### Missouri Oral Health Program Preventive Services Program

Facilitated Through:

The Missouri Department of

Health and Senior Services

Office of Dental Health



## What Is The Preventive Services Program?

The Missouri Oral Health Preventive Services Program (PSP) is a **community-based**, systems approach to population-based prevention of oral disease.

## How it Began Show Me Your Smile Survey



2005 Survey

Survey Results of 3<sup>rd</sup> Graders 3,500 children's teeth in 2005

### Key Finding of Show Me Your Smile Study

- Dental caries is a significant problem
- Oral health varies across SES levels
- Oral health varies across racial groups
- Higher income children have less decay than lower income children statewide
- Missouri's children have a low level of dental sealants
- A considerable share of children do not have access to oral health care

### Rationale for Missouri's Oral Health Preventive Services Program

- Desire to provide a program to improve oral health of this at-risk population
- Available to all children, infant to 18 years old
- Developed a comprehensive plan including;
- An evaluation of oral health in the community's children, implement prevention strategies, provide oral health educational information, initiate referrals for dental services to those identified with unmet dental needs

### Program Methodology

#### The 4 basic steps in the program include:

- ▶ 1. Screening/Surveillance; Complete an annual standardized oral health screening for a statewide database of the children in a community. This Basic Screening Survey(BSS)-provides nationally recognized data.
- 2. <u>Education</u>; Provide oral health education, toothbrush and toothpaste to all participating children
- ▶ 3. <u>Prevention</u>; Two applications of a fluoride varnish treatment. The first at a screening event, the second follow-up varnish application within a three to six month period.
- 4. Referral; Provide a structure for dental care for children with unmet dental need

## Community Partnerships & Coalitions

- Involve a broad and diverse range of people and organizations;
- coalition groups, schools, foundations, state and local government bodies, civic organizations, local public health agencies, clinics, hospitals, dentists, dental hygienists, physicians, nurses, etc.







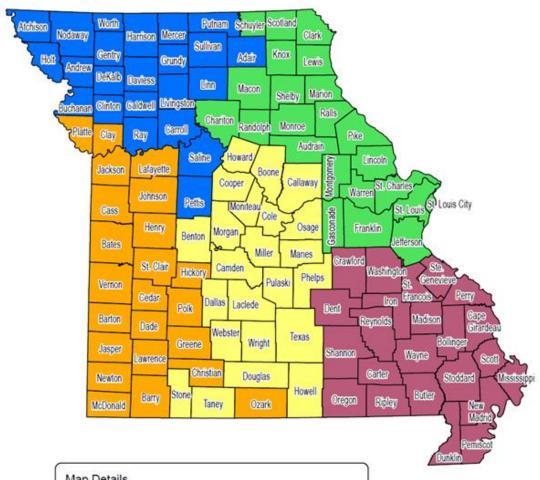
## PSP State Roles and Responsibilities

#### Oral Health Program will provide:

- Oral Health Program Consultant
- Educational Materials
- Screening supplies, toothbrushes, tooth paste and fluoride varnish
- Online training of volunteers to apply fluoride varnish
- Online calibrating dental professionals to collect surveillance data



#### Office of Dental Health Preventive Services Program (PSP) Regional Oral Health Consultants



#### Map Details

Jeffrey Bellamy - jeffrey.bellamy@health.mo.gov

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Ann Hoffman - ann.hoffman@health.mo.gov

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## Responsibilities of PSP Event Coordinator

- Recruit community dental professionals & other volunteers
- Obtain parental consent for fluoride varnish applications and oral screening
- Order supplies through Oral Health Program Consultant
- Provide oral health education to children
- Schedule screening/varnish application event and second varnish application event
- Develop referral system with community dentist for children with unmet dental needs

## People Involved in a PSP Event

#### **EVENT COORDINATOR**

Person coordinating the screening, varnish, education and referrals for the school or agency.

Typically a School Nurse or Head Start coordinator

#### **SCREENER**

Dentist or Dental Hygienist

### FLUORIDE VARNISH VOLUNTEERS

Parents, Nurse, Teacher or any other volunteer

#### OTHER ASSISTANTS

Parent, nurse, teacher or any other person interested in helping with the details event.

- One of many involved in a PSP Event
- Many hands working together for the oral health of the community

## Step 1: Oral Screening What is an Oral Screening?

- Not a thorough clinical exam, no x-rays
- Does <u>not</u> involve making a clinical diagnosis that results in a treatment plan
- Only identifies gross oral lesions
- Must be conducted by licensed dentists or dental hygienists

## Provide Statewide Database with Annual Screenings

#### Purpose is to:

- Describe oral health status of MO children
- Identify need for services/interventions
- Provide comparison among regions and communities
- Track outcomes

## Data Reported in a Community-Based Format

- Community is our Patient
- Community as a whole is assessed
- Community data is collected and utilized state and nationally
- Community is encouraged to build a network of care



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# Oral Screening Results Provided as a Community

Missouri Oral Health Preventive Services Program Screening Results for School Year 2012-2013

Sugar Creek - Independence School District Jackson County

Gender	Kindgtn		Grade 2				Grand Total
Female	13	15	18	18	15	9	88
Male	20	16	11	20	18	10	98
Grand Total	33	31	29	38	33	19	183
Age	Kindgtn	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grand Total
5	12						12
6	21	11					32
7		19	8				27
8		1	19	16			36
9			1	22	16		39
10				- 22	16	8	24
11					1	11	12
BLANK			_		_	- ''	14
		2.4	1	200		40	183
Grand Total	33	31	29	38	33	19	18.
Race	Kindgtn	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grand Total
African-American	1	1	2	2	1	1	8
Hispanic	6	6	5	5	5	2	29
Unknown Non-White	4	3	1	2	4	_	14
White	22	21	21	29	23	16	13
Grand Total	33	31	29	38	33	19	18:
Orang Total	33	31	29	30	33	19	10.
Oral Hygiene	Kindgtn	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grand Total
Satisfactory	29	17	16	20	22	7	11
Not Satisfactory	4	14	13	18	11	12	7:
Grand Total	33		29	38	33	19	183
Giarid Total	- 33	31	23	36	33	19	10.
Treated Decay	Kindgtn	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grand Total
None	25	17	12	7	10	3	74
Primary Only	8	14	17	30	16	13	98
Primary and Permanent				1	6	3	10
Permanent Only					1		
Grand Total	33	31	29	38	33	19	183
Untreated Decay	Kindgtn	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grand Total
None	28	30	27	27	27	16	155
Primary Only	5	1	1	7	6	2	23
Primary and Permanent				2		1	
Permanent Only			1	2			
Grand Total	33	31	29	38	33	19	183
Dental Sealants	Kindgtn	Grade 1	Grade 2		Grade 4		
No Sealants	32	29	27	29	22	18	
Sealants	1	2	2	9	11	1	20
Grand Total	33	31	29	38	33	19	183
Treatment Urgency	Kindgtn	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grand Total
No Obvious Problem	28	30	27	27	27	16	15
Early Dental Care	5	1	2	8	4	3	2
Urgent Care		·		3	2		-
Grand Total	33	31	29	38	33	19	183
orana rom	33	3.		30	- 33		10.
History of Rampant Caries	Kindgtn	Grade 1	Grade 2				Grand Total
No	30	24	24	24	28	17	14
Yes	3	7	5	14	5	2	36
Grand Total	33	31	29	38	33	19	183

### Step 2: Oral Health Education

- Inform of the benefits of fluoride varnish to parents and children through brochures and handouts
- Instruct in basic oral hygiene measures (brushing and flossing) through video/DVD and verbal presentations
- ► Each coordinator will decide how to incorporate the oral health education component.
- Oral health education is a required component of PSP and can be accomplished in many different formats.

### Free Toothbrushes, Toothpaste and Floss

Appropriately sized toothbrushes for the children being screened will be provided on day of the screening

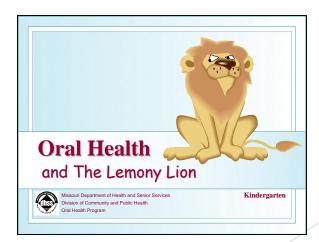
Toothpaste for all children

Grades 4<sup>th</sup> and up receive dental floss

## Oral Health Education Curriculum Presentations

- Oral health curriculum presentations
- Kindergarten through 12<sup>th</sup> grade is available on website:

http://health.mo.gov/living/families/oralhealth/oralhealtheducation.php



#### Free Oral Health Materials

http://health.mo.gov/living/families/oralhealth/oralhealtheducation.php



#### **Nutrition Tips for a Healthy Smile**

- Drink water or low-fat milk and stay away from sugary drinks like soda.
- Don't eat too much candy or desserts that are high in sugar and stick to your teeth.
- Eat plenty of fruits and vegetables to promote healthy gums and teeth.

#### Infants

- You can pass cavity-causing germs to your baby when you put baby's spoon or pacifier in your mouth.
- Clean your newborn baby's gums with a soft, clean, damp washcloth after every feeding, even if no teeth have come in yet.
- Baby begins cutting teeth at around six months old.
- Brush your baby's teeth as soon as the first tooth comes in. Use a small, soft toothbrush and a "smear" of fluoride toothpaste.
- Your baby should have a dental exam by their first birthday.
- Don't put juice, soda or any sweet drinks in baby's bottle or sippy cup.
- Don't put baby to bed with a bottle or sippy cup.





### Oral Health is Overall Health

#### Take Good Care of Your Teeth and Gums

- Brush your teeth and tongue for two minutes at least twice a day.
- Use a toothbrush with soft bristles and brush gently so you do not damage your gums.
- Don't share toothbrushes.
- Get a new toothbrush every six months.
- Use fluoride toothpaste.
- Clean between your teeth with dental floss at least once a day.
- Avoid tobacco products.
- Limit alcohol use.
- · See a dentist at least once a year.
- · Avoid sugary foods and drinks.

#### Avoid Tobacco for a Healthy Mouth

- Smokers are four times more likely to develop gum disease than non-smokers.
- Smokeless tobacco can contain sugar, which increases the risk of tooth decay.



### Step 3: Prevention

- Fluoride varnish comparable in efficacy to traditional topical fluorides
- Fluoride varnish can be applied in a variety of settings.
- Can be applied by nondental staff with training (must be at least 18 years of age)



### Fluoride Historical Value

Dramatic reduction in decay for 50-70 years.

Reduction due to both systemic and topical fluorides.







The CDC named community water fluoridation one of 10 great public health achievements of the 20<sup>th</sup> century.

### Fluoride Varnish

## Preventing and Arresting Dental Decay

Has been used in Europe and Canada for more than 40 years in preventing tooth decay.





## Fluoride Varnish is Endorsed by the Following Associations ...





Association of State and Territorial Dental Directors



Centers for Disease Control and Prevention

## Fluoride Varnish Characteristics

- Easy to learn to apply
- Sets on contact with moisture (saliva)
- Taste is tolerable and well accepted
- Decreases the acidic environment caused by plaque
- Retards, arrests, and may reverse the decay process
- Can promote the re-mineralization of tooth enamel

#### Fluoride Varnish is Cost Effective



- Nu Radiance costs less than \$.72 per application
- Free to participants/community

Dental care is the most commonly cited unmet health care need in the nation(Pediatr Clin N AM 2000;47:1177-1189).

### Fluoride Varnish Application

No dental chair needed

- Application takes 1-3 minutes
- Varnish is "painted" on all surfaces of all teeth with disposable applicator

### Reapply Fluoride Varnish

- ▶ To maintain its caries-preventive effect, PSP offers two applications per year
- Application of fluoride varnish twice per year can help reduce decay dramatically
- Studies support that higher caries risk patients should receive fluoride varnish applications at three to six-month intervals
- Additionally, research has shown the effectiveness in caries reduction when fluoride varnish is applied 3-4 times a year when a child has high caries risk

### Step 4: Referral Network

- Community action essential
- Involve local dentists, community health clinics, federally qualified health clinics (FQHC), other health providers
- Continued networking important to obtain and maintain good referral system

### Positive PSP Data

### PSP Activity for the past I lyears Number of participating children:

2006-2007 school year - 8,529

2007-2008 school year - 18,139

2008-2009 school year - 35,308

2009-2010 school year - 54,187

2010-2011 school year - 64, 657

2011-2012 school year - 63,764

2012-2013 school year - 72,088

2013-2014 school year - 76,320

2014-2015 school year - 82,258

2015-2016 school year - 83,139

2016-2017 school year - 92, 693

#### **Volunteers**

Over 1,600 licensed dental professionals have been calibrated to conduct oral screenings

Plus over 6,8000 volunteers trained to apply varnish



## The Anticipated Results







#### Improved Health Outcomes

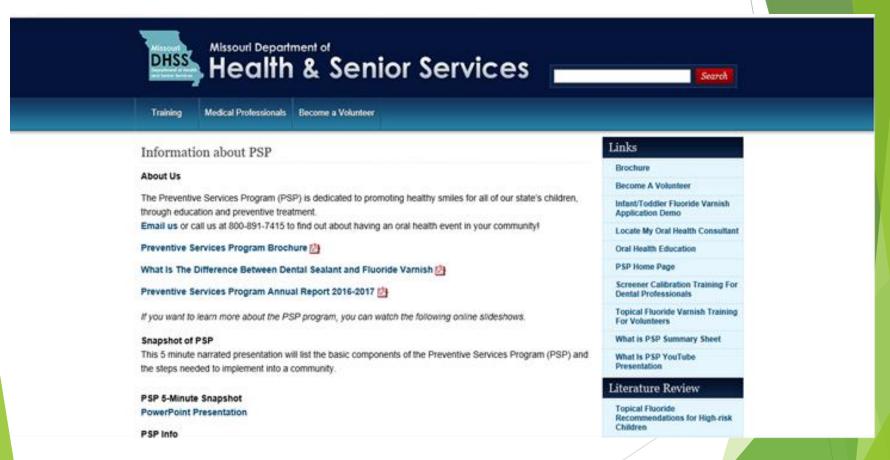
- Lower rates of acute and chronic diseases
- ► Higher rates of preventive services

#### **Improved Education Outcomes**

- Less absenteeism
- Better attentiveness in class
- Children in pain cannot learn

#### The PSP Web Site:

### http://health.mo.gov/blogs/psp/



### Department of Health Office of Dental Health

#### **Dental Director:**

▶ Dr. John Dane, DDS

#### Oral Health Program Manager:

Julie Boeckman

#### Oral Health Program Consultants:

- ▶ Jeffrey Bellamy, RDH, BSGS
- Beth Cameron, RDH, M.Ed.
- ► Audrey Hendee, RDH
- ► Ann Hoffman, RDH, BSDH
- Molly McBride-Mooty, RDH



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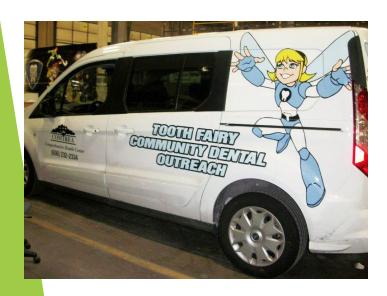
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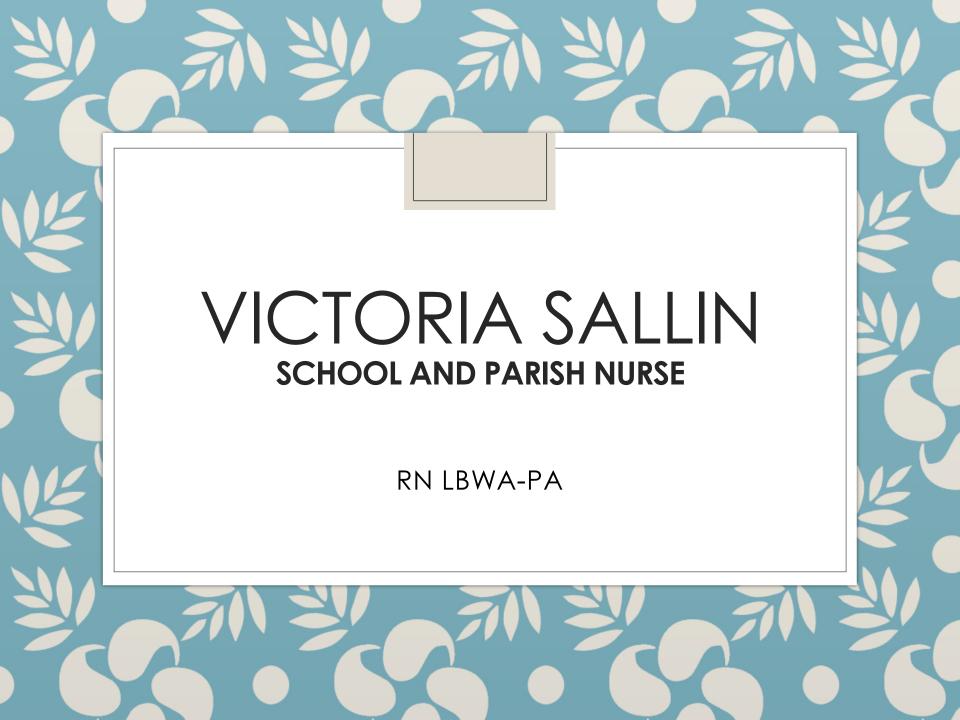
### A Couple of Our PSP Champions







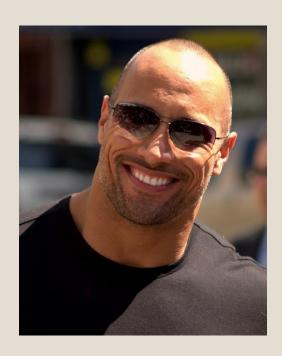




# Osage County Not "THE LAKE"



# My Husband



## Dale with Baby Mason



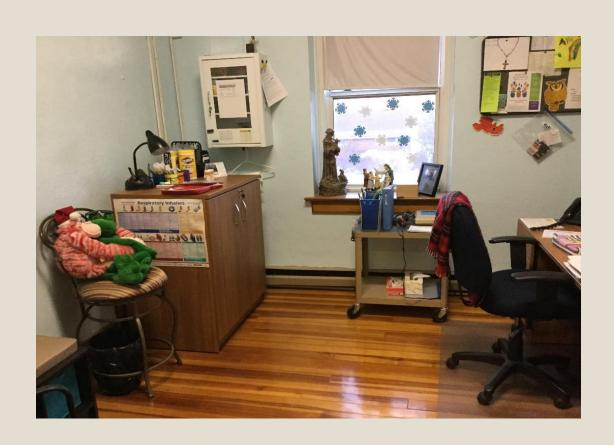
# Westphalia, Missouri



## St. Joseph Elementary School



## My Office and Mobile Health Unit



# St. Joseph Middle School



## **School Nurse/PE Teacher**



#### All You Need is a Whistle



#### **How Hard Can It Be?**



# I'm Sorry Mr. Thoenen



# Why Me?



## Why am I Qualified?

- •Because I have been doing this job forever!
- Because Ann couldn't get anyone else to respond to her email.
- •Because back when we did the SWISH fluoride rinse I had it down to a delicate science!

## Swish.....Gross



# What Do You Call a Deer With No Eyes? No I Deer!



## Why Did I Agree?



## **Anything To Get Out of PE!**

Those kittens aren't always cute.
(When I say kittens, I really mean kid)



## Preventive Services Program

- Grades K-8
- Enrollment: 210
- 99% participation

#### **Professionals**

- Community Health Clinic of Central Missouri
- Sometimes a parent
- Dr. Craig Stranes

# **Unpaid Workers**



#### **Oral Education**

- 1. Prior to the event
- 2. During the event
- 3. After the event

#### **Delta Dental Land of Smile**



## The Giant Tooth



#### Videos and Books

Missouri Department of Health and Sr. Services web site



#### The Event

- Gym
- Volunteer escorts
- Volunteer spit spy
- Kids watch a movie
- Screenings behind the stage curtain



#### **Devil Is In The Details**



## **Group Instructions**

- Hygienist will count your teeth
- Nothing will hurt
- No teeth will be pulled (even if you ask them)
- The varnish looks like ear wax but tasted kind of like bubble gum
- It is very sticky and makes your teeth feel fuzzy
- YES! It is okay to swallow

- NO! NO! NOOOOO! You should not spit it out
- Once you are finished close your mouth and swallow
- YES! Swallow
- Get a drink (do not spit in the water fountain, the spit spy is watching)
- You may eat and drink right away

You Should Not Brush Your Teeth at Bedtime.

BUT Please Brush When You Get Up Tomorrow!

And YES, I will send a note to your parents.



#### **Details**

- Sticker on DO NOT varnish kids (foreheads)
- Class roster (called in alphabetical order by an adult who knows the kids)
- Parent permission is given at the beginning of the school year.
- I review the school lunch menu prior to the day
- Pre-application of fluoride varnish

## Challenges

- Screeners
- Time out of the classroom (The Cart or during PE)

### Accomplishments/Outcomes

- Excellent participation (parent permission)
- Using the screening results to set up educational opportunities



# Specialized Degree Learn By Walking Around AND Paying Attention



#### Comtrea and PSP

How Comtrea Utilizes and Executes the PSP

## Sandy Holifield, RDH Oral Health Outreach Manager

- Multiple Locations within Jefferson County
- 1 School-based Dental Clinic
- 1 School-linked Dental Clinic (Also Comprehensive Services)
- 1 Emergency only Dental Clinic
- 1 Stand alone Comprehensive Health Center
- Plans for more soon

#### **PSP** in Action

- Offered to over 31,000 children in about 60 schools (10 districts)
- These include the WIC program, Pre-school, elementary school, Middle and High school aged children
- 4974 students were seen during the 2016-2017 school year and approximately 2794 students thus far for 2017-2018 school year
- Translated into approximately 203 new patients for our clinics last school year (\$88K production)

#### **PSP** in Action

- We've combined the PSP with our own Tooth Titans mobile program
- Consent form offers both programs and parents indicate which they would like to participate in
- We have a staff of anywhere from 4-5 people up to 10 people to execute the TT/PSP program, factors decide what is necessary. We also utilize Dental Students from UMKC and ATSU
- We have two vehicles dedicated to our Tooth Titan/Tooth Fairy program

#### Onboarding "Patients of Record"

- Due to the more extensive services offered with the PSP, more information is recorded
- Sealants make the difference for needed demographics in an FQHC

- Hypothesis: numbers would suffer greatly due to the need for more extensive and personal information
- This hypothesis is proving true. Numbers are down approximately 25% compared to the preceding year.

### Tooth Titans vs Tooth Fairy





#### Tooth Titan vs Tooth Fairy

#### **Tooth Titans Program**

- Offers "full dental services"
- Surprisingly, more parents choose this option over PSP only
- Also includes PSP in services
- Requires one to three days at school and more staff

# Tooth Fairy Program "PSP Only"

- Offers simple dental services: screenings, sealants, oral hygiene instruction, and varnish
- Fill out PSP paperwork along with other forms required
- Requires a half day to full day at school and less staff

#### Both programs offer a dental goody bag

### **Escorting Participants**

#### Preschool/Elementary age

- Most preschool age level students are escorted by a nurse's aide or teacher's aide
- Older children are allowed to go to and from the classroom unescorted
- This is left up to the school's preference

#### Middle/High School age

- These students are allowed to go to and from unescorted
- Sometimes must travel from one building to another
- Some don't show up ⊗

#### Oral Health Education

- As each child is seen, their specific needs are communicated with them.
- If the child is not old enough to comprehend the information, notes are written on the "take home sheet" for parents to read.
- Some notes may say "child needs help brushing twice daily" or "child is missing this area while brushing, please help them clean here".
- These notes are in addition to the bookmarks offered by the state to relay general oral health information.

#### After Care for Students

- Comtrea has two Patient Care Coordinators dedicated to our dental program and after each event, they will call all of the children marked URGENT, then Early Needs, then No Obvious to encourage and help the parents find care for their child.
- Whether the children come to Comtrea for services or have a dentist they normally see, the parent/guardian is called.

- All phone calls are noted in the patient charts as well as given a code to run reports to track Care Coordination.
- \*Prior to this school year, the school nurses were encouraged to make these calls, which is a disadvantage in several ways.

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- Since Comtrea's addition of Dental programs in 2013, the PSP Program has expanded from about 12 schools to over 60
- The program (adding sealants) has been self-sufficient for the past few months and no indication this will not be the case in the future

- The Tooth Titan van is large and waiting for it to heat up takes time!
- Getting organized with several moving parts while merging two programs
- Mobile work is physically and mentally hard on staff
- Follow up is difficult due to parental motivation and communication

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- Children who have not received care in years, are finally being seen
- Nurses appreciate the follow up care for their students
- Utilization of Medicaid benefits is going up
- Not only do parents now know their child may have dental needs, but they also have a resource by adding the Titans program

- Moving equipment into and out of schools on a regular basis
- Additional time needed at each school is seen as a negative by some school officials
- Preparation takes much longer
- Inventory is greater and requires a bit more time
- More days have been needed due to the nature of the program change and also the number signed up and/or technical difficulties

#### Changes for Next Year

- Fully staffed for next year! (having dedicated staff is important)
- Consents will be sent out to ALL schools at the very beginning of the year
  - This allows for better preparation for supplies, days needed per school, staffing, and less work for the Oral Health Outreach Manager throughout the actual school year. (Dropping off and picking up consent forms, scheduling extra dates, etc.)
  - Focus can move toward onboarding new schools and paperwork for state