

# Quality Measurement 106

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Measurement in Action:

*Modelling Improvement*

# How to interact during the webinar



Use the Chat function  
for questions for the  
Technical Team

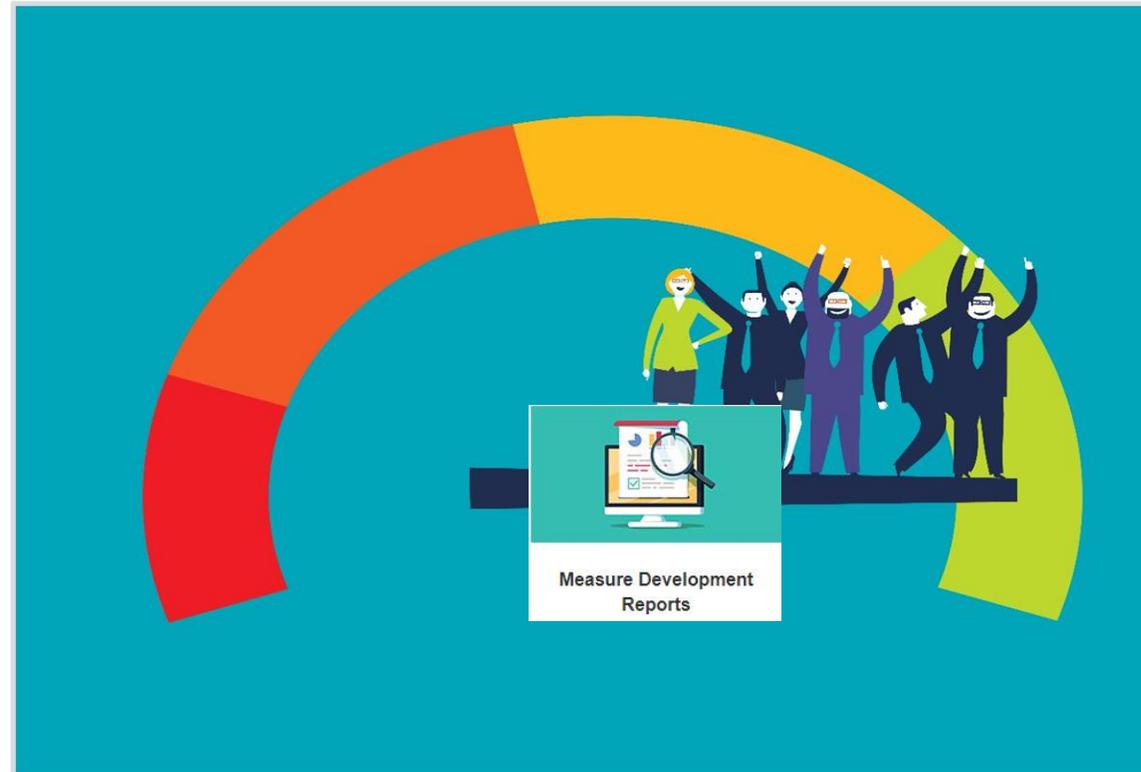


Use the Q&A function  
for questions for the  
presenter(s)

**Dr. Marie  
Schweinebraten, DMD**

**Chair, DQA Education  
Committee**





## MEASURE and IMPROVE



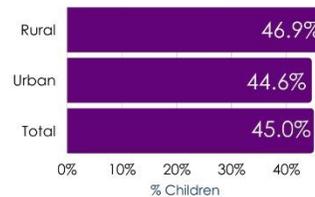
**Oral Health Quality in Medicaid and CHIP**  
**Michigan <21 years**  
7/2021

**Overview: Child Healthcare Quality**

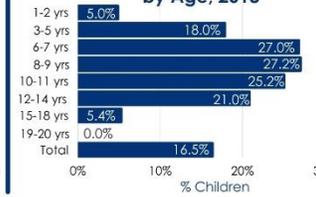
Year	Any Service (% children)	Oral Evaluation (% children)	Caries Risk Documentation (% children)	Topical Fluoride ≥ 2/year (% children)	Caries-Related ED Visits Per 100,000 Member Months
2018	51.3%	45.5%	0.0%	16.5%	34.9
2017	50.9%	45.5%	0.0%	16.9%	36.0
2016	49.6%	43.9%	0.0%	15.7%	37.7
National Sample, 2018*	53.1%	47.8%	3.1%	21.3%	24.5

\*Based on analysis of 18 states. See [DQA Oral Health Quality Reports](#) for more info.

**Oral Evaluation by Geography, 2018**



**Topical Fluoride at Least 2/Year by Age, 2018**



# MEASURE and IMPROVE

45% of children had an oral evaluation.

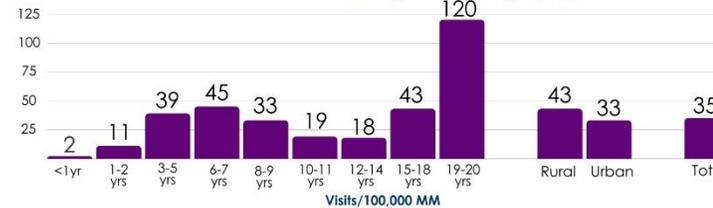


1 in 4 children 6-11 years & 1 in 20 children 15-20 years had at least 2 topical fluoride applications.



Children aged 19-20 years had more than 3 times as many ED visits as the program average.

**Caries-Related ED Visits by Age and Geography, 2018**



Source: Analysis of Transform Medicaid Statistical Information System (T-MSSIS) Analytic Files (RAF), Centers for Medicare & Medicaid Services. Analyses conducted by Key Analytics and Consulting. Contact [dqa@ada.org](mailto:dqa@ada.org) for questions or additional data. © 2021 American Dental Association on behalf of the Dental Quality Alliance (DQA). All rights reserved.

<https://www.ada.org/resources/research/dental-quality-alliance/dqa-improvement-initiatives>

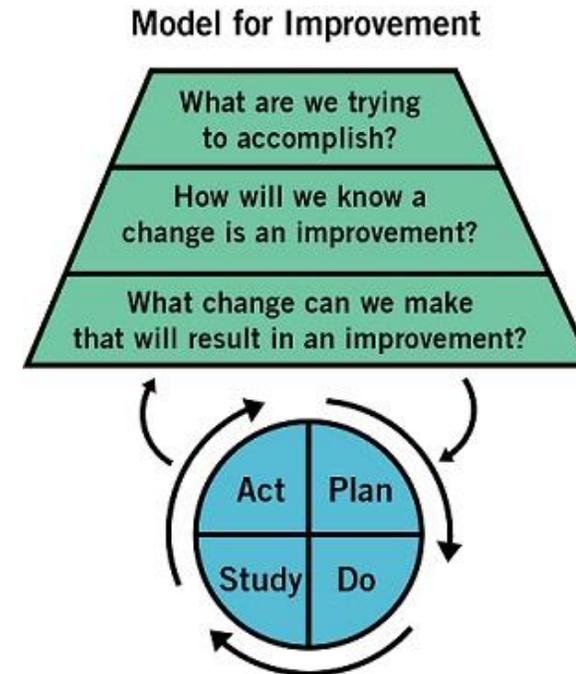
# Learning Objectives

By the end of this webinar, participants will be able to:

- Gain familiarity with the Institute for Healthcare Improvement's Model for Improvement.
- Learn how the DQA has incorporated clinical examples to support systems-level improvement.
- Understand how this model for improvement has been implemented in two dental clinics to improve the quality of care.

# QI 102: How to Improve with the Model for Improvement

- Lesson 1: An Overview of the Model for Improvement
- Lesson 2: Setting an Aim
- Lesson 3: Choosing Measures
- Lesson 4: Developing Changes
- Lesson 5: Testing Changes



# Clinical Example

How Can We Improve? 1 of 9



According to the Centers for Disease Control and Prevention, approximately 1 million patients suffer from hospital-acquired pneumonia each year.<sup>1</sup>

Hospital-acquired infections are common in the hospital, so the cause is often related to medical equipment that helps patients breathe. Ventilator-associated pneumonia or it may be unrelated to care from a ventilator — non-ventilator hospital-acquired pneumonia (NV-HAP).

When it comes to NV-HAP, three key factors put hospitalized patients at risk:<sup>2,3</sup>

- Changes in oral microbes. Critically ill patients have limited ability to perform basic hygiene functions such as mouth care; studies show changes in oral bacterial colonization, including more virulent gram-negative organisms, occur within 48 hours of hospital admission.
- Microaspiration (subclinical aspiration of small droplets). Patients lying on their backs and medications that suppress the central nervous system can exacerbate microaspirations; combined with changes in the oral flora and decreased mobility, this helps bacteria grow.
- The person's body being in a generally weakened state

To address oral risk factors in NV-HAP, an interprofessional team at Sutter Medical Center in Sacramento, California, began an oral care improvement initiative to reduce hospital-acquired pneumonia. As a result, from 2010 to 2014, the hospital reduced NV-HAP incidence by 70 percent. They saved approximately \$7 million and 31 patient's lives.<sup>4</sup>

How can you achieve the same type of results? Read on to learn more!

**1. Set an Aim**

**2. Establish Measures**

**3. Identify Changes**

**4. Test Changes**

**5. Implement Changes**



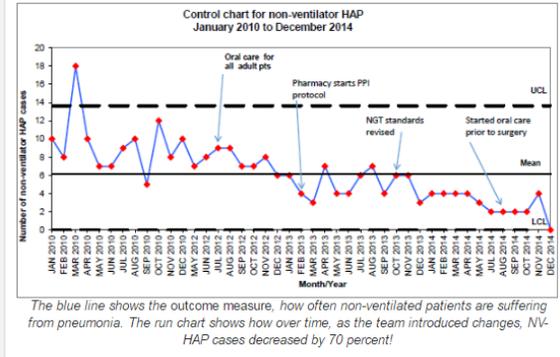
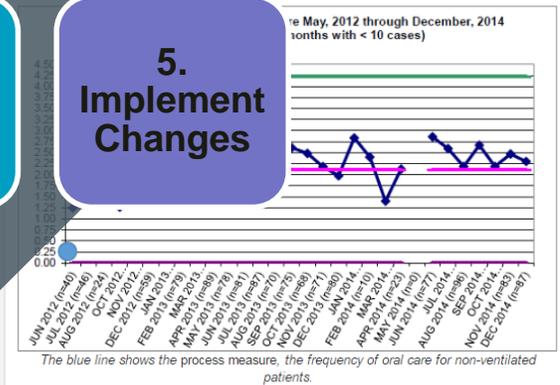
Credit: Dian Baker, Sutter Medical Center. Used with permission.



Credit: Dian Baker, Sutter Medical Center. Used with permission.

**5. Implement changes.** As you learned at the beginning of this lesson, the team saw significant improvements result from each of the changes it introduced. Once a team has identified successful process changes, the final step is to ensure the improvements will last. Through actions such as policy updates and training, the goal is to ensure the new procedures are a standard part of everyday work, long into the future.

Over the course of four years, the team at Sutter Medical Center has continued to monitor its NV-HAP rates and maintained its improvements in oral care; the reduction in NV-HAP is stable.



← 5 of 9 →



# Speakers



**Dr. Irene Hilton**, is a dental consultant with NNOHA and a clinician at the San Francisco Department of Public Health.

**Dr. Michael J. Raizen**, is a dentist with Denver Health and Hospitals, the safety net provider of integrated healthcare in Denver, Colorado.

**Dr. Angela Relf**, is the dental director at the Safford Clinic with the Arizona Department of Corrections and previously served as the Dental Chair at Mountain Park Health Center in Phoenix, Arizona.

# Disclosures



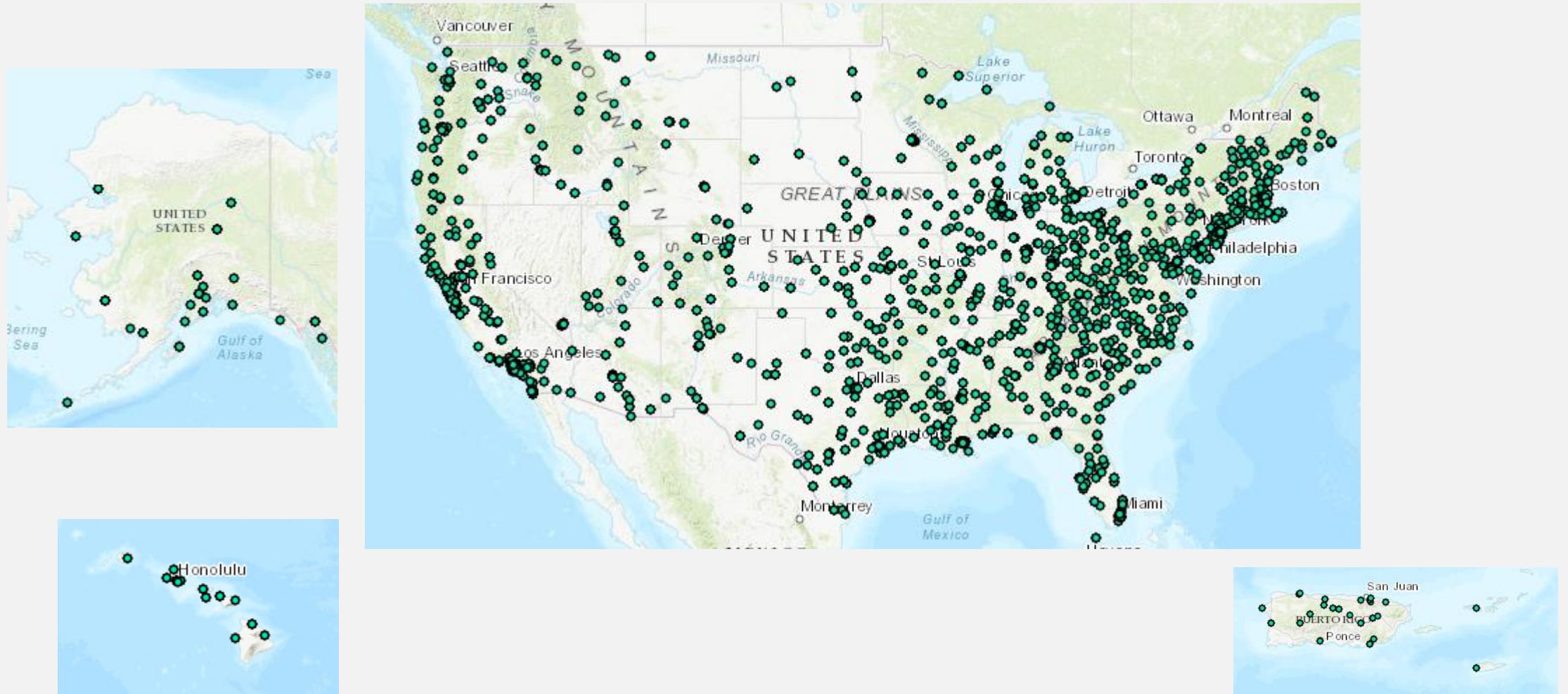
# Using the Model for Improvement at the Practice Level

*The Health Center Experience*

Irene Hilton, DDS, MPH

National Network for Oral Health Access

# HRSA Funded Health Centers



# Health Center Facts – 2020 UDS

- Number Health Center programs: 1,375
- Number HC with dental programs: 1,090 or **79%**
- Number medical users: 24,529,374
- **Number dental users: 5,155,619**



# HRSA UDS: Quality of Care Measures

**Early Entry into Prenatal Care**

**Childhood Immunization Status**

**Cervical and Breast Cancer Screening**

**Weight Assessment and Counseling for Nutrition and Physical Activity of Children and Adolescents**

**Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up Plan**

**Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention**

**Statin Therapy for the Prevention and Treatment of Cardiovascular Disease**

**Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet**

**Colorectal Cancer Screening**

**HIV Measures**

**Depression Measures**



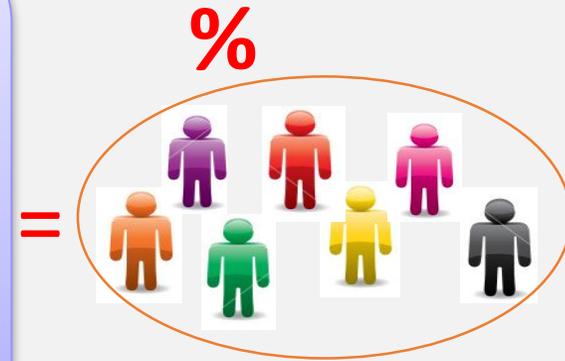
# 2015- HRSA UDS Sealants Measure

**NUM:** How many received a sealant on a permanent first molar in the reporting year

**DEN:** Of dental patients, aged 6-9 years at elevated caries risk, of record in the practice in the reporting year, who needed a sealant in a permanent first molar

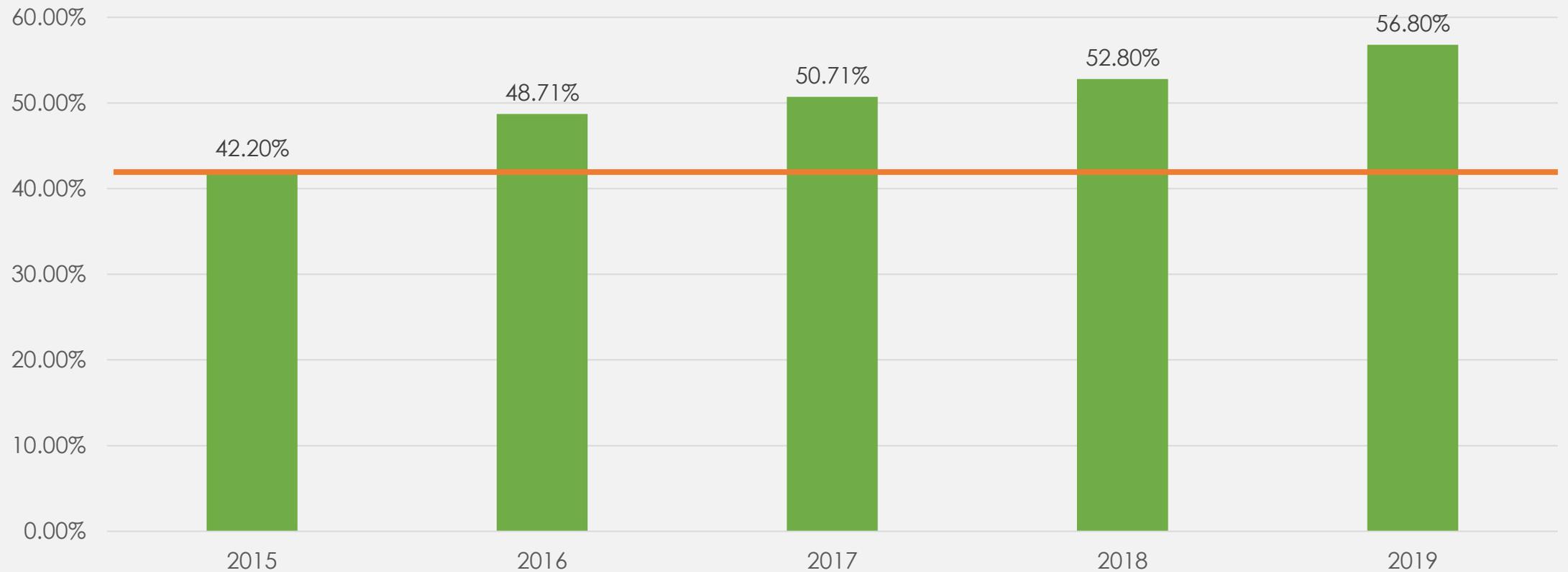
Denominator Exclusions (subtract from denominator):

- All four molars are not candidates for sealants.



# UDS Sealant Measure (%)

Dental Sealants for Children 6-9 at Moderate or High Caries Risk



Healthy People 2030 Goal 42.5%

National Network for Oral Health Access



# About NNOHA

- Founded in 1991 by FQHC Dental Directors
- Membership now > 3,500
- HRSA oral health training/technical assistance grantee
- [www.nnoha.org](http://www.nnoha.org)



# Training/Technical Assistance to Improve on Sealants Measure

- **Five years of 9-month IHI BSC Quality Improvement Collaboratives**
  - *Develop change package of strategies to improve on measure*
- Yearly webinar
- Yearly conference sessions
- Yearly FAQ
- Two yearly virtual Learning Communities



# Sealant Collaborative Rationale

- **Best Practices** to manage chronic health conditions
- **Gap** between best science/evidence and current practice
- **Best Practices are not being used** because:
  - Lack of knowledge
  - Non-supportive systems
  - Resistance to change



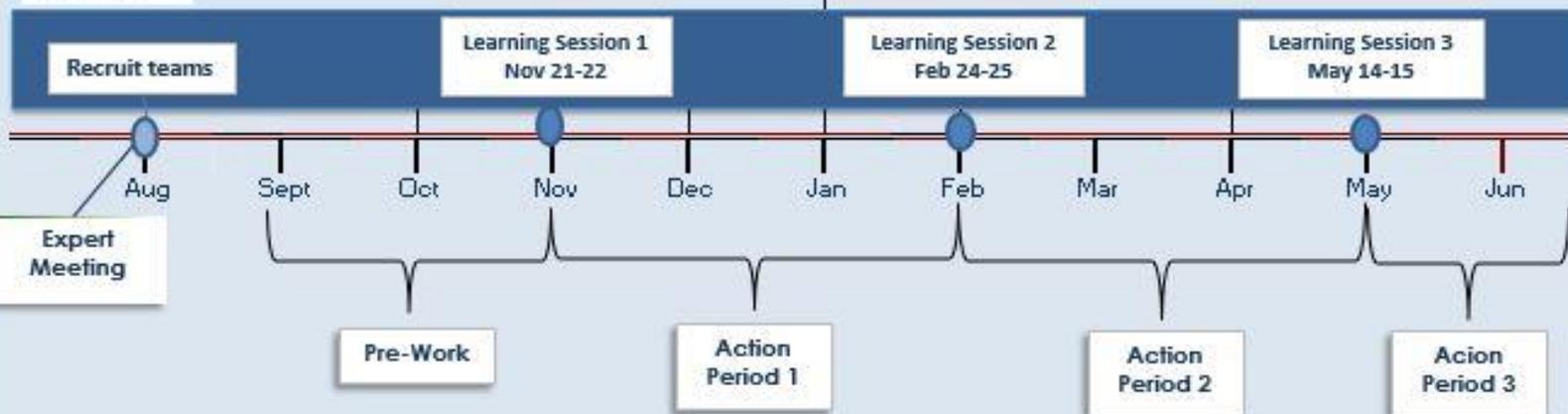
# NNOHA Sealants Improvement Collaborative

2019

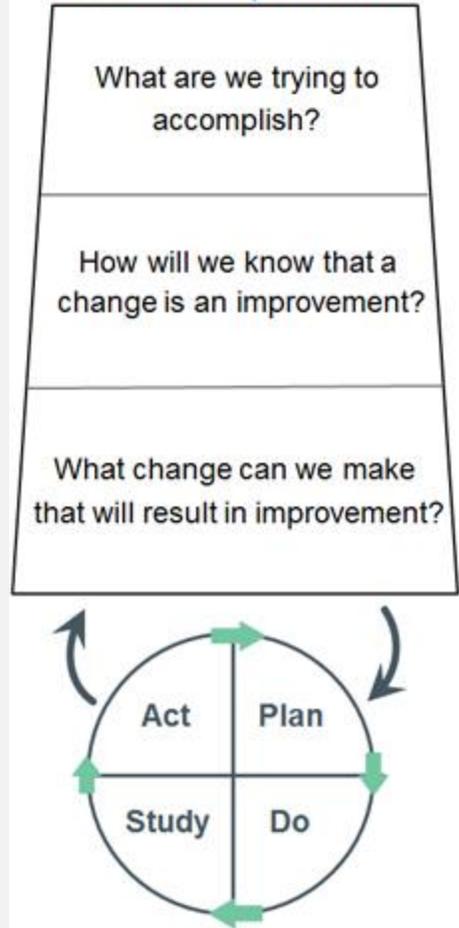
2020



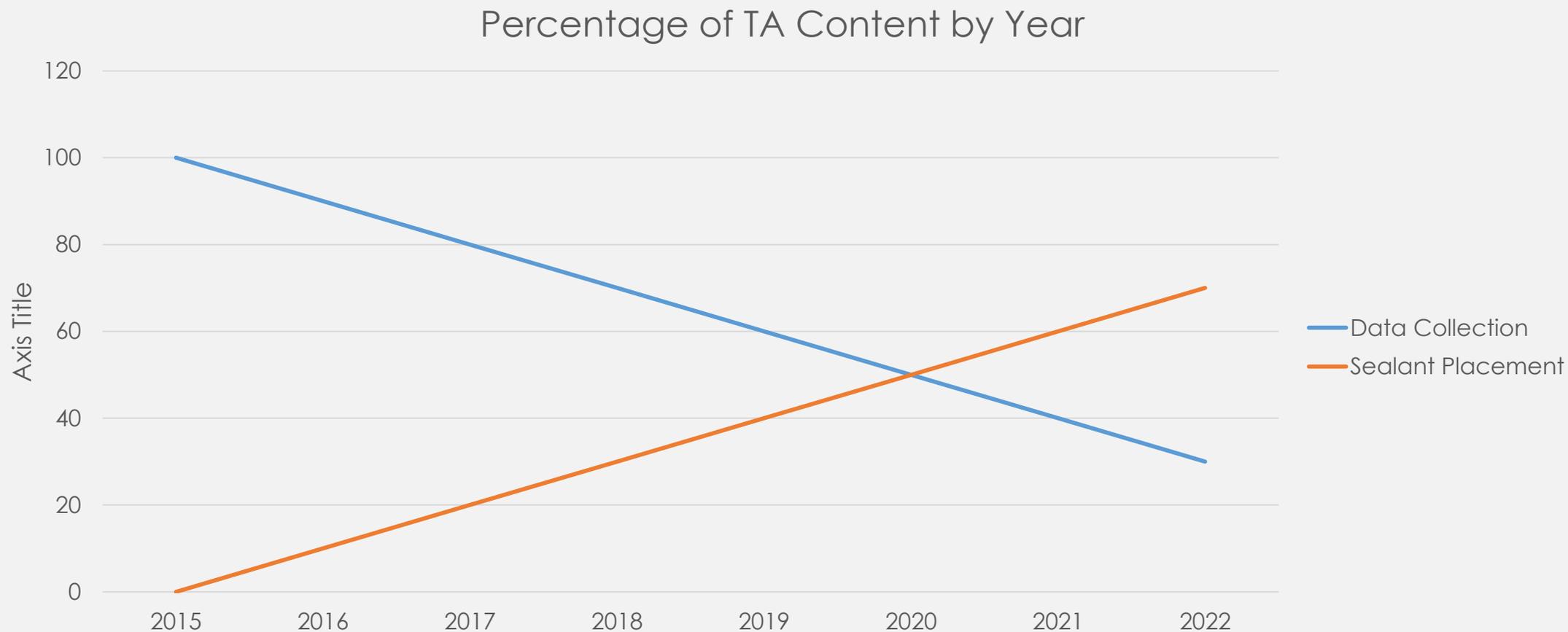
**Phase V**



## Model for Improvement



# Focus of Technical Assistance Evolves



# Top 6 Strategies for Placing More Sealants

#6-Treatment plan more sealants

#5- Equipment & Materials

#4- Optimize RDH & DA workforce

#3- Develop sealant workflows

#2- Prioritize Sealant Placement > routine restorative

**#1 SAME DAY SEALANTS**





# Health Center Stories



# Quality Measures

My journey into Quality Improvement

Dr. Angela Relf

# Do you know if your patient care is sufficient

- ▶ How do you know?
- ▶ How can I tell?

# Where do I Start?

- ▶ HRSA Quality measure
- ▶ Am I following those measure/s?

# Based on your findings

- ▶ What can I change?
- ▶ How do I implement those changes?

# How are we doing comparatively?

- ▶ What are other clinics/offices doing?
- ▶ How can I reach out to other clinics/offices?

# Quality Measurement 106: Measurement in Action “Modeling Improvement”



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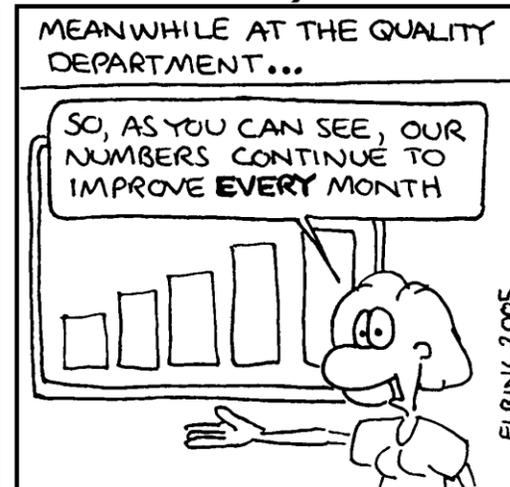
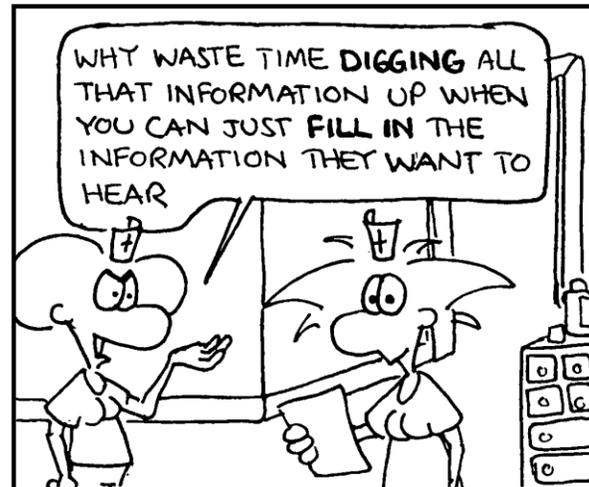
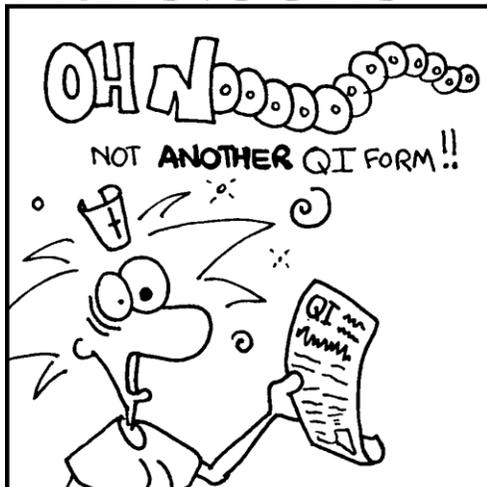
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## WHY SHOULD WE IMPROVE QUALITY?



### Nurstoons

by Carl Elbing



[www.nurstoon.com](http://www.nurstoon.com)



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## SOME OF MY REASONS FOR QI IN DENTAL...

- I'm the Chair of the Dental QI Workgroup at Denver Health – *It's my job!*
- I DON'T LIKE THE PHRASE “this is the way we have always done it.” I just want to strangle someone when I hear that!
- The other phrase I tell everyone that I don't want to hear anymore is “It's only...”
  - ❖ “A recall exam.”
  - ❖ “It's only a prophylaxis”
  - ❖ “It's only sealants”

By saying “it's only” means it has little or no value



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# 1. Plan the Initiative.

Current process for Dental Assistant  
Schedule wasn't working.

LOWRY ASSISTANT 2 Filter by Status Total: 11  Preview

Video	Status	Time	Age/Gender	Visit Type	Provider
This is not...	Sch	8:00 AM	8 y.o. / M	Dental Ped...	LOWRY ASSISTANT 2
This is not...	Sch	8:45 AM	5 y.o. / M	Dental Ped...	LOWRY ASSISTANT 2
This is not...	Sch	9:30 AM	32 m.o. / M	Dental Ped...	LOWRY ASSISTANT 2
This is not...	Sch	10:15 AM	15 m.o. / M	Dental Ped...	LOWRY ASSISTANT 2
This is not...	Sch	11:00 AM	13 y.o. / M	Dental Teen...	LOWRY ASSISTANT 2
This is not...	Sch	1:00 PM	4 y.o. / F	Dental Offic...	LOWRY ASSISTANT 2
This is not...	Sch	2:00 PM	13 y.o. / F	Dental Offic...	LOWRY ASSISTANT 2
This is not...	Sch	3:00 PM	8 y.o. / F	Dental Sealant	LOWRY ASSISTANT 2
This is not...	Sch	3:45 PM	9 y.o. / M	Dental Ped...	LOWRY ASSISTANT 2
This is not...	Sch	4:30 PM	13 y.o. / M	Dental Teen...	LOWRY ASSISTANT 2
This is not...	Sch	5:15 PM	12 y.o. / M	Dental Ped...	LOWRY ASSISTANT 2



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# CURRENT STATE



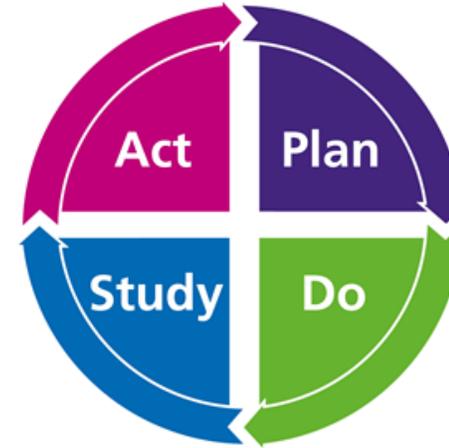
**What We Began With Our Dental Assistant Visits**



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## PROBLEMS – SOLUTIONS?

- ✓ Supplies Not Close at Hand
- ✓ Try Moving Supplies to Operatories
  
- ✓ Maybe We Don't Need to Re-invent the Wheel
- ✓ Observe Other Clinics
  
- ✓ Time Spent Waiting for Dentist to do Exam
- ✓ Can We Change Dentist Behavior?

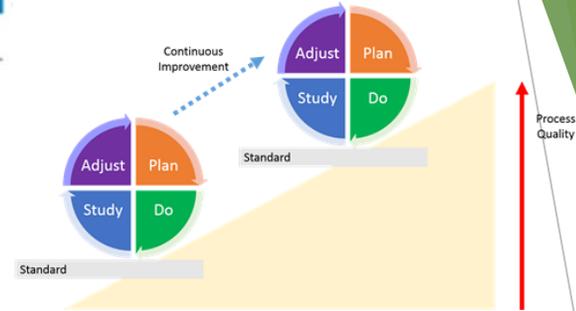


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## IMPLEMENT, SUSTAIN



## My Favorite PDSA

- Things Did Not Go Well Initially
- Created “Kanban”
- The Roadmap of What’s Up next
- Once Created, Things Went Much Smoother
- Revised at Least 10 Times!

**MONTBELLO DENTAL SEALANT KANBAN**  
DENTAL ASSISTANT SCHEDULE      DATE 06/27/2020

TIME	MRN	AGE	NEW/RECALL	X-RAYS NEEDED	SEALANTS PRESENT	POSSIBLE SEALANTS?	SEALANTS PLACED?	SHOW NO SHOW	COMMENTS
8:00		6	N	Y - BW - PAN	N	Y	Y N		
8:45		11	R	N	Y	N	Y N		
9:30		18 months	N	N	N	N	Y N		LAP EXAM
10:15		7	R	Y BW	N	Y	Y N		WALKS RAPIDLY SCOUTED 12/19
11:00		12	-	-	Y	Y	Y N		SEAL TOOTH #5 2, 15, 16, 31
							Y N		
1:00		2	N	N	N	N	Y N		SIS LINDS
1:45		2	N	N	N	N	Y N		LAP EXAMS
2:30		10	R	Y - BW	Y	N	Y N		DE POSTDUE LAST VISIT OF 2019
3:15		12	N	Y - PAN BW	N	N	Y N		K-RAP EXAM ONLY DPS - 2019 w/ 11 DPS - 2019 sealants?
4:00		4	R	Y - IF possible	N	N	Y N		

X-RAY GUIDELINES:  
BWs & OCCLUSAL ANNUALLY  
PANORAMIC AT 6 YEARS, 12 YEARS, AND 18 YEARS

WEATHER Clear      TEMP 83°



Revised 02/17/2020



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## Dental Sealants Placed by Same-Day/Planned (6 to 14 Years)

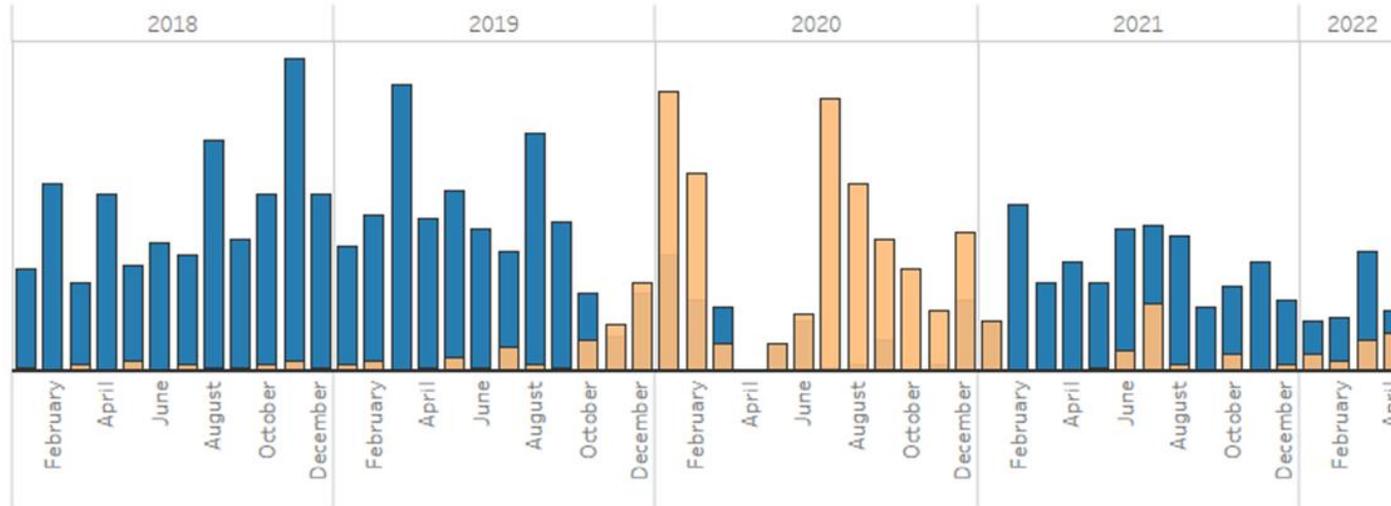
Visit Month  
April 2022

Department Name  
Montbello Dental

Age Yrs Vst  
6 to 14

Visit Month	Eligible Teeth in Month	Eligible Teeth Sealed in Month	Percent Eligible Teeth Sealed in Month	Eligible Teeth Sealed in Month (Same-Day)	Percent Teeth Sealed in Month (Same-Day)	Eligible Teeth Sealed in Month (Planned)	Percent Teeth Sealed in Month (Planned)
April 2022	118	28	24%	11	39%	17.0	61%

Sealants Completed in Month by (%) Planned / Same-Day





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## Sealant Trend by Month (6 to 14 years)

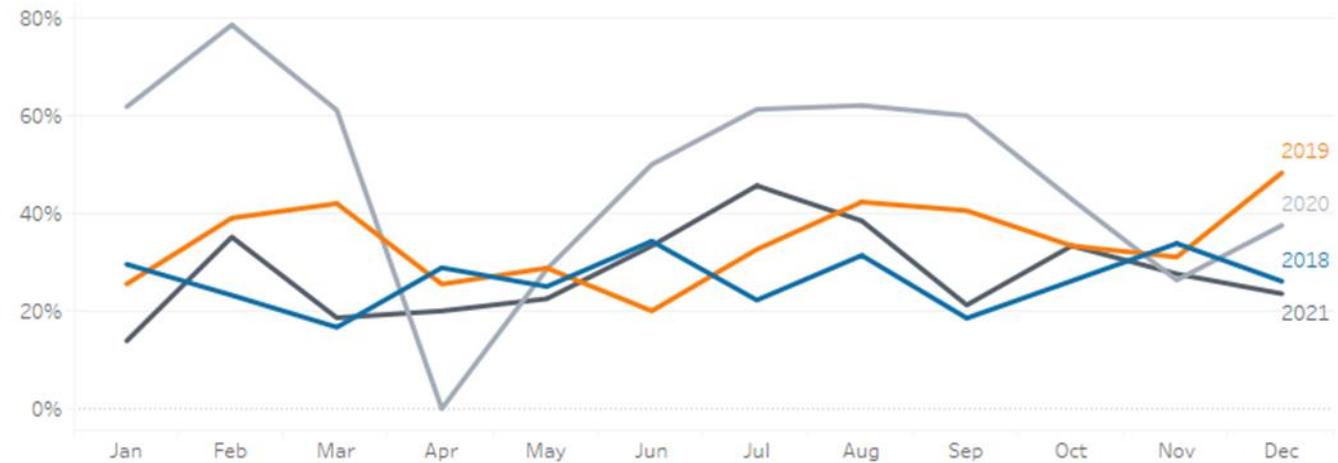
Select Measure

All Eligible Teeth Sealed

At Least 1 Tooth Sealed

Department Name  
Montbello Dental

Select Age Range  
6 to 14



	2018	2019	2020	2021
Eastside Dental	8% (74/957)	19% (117/631)	21% (144/692)	15% (146/980)
Lowry Dental	17% (138/834)	24% (190/786)	22% (89/412)	28% (141/497)
Montbello Dental	26% (156/592)	33% (181/543)	53% (158/296)	28% (129/462)
OMC Dental	15% (74/507)	14% (70/498)	15% (74/478)	12% (58/482)
Pediatric Dental Clinic				37% (104/284)
Peña Dental	14% (103/743)	23% (170/725)	28% (145/520)	24% (183/749)
Westside Dental	24% (232/966)	20% (173/886)	24% (163/680)	18% (141/803)



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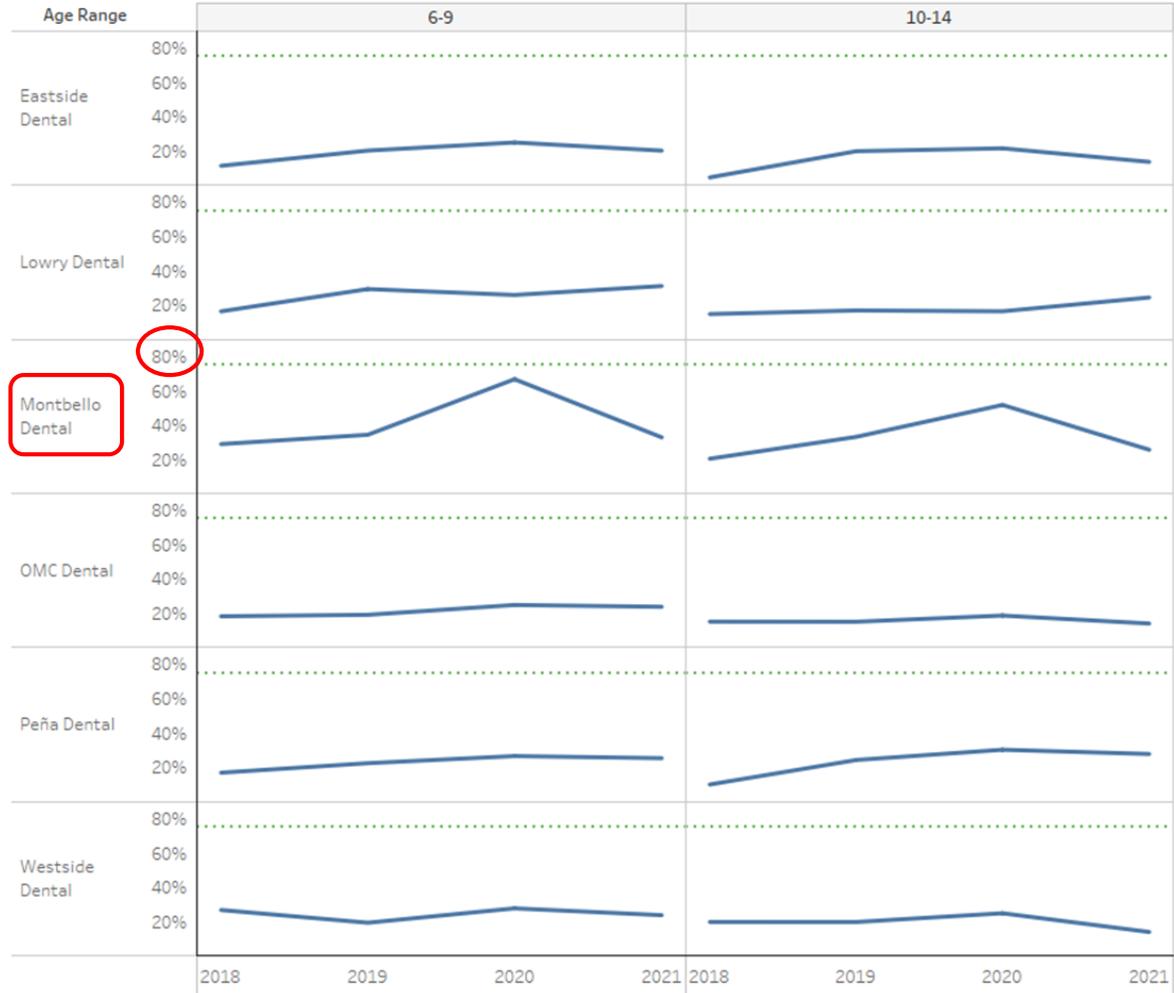
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## Measure Trend by Clinic

Select Measure

- NNOHA Sealant
- UDS Sealant
- Caries at Recall





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## Measure Trend by Clinic

- Select Measure
- NNOHA Sealant
  - UDS Sealant
  - Caries at Recall





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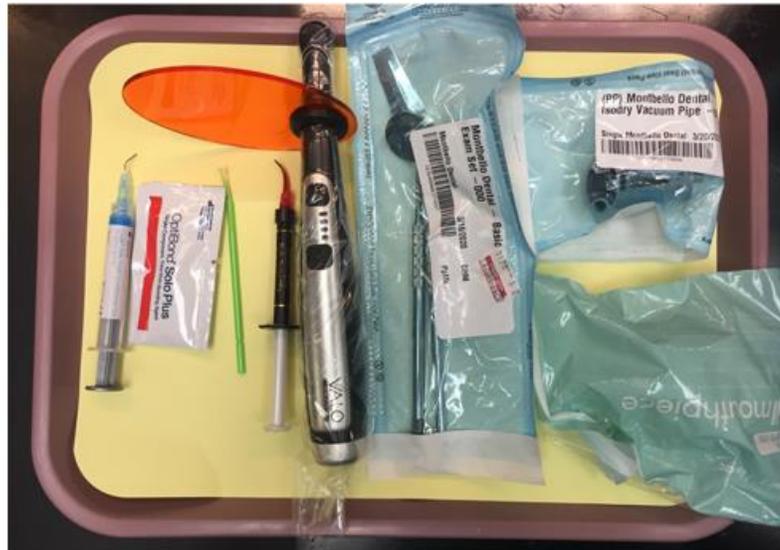
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# Dental Assistant Schedule

## Same Day Sealants

## Standard Work



Dr. Michael Raizen  
Montbello Family Health Center  
Dental Clinic  
Michael.raizen@dhha.org  
303-602-3925



**Process Owner:**  
Michael Raizen

**Dental Department**  
**Dental Assistant Standard Work**

**Dental Assistant Schedule - Same Day Sealants**

**Documentation Number/Revision #1**

**Page 1 of 1**

**Date: 03/20/2020**

**Executive Sponsor:**

**I. Purpose**

- To define responsibilities of Dental Team members in relation to Dental Assistant Visit
- To ensure that the Dental Assistant Visit accomplishes maximum preventive Dental care by way of fluoride application and same day sealant application.

**II. Background/Scope**

Evidence Based Research indicates that the only effective Preventive Dental procedures are placement of fluoride varnish and placement of Dental Sealants. This process will ensure that In an effort to make the best use of the "Dental Sssistant Visit," a process has been designed to

**III. Responsibility**

It is the responsibility of every pharmacy technician to know where to access the duty sheets, how to fill them out correctly, and what type of information should be passed on during sign-off.

**IV. Procedure and Process Steps**

Step	Actions	When	Key Points	Why
1	Retrieve duty sheet for your job assignment for the day	Beginning of each shift	*Make more copies if needed *Record name and date	To use as a guide/reference for expectations and duties assigned to each job
2	Use duty sheet to guide your workflow	Throughout the shift	Make any necessary notes and/or reminders for yourself on this sheet	*To ensure all responsibilities are completed on each shift
3	Record any notable items that should be mentioned during sign-off	Throughout the shift	*Any unusual medications being used on a patient *Problems/resolutions that came up during the shift *Unfinished tasks *Shortages/outages *Highlights from Huddle *Any other pertinent info	*To increase productivity *To decrease errors *To facilitate a smooth-running operation *Provide exceptional service to our patients and other health care providers who are taking care of our patients
4	Provide a complete and effective sign-off with the next staff member coming on duty	End of shift	Allow for a quiet and uninterrupted sign-off to ensure a complete hand-over of duties and responsibilities.	*See above
5	Sign this sheet, person receiving sign-off signs this sheet, and file it under the day of the week tab in the Technician Duty Sheets binder.	End of shift	Signatures must be present, and sheet filed in the correct place	These sheets will serve as a reference for job completion and acknowledgement of effective sign-off. They will be audited for completeness and sign-off content.

# Thank you

My Contact  
Information:

Michael Raizen, DDS  
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Wellington E. Webb Center  
301 W. 6<sup>th</sup> Ave.  
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Cell: 303-548-4061  
Email:  
[michael.raizen@dhha.org](mailto:michael.raizen@dhha.org)



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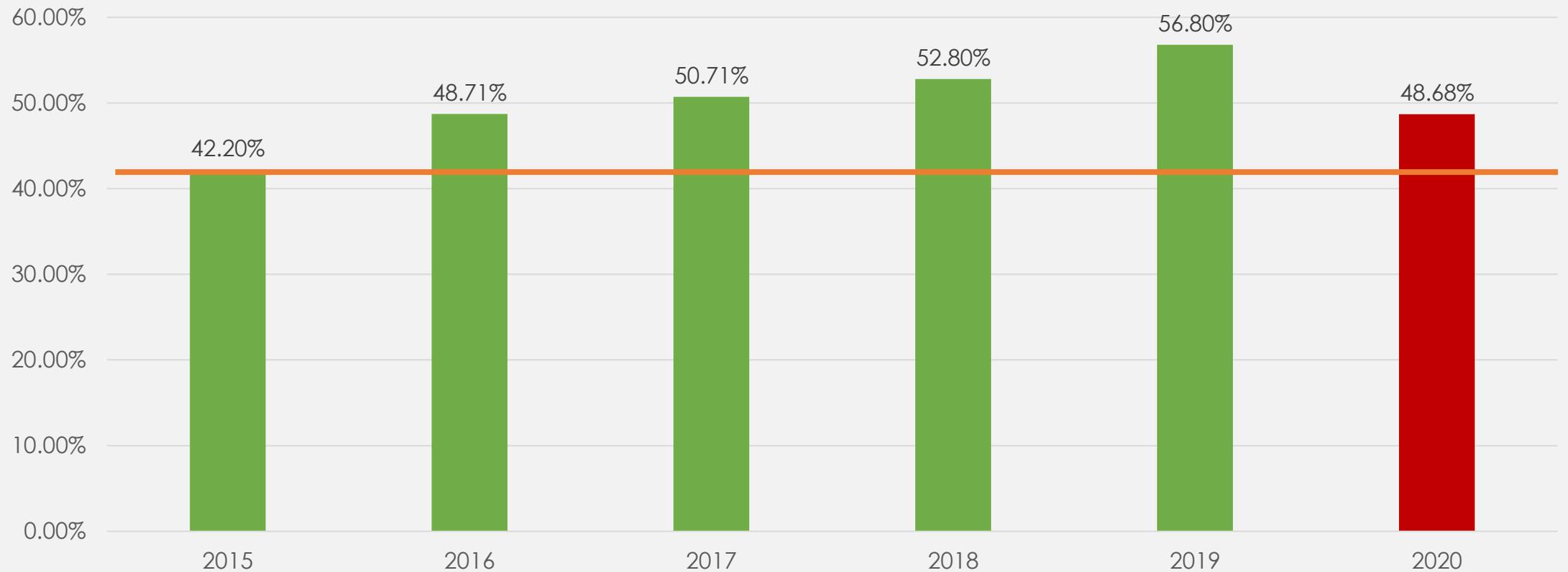


# QI Results



# UDS Sealant Measure (%)

Dental Sealants for Children 6-9 at Moderate or High Caries Risk



# Conclusion

- **Always changing:** Environment in which health care/oral health care exists
- **Never changes:** Our mission to strive to provide the highest quality care we can to the populations we serve



# Contact Us!



National Network for Oral Health Access

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Use the Q&A function  
for questions for the  
presenter(s)

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A recording of this webinar will be available on [ADA.org/DQA](http://ADA.org/DQA) within the next few weeks.

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