

VARNISH! MICHIGAN BABIES TOO!



2015-2016

Annual Report



The Varnish! Michigan Babies Too! Program was developed to encourage medical providers to receive oral health training, perform oral health screenings, apply fluoride varnish and provide guidance to parents during well-child visits. The following report contains information and the data from the 2015-2016 year.

ANNUAL REPORT

Introduction to Varnish! Michigan Babies Too!

The overall goal of the Varnish! Michigan Babies Too! Program is to increase the number of primary caregivers who incorporate an oral health program into overall care for patients. After these health care providers take the Smiles for Life and Varnish! Michigan Babies Too! trainings, the Michigan Department of Health and Human Services (MDHHS), Oral Health Program (OHP) provides free fluoride varnish, parent brochures, and technical assistance to staff members to facilitate the incorporation of oral health screenings, patient education and fluoride varnish applications into their well-child and other patient visits.

Background Information

There are many factors that influence the oral health status of individuals, including limited access and availability to care, lack of education regarding oral health, cost, and many social determinants including income, education level, and race or ethnic group. In the Healthy People (HP) 2020 report, increasing the proportion of children, adolescents, and adults who use the oral health care system is considered one of the 12 leading health indicators.

The goal for this HP 2020 indicator is to increase, by 10 percent, the proportion of people over the age of two that have a dental visit during the course of a year. The Varnish! Michigan Babies Too! Program aligns with this goal by increasing oral health screenings in primary care settings and by facilitating the establishment of dental homes for babies by the age of one.

According to the US Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health, 2000, tooth decay is one of the leading chronic diseases in children in the United States and dental disease can be attributed to more than 51 million lost school hours for children each year. According to the 2015 CDC National Health and Nutrition Examination Survey, 18 percent of children ages 5 to 19 had untreated dental caries in 2011-2012, most of whom come from low income households.

Although tooth decay is a problem, it is preventable. One method of prevention is the use of fluoride varnish. When applied to the teeth, fluoride varnish enters the tooth enamel and makes the tooth hard which prevents new decay from occurring and stops existing decay from progressing. Once applied, the varnish is effective for many months. Varnish applied at least twice a year has shown to prevent tooth decay in primary teeth and can be applied up to four times a year on high risk children. *(Ref: Fluoride Varnish: an Evidence-Based Approach Research Brief; Association of State and Territorial Dental Directors)*

Varnish! Michigan Babies Too! Program Goals

The Varnish! Michigan Babies Too! Program was developed to increase the number of medical providers that have oral health training and have oral health programs in their practices. The ultimate goal of the program is to prevent tooth decay through preventive fluoride varnish application on babies and toddlers currently not visiting a dental home and to encourage early referral to a dentist by age one. With the implementation of this program, the OHP has been able to encourage more medical providers to consider oral health as an integral part of overall health of the patient. They are now more inclined to take a look in the mouth, provide a caries risk assessment, apply fluoride varnish, offer anticipatory guidance to parents on oral health care, and refer to a dental home by the age of one.

Training

For the Varnish! Michigan Babies Too! Program, medical providers, including physicians, nurse practitioners, PAs, RNs, LPNs, and MAs, who wish to provide oral health screenings and varnish applications must complete the Smiles for Life Course 6: Fluoride Varnish module, which is endorsed by the American Academy of Pediatrics. This is mandatory training for any agency wishing to participate in the Varnish! Michigan Babies Too! Program and to have the ability to bill Michigan Medicaid for services provided. This training can be accessed at www.smilesforlifeoralhealth.com or through the Altarum Institute's MI Caries Prevention Program (MCP) at www.miteeth.org

Once Smiles for Life training is completed, medical providers receive a certificate of completion. The certificate and a completed contact information form, which includes license number and NPI number, must be submitted to the OHP, who in turn, submits to the Medicaid Program. The provider is then issued a certificate and is eligible to bill Medicaid for reimbursement. Physicians and nurse practitioners are the only medical providers recognized by Michigan Medicaid as billable providers. Other providers who take the training will receive a completion certificate from the OHP, even though they may not be eligible to bill Medicaid directly.

After each staff member within an agency or office has completed the Smiles for Life training, additional training to participate in the Varnish! Michigan Babies Too! Program is provided by a representative from the MDHHS OHP. This training provides all staff involved in the Varnish! Michigan Babies Too! Program with information specific to program policies and procedures. This training is offered on-site or via webcast.

A current list, including names and locations of physicians and nurse practitioners that have completed the Smiles for Life training and received an MDHHS Certificate, can be found at [http://michigan.gov/documents/mdch/Fluoride Varnish Training Certificates 278243 7.pdf](http://michigan.gov/documents/mdch/Fluoride_Varnish_Training_Certificates_278243_7.pdf).

As of the time of this publication, 3437 medical professionals have taken the Smiles for Life training since November 2008, with 1627 being physicians or nurse practitioners. A large part of

this increase is due to the MI Caries Prevention Program (MCP) which provided medical provider training through the Altarum Institute with an award provided by the Centers for Medicare and Medicaid Innovation.

Reimbursement

Physicians and nurse practitioners that have completed the Smiles for Life training are allowed to bill Medicaid for two oral screenings a year and up to four fluoride varnish applications on a child up to 3 years old (0-35 months) over a 12 month period. The current reimbursement rate from Medicaid Fee-for-Service for an oral screening by a medical provider is \$14.89 and is \$9.00 per varnish application. Some Medicaid Health Plans may reimburse at different rates.

Fluoride Varnish

The OHP, per Memorandum of Agreement of the Varnish! Michigan Babies Too! Program with each agency, provides free fluoride varnish for as many children as there are returned screening forms (as long as supply is available). The provision of free fluoride varnish is to encourage medical providers to incorporate oral screenings, anticipatory guidance, and fluoride varnish applications as part of the EPSDT (Early and Periodic, Screening, Diagnosis, and Treatment) well baby checks and to connect families to a dental home. Upon completion of the Varnish! Michigan Babies Too! training, providers receive an agreed upon starting amount of free fluoride varnish and education brochures to give to parents.

Screening Data

Data are collected by medical providers during oral health screenings. These screening forms are sent to the OHP, on a quarterly basis, where data are entered into a central database. Once collected and entered, the data are used to determine the size and scale of the Varnish! Michigan Babies Too! Program, track oral health services provided, as well as provide information on the demographics of the population receiving the services.

Data Collection for 2015-2016

During FY 15-16, (Oct 2015-Sept 2016), screening forms were collected from 45 agencies from across the state, an increase of 21 agencies from the previous year! The screening forms received were from a variety of agencies including hospitals, health departments, clinics, WIC clinics, and primary care offices.

The 2015-16 Varnish! Michigan Babies Too! Screening Form collected the following information.

- Date of service
- Agency name
- Site name if different from agency name
- Child's name including first, middle, and last

- Child's date of birth
- Yes/No if the child has seen a dental provider in the last 12 months
- Yes/No if medical history was reviewed/if child is allergic to pine sap
- Parental signature for consent
- Gender
- Race/ethnicity
- Primary language
- If the child is limited in any way in any activity because of physical, mental or emotional problems
- Examiner initials
- Total number of teeth present
- # of teeth with previous caries experience
- # of teeth with untreated decay
- Yes/No for white spot lesions present
- Yes/No for Early Childhood Caries (ECC)
- Treatment Urgency: 0) no obvious problems, 1) early dental care, 2) urgent care
- Yes/No for a caries risk assessment
- Yes/No for fluoride varnish application
- Yes/No for child referred for treatment

For FY 15-16, the data collected were not indicative of the state as a whole and only represent those agencies volunteering to collect data as part of the Varnish! Michigan Babies Too! Program. The following are the results of the data collected from October 1, 2015 through September 30, 2016:

- 6385 children were seen (up from 3813 in FY 13-14- a 67% increase)
- 6308 children received at least one oral health screening
- 5808 (91%) children screened received at least one varnish application
- 1073 children, out of the 6308 that received any varnish application, received a second varnish application, 199 received a third varnish application, and 7 children received a fourth varnish application
- 975 teeth on children had previous caries treatment at the time of their first screening
- 428 teeth screened had untreated decay at the time of the first screening
- 7% of children had white spot lesions present on teeth at the time of the first screening

Table 1: Comparison of Varnish! Michigan Babies Too! Program totals between FY 14-15 and FY 15-16

Varnish! Michigan Babies Too!	2014/2015	2015/2016
Children Seen	3813	6385
Children Screened	3813	6308
Children that received 1 st varnish application	3725	5808
Children that received 2 nd varnish application	320	1073
Children that received 3 rd varnish application	56	199
Children that received 4 th varnish application	3	7
Number of teeth with previous caries treatment at first screening	127	975
Number of teeth with untreated decay at first screening	234	428
% of children with white spot lesions present at first screening	3.7%	7%

Demographics

Gender: As seen in the graph below, of the 6385 infants and toddlers that were seen in the Varnish! Michigan Babies Too! Program in FY 15-16, 2973 or 47 percent had indicated male and 2933 or 46 percent had indicated female. (Some did not include this information in the screening data).

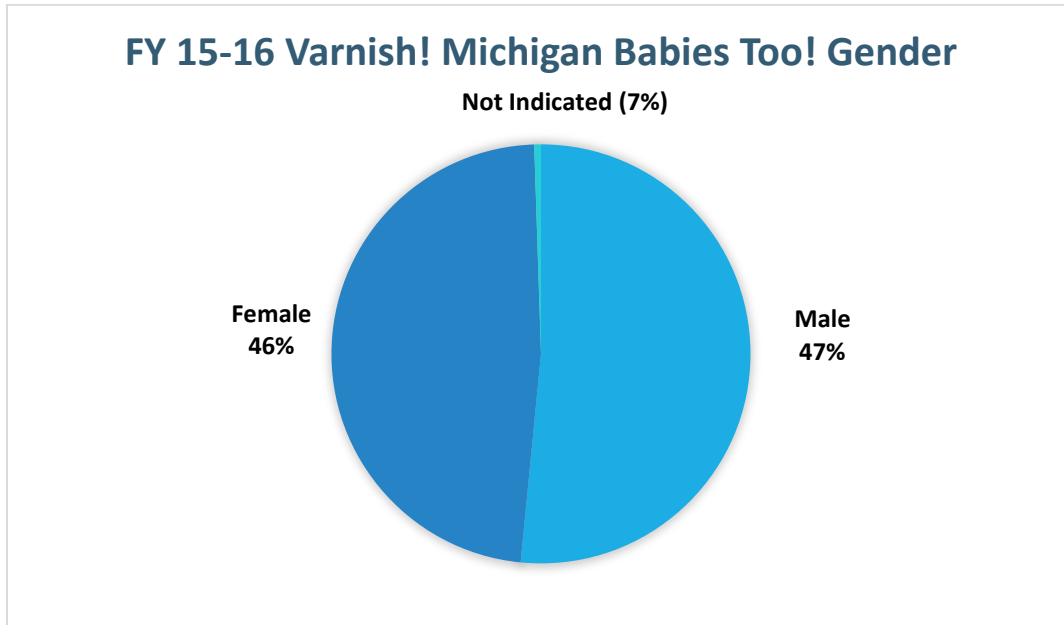


Figure 1: Pie Chart of gender breakdown for Varnish! Michigan Babies Too! Program FY15-16

Race/Ethnicity: The following graph shows the percentage of each racial/ethnic group that was recorded in FY 15-16 for the Varnish! Michigan Babies Too! Program. The largest population of children screened was White (65%), followed by African American (13%), Hispanic (8%), and other or mixed race/ethnicity (7%).

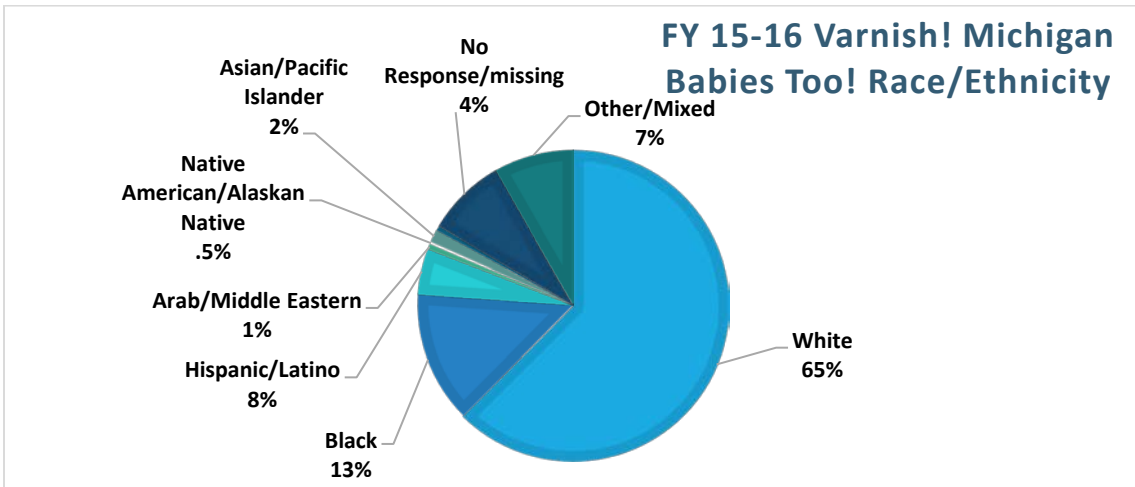


Figure 2: Race/Ethnicity of children screened in Varnish! Michigan Babies Too! Program FY15-16

Primary language: The following graph illustrates the primary language by household for children in the Varnish! Michigan Babies Too! Program for FY 15-16. As seen below, ninety-six percent of children screened live in a household with English as the primary language, followed by eight percent Spanish speaking and less than one percent of households speaking Arabic. Six percent of the screening forms were returned with no response for primary language and one percent indicated a language other than those listed.

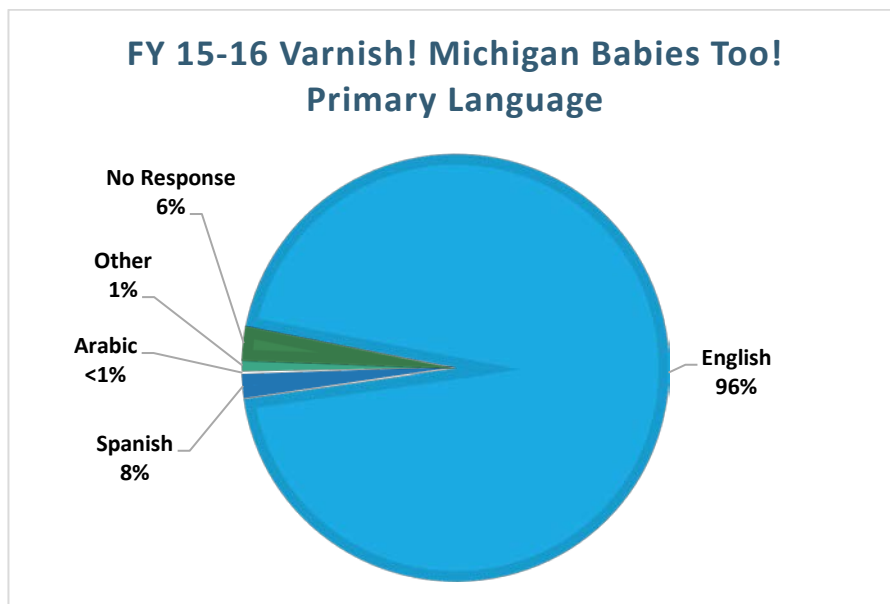


Figure 3: Primary Language of children in the Varnish! Michigan Babies Too! Program FY15-16

Disability: Of the 6308 children that were screened in the Varnish! Michigan Babies Too! Program in FY 15-16, 68 (1.1%) were recorded as having a disability. Disabilities were categorized as physical, mental, emotional or other, and more than one disability could be selected. Physical disabilities were encountered most often, followed by mental disabilities, other types of disabilities, multiple types of disabilities, and emotional disabilities.

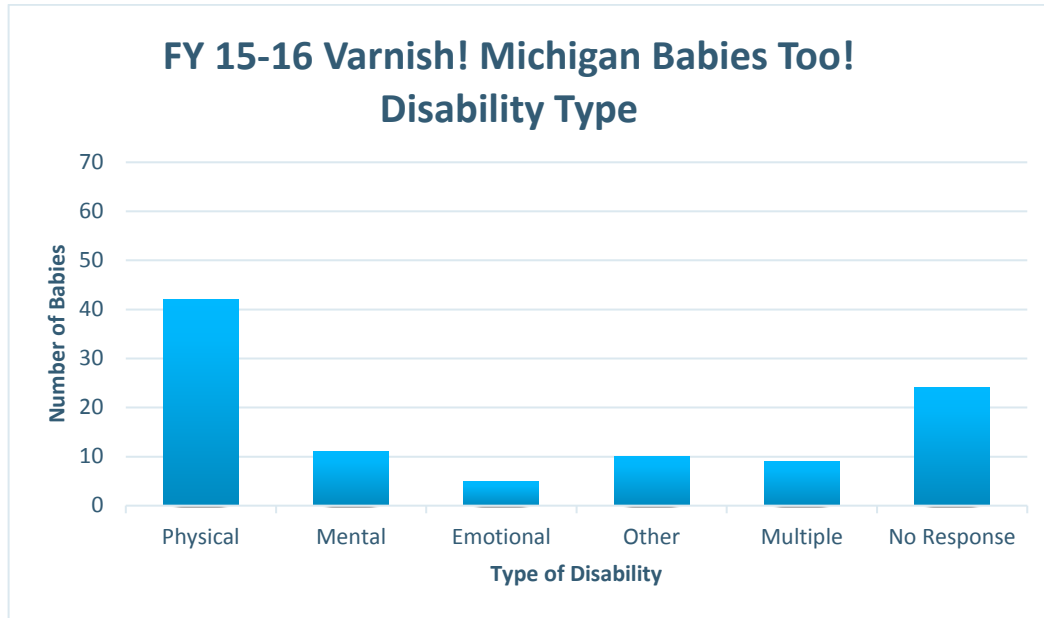


Figure 4: Number of Children with each type of disability in the Varnish! Michigan Babies Too! Program FY15-16

Lessons Learned

Although the Varnish! Michigan Babies Too! Program has participating medical providers in many counties around the state, it is not considered to be a statewide program. Physicians and other medical providers are not actively recruited to the program and participate on a voluntary basis. Because of this, data from this program cannot be indicative of the statewide levels of fluoride varnish being applied to children's teeth.

As seen in Table 1, the overall number of children that were screened in FY 15-16 increased significantly from FY 14-15. In addition, the proportion of children receiving a 2nd and 3rd varnish applications almost tripled from the previous year. Even though an increase occurred, the proportion of children receiving more than one application of fluoride varnish remains small. The difficulty is in getting more than this first application of fluoride varnish on these children even though they may be returning several times throughout the 12 month period. Unsure why this is the case and additional analysis may be required to get more information on barriers to providers for performing more than one application of varnish. Agencies are being continually added into the program throughout the year which may account for not getting more than one application per child.

The OHP will continue to collaborate with the Altarum Institute and the MI Caries Prevention Program (MCP) as they were instrumental in the 67 percent increase of children that were seen through the Varnish! Michigan Babies Too! Program from the previous year. MCP promoted the Varnish! Michigan Babies Too! Program at each of their trainings with medical providers and encouraged them to contact the OHP to participate.

Evaluation

The Varnish! Michigan Babies Too! Program did an extensive program evaluation in 2016 with the help of the Michigan Public Health Institute (MPHI). In January of 2016, an evaluation was initiated to assess the program's operations and make recommendations for program improvements. Specific evaluation areas included:

- barriers to implementing the program
- provider preparation to incorporate the program into their practice
- provider confidence in program delivery
- provider satisfaction with the program

OHP staff and a MPHI evaluation team met to plan out the scope and purpose of the evaluation as well as to develop evaluation questions, data collection methods, and instrumentation. A provider survey was developed and disseminated to all programs asking for feedback on the program during the timeframe of October 2015-May 2016. Key feedback from the evaluation was used by the OHP to make changes to the program. For instance, the Varnish! Michigan Babies Too! training is now being offered both on-site and via webcast, allowing for as-needed

instruction from several other dental hygienists across the state as recognized trainers of the program. In addition, more emphasis is now on fluoride varnish application, identifying tooth decay, and going through the requirements of the data collection screening form. A new scannable screening form has been developed that requires less time to enter data by both the program participant and the OHP staff. A vast majority of providers stated that they saw value in the program and that it increased access to dental services that their clients would not normally have received.

Future of the Program

The Varnish! Michigan Babies Too! Program receives funding from a variety of sources but the Altarum Institute provided the majority of funding. As the program continues to increase the number of providers participating and the funding remains constant, securing additional funding becomes important to the growth of the program.

Part of the agreement with providers is that the program will continue to provide free varnish to participating agencies while supplies last. This is based on funding availability for the program. Possible changes to the program may be to limit participation of providers to two years. This will be to establish the practice of providing oral screenings to 0-3 year olds during their primary care visits and make it a regular part of the check-ups. Fact sheets with program information and updates are regularly sent to participants. Another consideration may be to send the MDHHS Fluoride Varnish brochures only to currently participating providers, while making the brochure available electronically, so that it can be accessed by anyone requesting a copy.

For more information on the Smiles for Life certification process and the Varnish! Michigan Babies Too! Program contact:

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