INTRODUCTION

Welcome to the Change Package for the NNOHA Dashboard Quality Improvement Collaborative. Health care, including oral health, is undergoing a period of tremendous and rapid transition. Health Center oral health programs are not exempt from these changes. They must adapt to and incorporate changes in the oral health care delivery landscape even as they continue to fulfill their core mission of improving the oral health of underserved populations thereby contributing to overall health.

The Dashboard Collaborative, funded through a cooperative agreement with the Health Resources and Services Administration, uses an established quality improvement approach - the Institute for Healthcare Improvement's (IHI) Breakthrough Series Collaborative - to implement the NNOHA Health Center Dental Dashboard© of oral health quality measures to enhance the quality of oral health services in health center dental programs. The Dental Dashboard consists of 15 measures that are organized into three categories:

**Health Center Population Health**

1. Caries at Recall
2. Treatment Plan Completion
3. Oral Evaluation and/or Risk Assessment of all Primary Care Patients
4. Risk Assessment of all Dental Patients
5. Topical Fluoride
6. Sealants (6-9 year olds)
7. Sealants (10-14 year olds)
8. Self-Management Goal Setting
9. Self-Management Goal Review
NNOHA launched the Dashboard Quality Improvement Learning Collaborative with a pilot phase bringing together five HRSA-funded Health Center grantee dental programs. Materials, techniques, and methods were developed and will serve as a framework for the second phase of the Collaborative, which will include 26 teams. Pilot teams worked together to develop and test strategies for implementing and improving on the Dashboard measures. These ideas are included in this Change Package.

**COLLABORATIVE AIM**

The NNOHA Dashboard Collaborative follows the structure of the Breakthrough Series (BTS) Learning Collaborative Model.¹

The aim of the NNOHA Dashboard Collaborative is:

"Use the Dental Dashboard and quality improvement methods to improve the oral health of health center patients less than 21 years of age."

Use the Dental Dashboard and QI methods to improve oral health care of health center patients < 21 years old.

- Reduce caries at recall
- Increase patient satisfaction
- Maintain/improve operation performance

**Outcomes**

**Primary Drivers**

- P1. Patients and families are active partners in oral health
- P2. Evidence and risk-based care
- P3. Health center leaders drive and support improved oral health services
- P4. Able to measure clinical and operational performance
- P5. Able to use Model for Improvement to test, deploy and maintain changes

**Secondary Drivers**

- S1. Evidence-based behavior change techniques educate and motivate patients and families (dental SMGs)
- S2. Practice outreach supports visit completion (no shows), SMG compliance
- S3. Patients are assessed for caries risk
- S4. Recall visits completed on risk-based schedule
- S5. Sealants and topical fluoride are applied as required
- S6. Phase 1 Tx plans completed within 6 months
- S7. Medical providers assess risk, apply fluoride, reinforce pt. coaching
- S8. Teams have time and resources to improve
- S9. Organization strategy includes improved oral health
- S10. Patient dental data is available at medical as well as dental visits
- S11. Infrastructure: Adapted EDR and skills to maintain data, queries, reports

**Impact**
This change package publication is a compilation of the changes and strategies that pilot teams tested and found worked best to implement evidence-based practices and the systems to collect measurement data for the Dashboard Collaborative. Our hope is that by benefiting from the experience of those who have gone before you, you will be able to accelerate the pace of change in your own health center. The change ideas are categorized under the Primary, and then Secondary drivers they impact. This initial version of the change package contains the ideas from the activities of the five pilot teams. Future revisions will build on these ideas with the contributions of the 26 teams participating in the second phase of the Dashboard Collaborative.

**ACTIVE PARTNERSHIPS**

**PRINCIPAL DRIVER 1:** Patients and families are active partners in oral health.

**SECONDARY DRIVER 1:** Evidence-based behavior change techniques educate and engage patients and families with dental Self-Management Goals (SMG).

**Change Ideas --**

1. Train providers and other key staff on how to conduct motivational interviewing to help patients set self-management goals.
2. Script culturally sensitive patient oral health education.
3. Provide patients with a copy of their goals and document in chart.
4. Medical providers also address oral health behaviors with parents.
5. Ensure messaging is consistent across disciplines.

**SECONDARY DRIVER 2:** Practice outreach supports visit completion. Reduces no shows; increases SMG compliance.
**Change Ideas --**

1. Script discussion on appointment compliance facilitators.
2. Schedule patients for dental appointment before leaving clinic from medical appointment.
3. Have “goodie bags” ready to go that contain supplies and OHI information for a same-day medical/dental appointment to facilitate patient process flow.
4. Create a follow-up system for self-management goals – telephone call to parent/caregiver to see if patient is maintaining self-management goals. Periodically might vary depending on risk – sooner for high risk (1-2 months), later for lower risk (3-4 months).

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**RELIABLE DELIVERY OF CARE**

**P2. Evidence and risk-based care**

- **S3. Patients are assessed for caries risk**
- **S4. Recall visits** completed on risk-based schedule
- **S5. Sealants** and topical fluoride are applied as required
- **S6. Phase 1 Tx plans** completed within 6 months

**PRIMARY DRIVER 2:** Reliable delivery of timely, evidence-based, risk-based preventive and restorative care.

**SECONDARY DRIVER 3:** Patients are screened for caries risk.

**Change Ideas –**

1. Embed Caries Risk Assessment in the electronic dental record and, if possible, have the system auto-score and code risk level.
2. Implement systems to chart and electronically capture risk status.
3. Development workflow to efficiently conduct risk assessment during the patient visit and frequency/indications for reevaluation of risk status (e.g., based on Caries Recall Assessment (CRA) tool selected, q 1 month, q 3 mos, q 6 mos, based on patient’s risk status, etc.).
4. Define team-based roles and utilize support staff to conduct caries risk assessment.

**SECONDARY DRIVER 4:** Recall visits complete on a risk-based schedule.
Change Ideas –

1. Implement registries that can track patients by risk level.
2. Establish treatment plan protocols based on risk status including guidelines for specific recall intervals.
3. Use the electronic dental record (EDR) to auto generate recall reminders, emails, mailings, run list of patients not attending recall for follow-up.
4. Use an integrated electronic health record (EHR), when available, to program alerts so the Primary Care Physician (PCP) will be aware of clients due for a dental recall.

TIPS & SUGGESTIONS

The foundation of improved access scheduling is the matching of supply and demand on a daily, weekly, and long-term basis.

- Create plans to monitor supply and demand on a regular basis.
- Manage variation in demand.
- Commit to doing today’s work today.
- Use daily huddles and regular staff meetings to plan production and to optimize team communication.

SECONDARY DRIVER 5: Sealants and topical fluoride are applied per local protocol.

Change Ideas –

1. Develop a risk-based local protocol for the application of sealants and fluoride varnish (FV).
2. Sealant Change Ideas:
   a. Dental providers & staff are trained in clinical evidence base, including use over carious lesions, and demonstrate understanding of the cost effectiveness of sealants.
   b. Care process delegates sealant placement to appropriate dental team members.
   c. Consider ability to add sealant placement to any visit type if rooms & support staff available.
   d. Evaluate sealant material types and indications for use of each and train all relevant staff on their use.
   e. Use ultra-rapid 5 second curing lights.
3. Fluoride Change Ideas:
   a. Primary care and dental staff understands national recommendations on FV placement and dose dependency of efficacy.
   b. Test optimal clinic flow for FV placement in primary care and dental clinics.
   c. Care process delegates FV application to appropriate dental team members.
   d. Consider ability to add FV application to any visit type if rooms & support staff available.

SECONDARY DRIVER 6: Phase 1 treatment plans completed within six months.

1 Tips & suggestions gleaned from chronic disease collaboratives outside of oral health. We pulled ideas that could be tested in the dental setting.
**CHANGE IDEAS –**

1. Monitor & control access to comprehensive care to allow treatment (Tx) plan completion within 6 months.
   a. Collect data on the # of appointments needed to complete care on the average patient;
   b. Assess/determine time between appointments at which attendance starts to drop (i.e., 4 weeks);
2. Schedule appointments based on assistant type (e.g., Dental Assistant (DA), Registered Dental Assessment (RDA), Registered Dental Assistant-Expanded Function (RDA-EF)) to ensure team members work to the top of their licenses.
3. Group planned treatments into simplified appointment types to reduce errors in scheduling and allow for greater flexibility when scheduling appointments (i.e., hygiene, operative/restorative, follow-up).
4. Apply advanced access principles to ensure some same day access for patients needing/wanting to be seen the same day.
5. Perform quadrant dentistry when appropriate.
6. Bundle risk-based services with other care whenever possible (e.g., caries risk assessments, FV, and sealants with exams or operative care, etc.).

**TIPS & SUGGESTIONS**

Create a dummy code in the EDR. The code is to be marked at the visit the treatment plan is completed. Develop a report that would track the data. Train staff to know when to complete the code in the EDR. Once these three steps are in place, measure baseline for patients completing their treatment plans.

**IMPROVED ORAL HEALTH SERVICES**

- **P3. Health center leaders drive and support improved oral health services**
- **S7. Medical providers assess risk, apply fluoride, reinforce pt. coaching**
- **S8. Teams have time and resources to improve**
- **S9. Organization strategy includes improved oral health**

**PRIMARY DRIVER 3:** Health Center leaders drive and support improved oral health services.

**SECONDARY DRIVER 7:** Medical Providers assess risk, apply fluoride, and reinforce patient coaching.

**CHANGE IDEAS –**

1. Train medical providers and support staff to develop oral health core clinical competencies.
2. Implement systems to chart and electronically capture risk, auto order FV.
3. Medical practice incorporates FV applications into well-child visit. This care process can be delegated to non-licensed providers such as Wellness Coaches and Medical Assistants.

4. EMR has ability to include oral health self-management goals in After Visit Summaries.

5. Assign a DA to be in the medical department to help with CRA, oral health education, fluoride varnish applications and referrals. This can be an initial strategy to help develop relationships and cross-train medical staff until they are comfortable delivering these services and those care pathways within the medical practice are developed.

**TIPS & SUGGESTIONS**

The foundation of improved access scheduling is the matching of supply and demand on a daily, weekly, and long-term basis.

**SECONDARY DRIVER 8:** Teams have time and resources to improve.

**CHANGE IDEAS –**

1. Identify Senior Leader to ensure resources and support for oral health Quality Improvement.
2. Health Center quality improvement staff and resources available to dental programs.
3. QI teams have sufficient time for training/meetings/huddles.
4. Work on improvements as a team (with defined roles).

**SECONDARY DRIVER 9:** Organizational strategy includes improved oral health.

**CHANGE IDEAS –**

1. Organization strategic plan includes oral health access and/or improvement.
2. Chief dental officer/dental director reports to CEO.
3. Organization strives for parity between primary care and dental program user numbers.

**MEASURE PERFORMANCE DATA**

- **P4.** Able to measure clinical and operational performance
- **S10.** Patient dental data is available at medical as well as dental visits
- **S11.** Infrastructure: Adapted EDR and skills to maintain data, queries, reports

**PRIMARY DRIVER 4:** Health Center dental programs are able to measure clinical and operational performance.
SECONDARY DRIVER 10: Patient dental data available at medical visits as well as dental visits.

CHANGE IDEAS –

1. Commitment to developing an integrated EHR system through purchasing an integrated system or purchasing HL7 bridge between non-integrated EMR and EDR.
2. Oral Health Risk Assessment tool is linked to a population health management registry for querying, reporting, and QI planning purposes.

SECONDARY DRIVER 11: Infrastructure: adapted EDR and skills to maintain data, queries, and reports.

CHANGE IDEAS –

1. Elevating dental program data analytics to be as important as medical program data.
2. Dental program leaders have open access to health center data managers/HIT staff.
3. Identify and/or develop EDR “super-users”.
4. Purchase EDR system that allows end-user configuration and programming.

UTILIZE MODEL OF IMPROVEMENT

P5. Able to use Model for Improvement to test, deploy, and maintain changes.

PRIMARY DRIVER 5: Health Center dental programs are able to use Model for Improvement to test, deploy and maintain changes.

CHANGE IDEAS –

1. Regular improvement team meetings
2. Morning huddles to coordinate and review tests
3. Empower and use ideas from front line staff
4. Use the three fundamental QI questions to guide the team as it sets goals, defines measures and generates ideas for improvement
   a. What are we trying to accomplish?
   b. How will we know that a change is an improvement?
   c. What changes can we make that will result in an improvement?
5. Implement the Plan-Do-Study-Act (PDSA) cycle to test small-scale changes in real work settings – by planning a test, trying it, observing the results, an acting on what is learned

TIPS & RECOMMENDATIONS

Successful PDSA cycles build knowledge and accelerate the adoption of proven and effective changes.
• Think a couple of cycles ahead
• Plan multiple cycles to test and adapt change
• Scale down size of test (# of patients, location). A “cycle of 1” is often appropriate
• Do more cycles, at a smaller scale and faster pace instead of fewer, bigger, slower ones
• Test with volunteers first
• Don’t seek buy-in or consensus for the test
• Be innovative and flexible to make test feasible
• Collect useful (and only just enough) data during each test
• Test over a wide range of conditions
• Learn from failures as well as successes
• Communicate what you’ve learned
• Engage leadership support
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