

IMPLEMENTATION OF SALIVA-CHECK MUTANS BACTERIAL IDENTIFICATION KIT AS EDUCATIONAL AID FOR PATIENTS DURING PRE-NATAL DENTAL VISITS

Research Component of:

Michigan Initiative for Maternal and Infant Oral Health

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Project Team

- **John Girdwood:** Strategy and Planning for Sustainability
- **Emily Norrix:** Importance of Perinatal Oral Health
- **Lindsay Sailor:** Integrating Oral Health Into Primary Care Clinics

Lindsay Sailor

Michigan Primary Care Association



Integrated Health Program Manager

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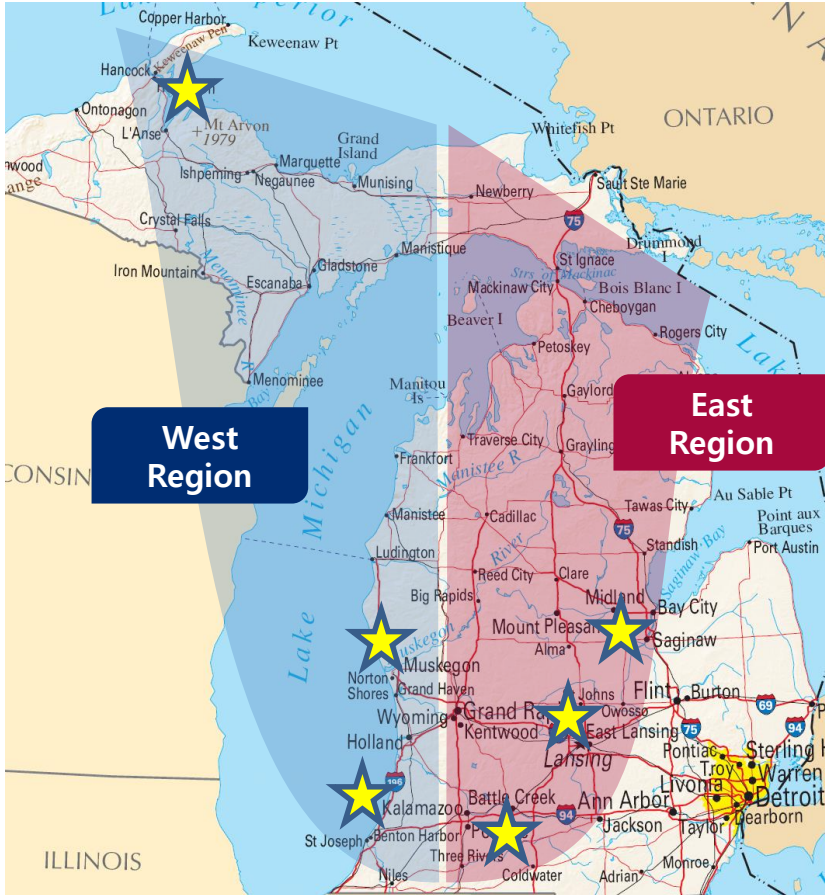
Detroit Mercy Dental, Principal Investigator

Emily Norrix, MPH

Michigan Department of Health and Human Services



Perinatal Oral Health Consultant



6 Pilot Sites

East Region

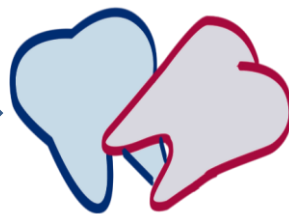
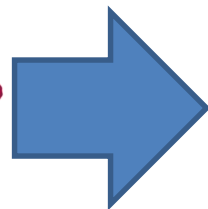
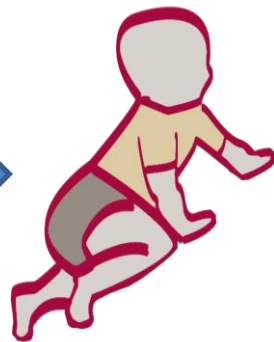
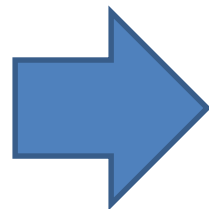
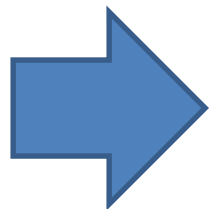
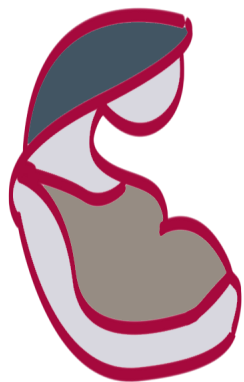
1. Battle Creek
2. Bay City
3. Lansing

West Region

1. Muskegon
2. Benton Harbor
3. Upper Peninsula



Value Stream



Teeth²

2 Healthy
Mouths!

Pregnant
mother visits
OBGYN for
prenatal care

Prenatal oral
health care
provided

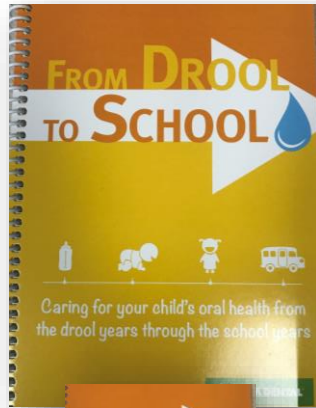
New mother
and baby

Research Setting



- Dedicated space for the hygienist and patient
- Private room equipped for dental hygiene care in an OBGYN medical setting

Examples of Existing Patient Education and Material



Finger Brush

Dental Care by Age

You should schedule your child's first dental visit by age 1. The dentist can check your baby's mouth and answer any questions you might have.

All 20 baby teeth are present in the gums at birth. That means that it's never too early to start developing good oral health habits. Baby teeth are at risk for tooth decay (cavities) as soon as they first appear.

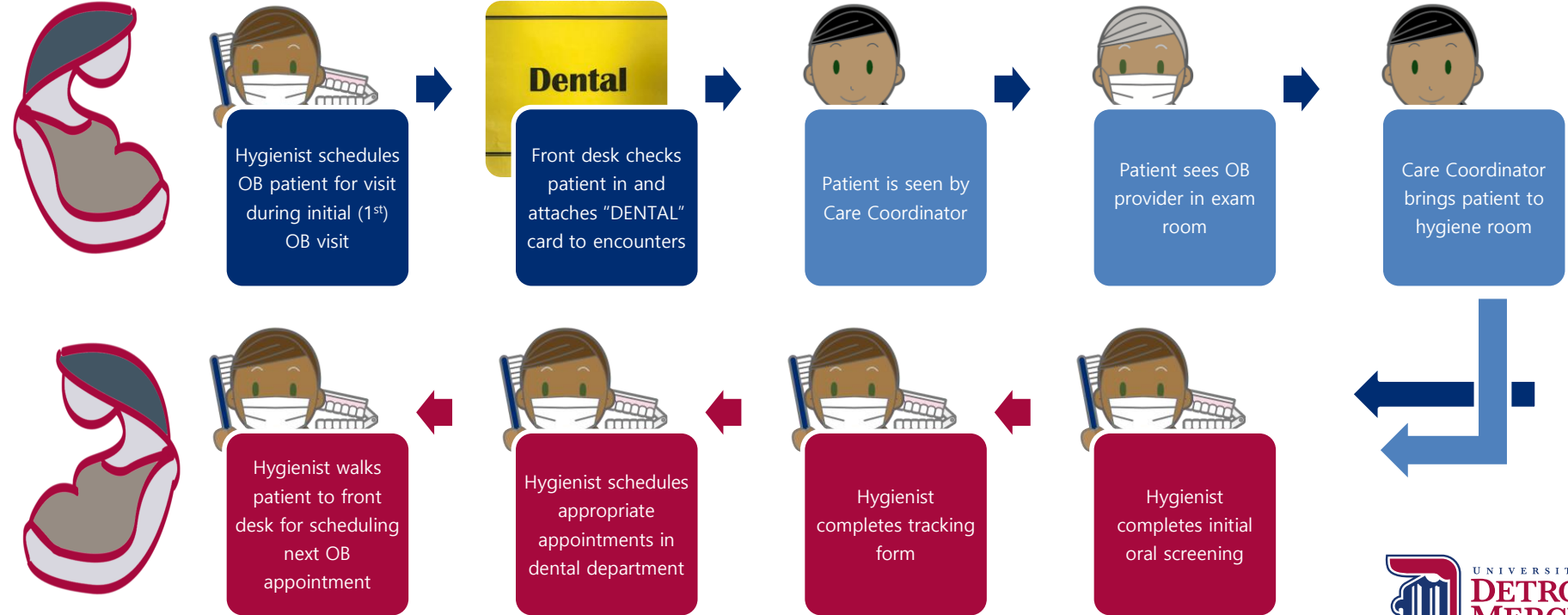
Healthy baby (primary) teeth help baby:

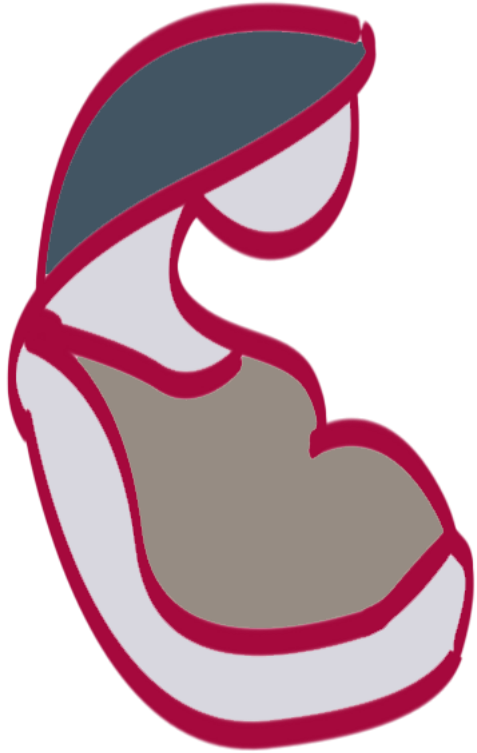
- Speak clearly
- Make room for adult (permanent) teeth
- Chew healthy foods

Warning: Potential choking hazard. Toothbrush should fit snugly on finger. Keep out of reach of children and infants when not in use. To be used by adults only. Wash thoroughly before first use and after each use.



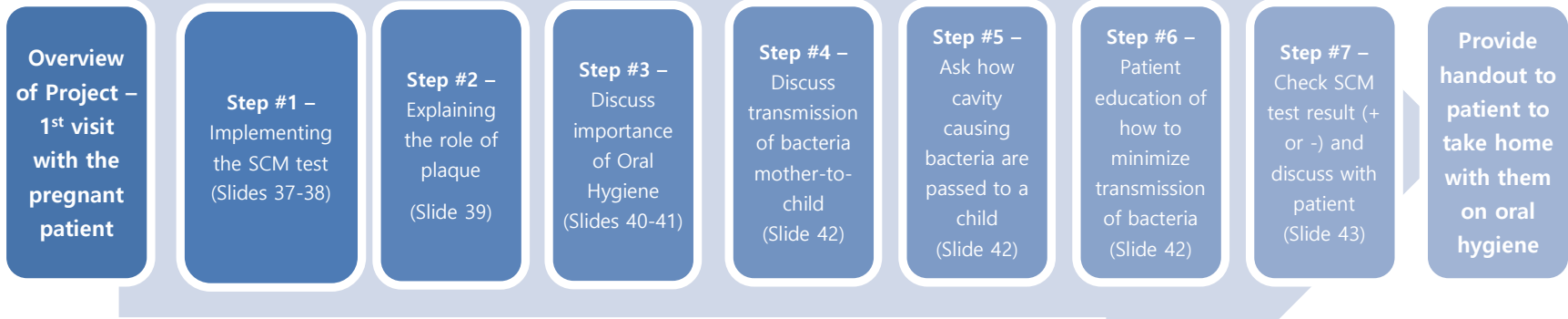
Visit: Sample Value Stream Map



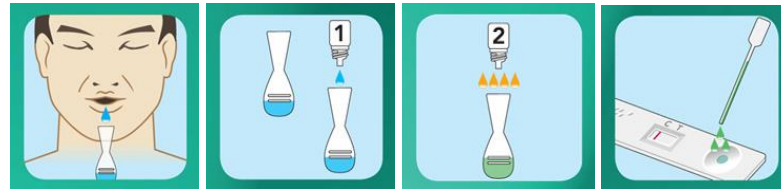
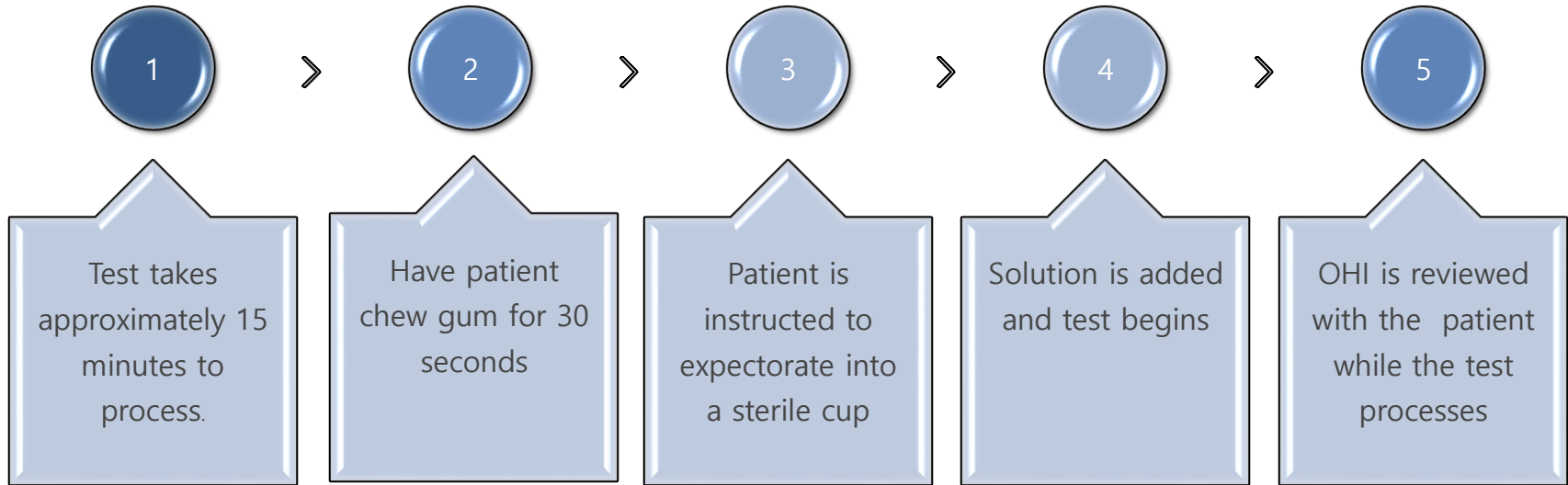


Research Project Calibration

Steps for successful implementation



Implementing SCM test with patient



Saliva-Check Mutans Test

After 15 minutes:

- Positive Result
> 500,000CFU/mL *S. mutans*
- Negative Result
< 500,000CFU/mL *S. mutans*

<https://www.youtube.com/watch?v=TqaM2XI-qbE>

3:20 – 5:03



Healthy teeth versus teeth with plaque

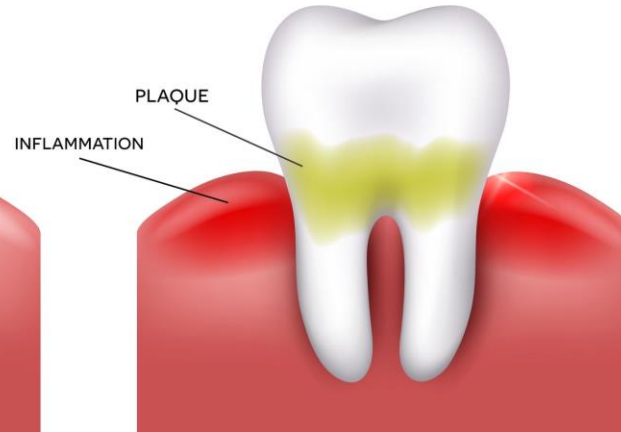
DENTAL BIOFILM (PLAQUE)

HEALTHY TOOTH



Brushing, flossing & use of mouth rinse 2 times daily

TOOTH WITH DENTAL BIOFILM (PLAQUE)



Lack/infrequency of daily brushing, flossing and mouth rinse

Please read and discuss this explanation on oral hygiene best practices with to the patient

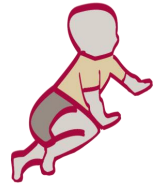
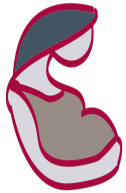
Oral hygiene is the practice of keeping one's mouth clean and free of disease and other problems by regular brushing and cleaning between the teeth. It is important that oral hygiene be carried out on a regular basis to enable prevention of dental disease. The most common types of dental disease are tooth decay and gum diseases, including gingivitis, and periodontitis. Regular brushing consists of brushing twice a day after breakfast and before going to bed. Cleaning between the teeth is called interdental cleaning and is as important as tooth brushing. This is because a toothbrush cannot reach between the teeth and therefore, only cleans 50% of the surfaces. There are many tools to clean between the teeth, including floss and interdental brushes. It is up to each individual to choose which tool he or she prefers to use. Antibacterial mouth rinses can also be used to keep breath fresh and kill the bacteria in the mouth that causes oral diseases.



BEFORE & AFTER disclosing solution/colored dye applied

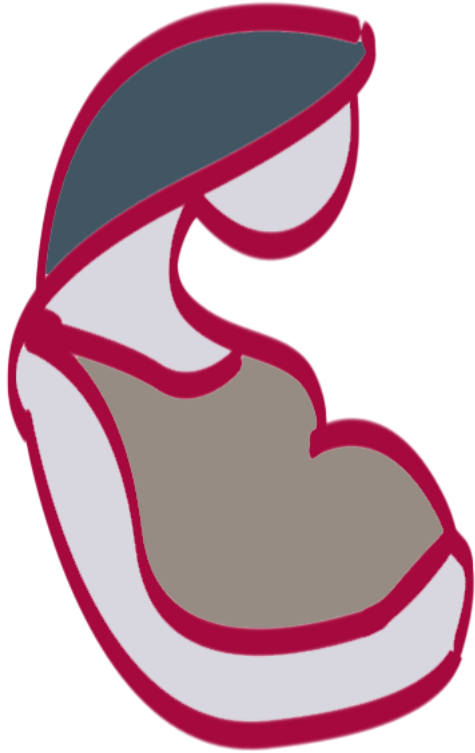
- Plaque isn't always easy to detect as it usually blends in with the tooth
- By looking under a microscope or by using colored disclosing solution/dyes, plaque is quite noticeable!
- Plaque returns rapidly (within 8-12 hours), so frequent removal by brushing, flossing and mouth rinse is key!

How can cavity causing bacteria be transferred from a mother to her child?



How can mom reduce transmission of bacteria to child?





SCM test results



Conclusion

- Your #1 Priority is ALWAYS the **PATIENT!**
- We focus on the both **mother and child!**
- This is a life course approach to reducing caries and **improving oral health outcomes!**
- Research is part of three-prong approach:
 - **Care** Delivery
 - Patient-Centered
 - Provision/**Workflow** Monitoring
 - Drop the right codes
 - Billing and reimbursement
 - **Bacteria Research**
 - Pre- and Post!

