## Three Faces of Performance Measurement

<table>
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<tr>
<th>Aspect</th>
<th>Improvement</th>
<th>Accountability</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aim</strong></td>
<td>Improvement of care (efficiency &amp; effectiveness)</td>
<td>Comparison, choice, performance management</td>
<td>New knowledge (efficacy)</td>
</tr>
<tr>
<td><strong>Methods</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test Observability</td>
<td>Tests are observable</td>
<td>No test, evaluate current performance</td>
<td>Test blinded or controlled</td>
</tr>
<tr>
<td>Bias</td>
<td>Accept consistent bias</td>
<td>Measure and adjust to reduce bias</td>
<td>Design to eliminate bias</td>
</tr>
<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>
</tr>
<tr>
<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>
<tr>
<td>Testing Strategy</td>
<td>Sequential tests</td>
<td>No tests</td>
<td>One large test</td>
</tr>
<tr>
<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>
</tr>
<tr>
<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>
</tr>
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MEASUREMENT FOR SUCCESS: THE 15 HEALTH CENTER DENTAL DASHBOARD® MEASURES
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!
Question 2 of the Model for Improvement

Model for Improvement

What are we trying to accomplish?

How will we know that a change is an improvement?

What change can we make that will result in improvement?

The most basic understanding of this is: Measurement
# The Health Center Dental Dashboard® Measures

## Population Health
- Caries at recall
- Risk assessment of all dental patients
- Oral evaluation and/or risk assessment
- Sealants (6-9 year olds)
- Sealants (10-14 year olds)
- Topical fluoride
- Self-management goal setting
- Self-management goal review
- Treatment plan completion

## Fiscal and Operational Sustainability
- Recall rates
- No shows
- Gross charges (production) per encounter
- Encounters per hour
- Direct cost per visit

## Patient Satisfaction
- Recommendation to family and friends
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
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?**

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**Do the math**

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

- **# of Patients with a Completed Periodic Exam**

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AFL ENTERPRISES

ENTSING SOLUTIONS

NNOHAA

National Network for Oral Health Access
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)
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
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
THE HEALTH CENTER DENTAL DASHBOARD® IN ACTION
CHAS HEALTH: A Journey in Quality improvement

Dr. Elisabeth Warder, DDS, Dental Director
History of CHAS Health

- Started in 1994 as a single clinic with 2 exam rooms
- Currently 18 clinics
- Primary care, Dental, OB, Behavioral Health, and Urgent Care Services are offered
- We have 8 dental clinics, 2 of which are stand alone, the other six are collocated with primary care and pharmacy, or urgent care and pharmacy
- Our dental scope of practice includes care for children and adults, including exams, preventative care, sealants, restorative care, fixed prosthodontics, hygiene services, and emergency care.
Experienced a period of rapid expansion, adding 34 dental operatories in 2 years.

This period of rapid growth coincided with the realization that we as an organization did not have defined quality metrics with which to evaluate our program.

Began NNOHA Sealant improvement collaborative in 2018.

Participated in two 9 month programs, beginning in Jan 2018 and ending in June of 2019.

In addition, participated in a medical dental integration collaborative June through November.
Metrics chosen to track

- Sealants 6-9 y/o
- Sealants 19-14 y/o
- CRA for all dental patients
- SMG setting for all patients
- Caries at recall
- Direct cost per visit
Steps taken to achieve success

- Many small PDSA cycles at different locations
- Sealant Registry created in excel
- Trainings developed help providers overcome fears and develop a new way of thinking
- Sharing of evidence based research
- Used several small groups to initiate and track change
  - Lead dentist meetings
  - Guide teams
  - Dental working group
  - QI coach meetings
NNOHA Sealant rate 6-9
NNOHA SEALANT Rate 10-14
% of patients between 6 and 9 years old with a moderate to high risk of caries with sealants on at least one eligible molars.
Caries risk Assessment
% of patients cavities at a Recall examination. This is an outcome measure that is used to gauge the efficacy of our sealant and self management goal setting initiatives on preventing cavities.
Direct Costs per Visit
(Balancing Measure)

Direct costs per month divided by number of dental encounters
Continued progress

- We have seen continued progress in these measures even after completing the collaborative.
- We increased our goal for sealant completion to 90%, and we are almost 87% at this time.
- Decline in caries at recall is motivating and hopeful.
- We have recently begun utilizing tableau, which has made reporting easier.
- In addition to making progress, involvement with the collaborative was key in that sharing of ideas sparked creativity and new ideas.
Ellensburg Dental Clinic’s QI Journey

Ellensburg DC
Series median: dashed horizontal line; Goal: solid horizontal line

- Caries at Recall_LT21
- Direct Costs/Visit
- Risk Assessment

- Sealants 10-14 yrs
- Sealants 6-9 yrs
- Self-Mgmt Goals Set_LT21

[Graphs showing data trends over time]
Chat in or Discussion
Questions/Comments/Ideas

“To be able to apply what I learned today, what I need from NNOHA is...”
UPCOMING OPPORTUNITIES
Next Steps

- Check out the Health Center Dental Dashboard ©
  http://www.nnoha.org/resources/dental-dashboard-information/

- NNOHA Annual Conference: October 25 – 28, 2020
  http://www.nnoha.org/events/conference/

- UPDATED: Quality Chapter of the NNOHA Operations Manual
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