

## 2017 Model Practices

### Applicant Information

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### Model Practice Title

Please provide the name or title of your practice: \*

Fluoride Varnish in the Pediatric Primary Care Setting

### Practice Categories

Model and Promising Practices are stored in an online searchable database. Applications may align with more than one practice category. Please select all the practice areas that apply.: \*

- |   |   |   |  |  |
|---|---|---|--|--|
| <input checked="" type="checkbox"/> Access to Care  | <input type="checkbox"/> Advocacy and Policy Making       | <input type="checkbox"/> Animal Control                 | <input type="checkbox"/> Coalitions and Partnerships | <input type="checkbox"/> Communications/Public Relations                 |
| <input type="checkbox"/> Community Involvement  | <input type="checkbox"/> Cultural Competence              | <input type="checkbox"/> Emergency Preparedness         | <input type="checkbox"/> Environmental Health        | <input type="checkbox"/> Food Safety                                     |
| <input type="checkbox"/> Global Climate Change  | <input type="checkbox"/> Health Equity                    | <input type="checkbox"/> HIV/STI                        | <input type="checkbox"/> Immunization                | <input type="checkbox"/> Infectious Disease                              |
| <input type="checkbox"/> Informatics  | <input type="checkbox"/> Information Technology           | <input type="checkbox"/> Injury and Violence Prevention | <input type="checkbox"/> Marketing and Promotion     | <input checked="" type="checkbox"/> Maternal-Child and Adolescent Health |
| <input type="checkbox"/> Organizational Practices   | <input type="checkbox"/> Other Infrastructure and Systems | <input type="checkbox"/> Organizational Practices       | <input checked="" type="checkbox"/> Primary Care     | <input type="checkbox"/> Quality Improvement                             |
| <input type="checkbox"/> Research and Evaluation  | <input type="checkbox"/> Tobacco                          | <input type="checkbox"/> Vector Control                 | <input type="checkbox"/> Water Quality               | <input type="checkbox"/> Workforce                                       |
| <input type="checkbox"/> Conference Theme: Bridging Clinical Medicine and Population Health |   |   |  |  |

Other::

Is this practice evidence based, if so please explain. :

Using fluoride varnish as a preventative tool to decrease early childhood caries is an evidenced-based, proven technique. There are over 110 studies and 40 clinical trials that have demonstrated its' effectiveness. Fluoride varnish treatment is recommended by the American Dental Association, the American Academy of Pediatric Dentistry, the United States Preventative Task Force (USPSTF) and the American Academy of Pediatrics.

## Winnable Battles

To keep pace with emerging public health challenges and to address the leading causes of death and disability, CDC initiated an effort called Winnable Battles to achieve measurable impact quickly. Winnable Battles are public health priorities with large-scale impact on health and known effective strategies to address them. Does this practice address any CDC's seven Winnable Battles? If so, please choose from the following: \*

☐ Food Safety

☐ HIV in the U.S.

☒ Nutrition, Physical Activity, and Obesity

☐ Tobacco

☐ Healthcare-associated Infections

☐ Motor Vehicle Injuries

☐ Teen Pregnancy

☐ None

## Overview: Provide a brief summary of the practice in this section (750 Word Maximum)

Your summary must address all the questions below:

- Brief description of LHD- location, demographics of population served in your community
- Describe public health issue
- Goals and objectives of the proposed practice
- How was the practice implemented/activities
- Results/Outcomes (list process milestones and intended/actual outcomes and impacts.
  - Were all of the objectives met?
  - What specific factors led to the success of this practice?
- Public Health impact of practice
- Website for your program, or LHD.

750 Word Maximum

The Clinton County Health Department (CCHD) is located in Clinton County, New York a rural community situated in the furthest north east section of the state. The 81,251 residents are predominately Caucasian with 16.6% living below the poverty level. The CCHD has been serving its North Country communities since 1957. It fulfills its missions through the employ of health professionals and support staff from a variety of disciplines and is overseen by a Director of Public Health, with the authority by the Clinton County Board of Health. The Department has been a leader in the local public health system for many years and has considerable experience providing services to residents throughout the county and region through multiple grant opportunities and core funded initiatives. The CCHD collaborated with the New York State Association of County Health Officials (NYSACHO) on an initiative to implement fluoride varnishing in the pediatric primary care setting for patients under the age of 5. The public health issue is oral health and its' connection to inadequate nutrition, systemic diseases, developmental delays, self-esteem concerns, pain, increased prevalence of decay in adulthood and elevated costs associated with repair and treatment. The goals of the project include completing public health detailing on fluoride varnish at 100% of pediatric primary care practices in Clinton County, increasing the number of pediatric primary care providers and staff that apply the varnish to patients at their well visits, increase the number of patients 5 years and under who are varnished at their primary care provider's office and ultimately decrease the number of early childhood caries. In order to implement this initiative, CCHD staff completed a 'train the trainer' series of webinars with NYSACHO that trained local health department staff on everything related to fluoride varnish, from a general overview to application and billing. Once the training was complete, staff used existing relationships to establish buy-in, recruit and train pediatric provider offices. The CCHD completed public health detailing on fluoride varnish at each practice. Office staff was trained on screening, assessment, counseling, proper application, potential barriers, billing and evidenced based research. Upon completion of the training, all offices agreed to implement varnishing in their practice. An office champion was selected at each practice to ensure progress was being made on this initiative. Resources were supplied to the offices to simplify billing, enable office staff to train new staff, strengthen oral health messaging and provide patient education. Local Health Department (LHD) staff completed periodic check-ins to confirm advancement in goals and objectives, determine if there were any barriers and capture successes. Overall, 100% of pediatric practices in Clinton County were trained. 36 pediatric provider staff was trained to apply and bill for fluoride varnish in 3 practices. Prior to the detailing visits, there were no primary care offices varnishing their patients. All 3 offices have begun varnishing, 2 have been varnishing for a few months and one has just started. The next step will be to run reports in each of the Electronic Medical Record systems to capture how many patients under the age of 5 were billed with the varnish specific CPT code 99188. There were many factors that led to the success of this project. Prior to the project's implementation, CCHD's Obesity Prevention in Pediatric Health Care Settings grant held a conference for local pediatric providers and one of the topics focused on the 'Relationship Between Childhood Oral Health and Obesity' by Dr. Melinda Clark. This presentation laid the groundwork for the fluoride varnish work and showed the direct correlation between oral health and an array of other health conditions that could have a significant impact on their patients. The two other factors that played a role were the training materials and resources developed by NYSACHO as well as the strong existing relationships between the LHD and the local providers. These influences made this process less labor intensive and easier to accomplish with an already full workload. The public health impact of fluoride varnish is significant. The most obvious impact will be decreasing early childhood caries in children under the age of 5, which will decrease the number of caries experienced in older children, adolescents and adults. Healthy teeth in children can also lead to healthier diets, lower rates of overweight and obesity, lower risks of health conditions like diabetes and heart disease, decreased speech delays, decreased sleep conditions, lower absentee rates, and reduced costs associated with a variety of medical and dental conditions. [www.ClintonHealth.org](http://www.ClintonHealth.org)

## Responsiveness and Innovation

A Model Practice must be responsive to a particular local public health problem or concern. An innovative practice must be (1) **new to the field of public health (and not just new to your health department)** OR (2) **a creative use of an existing tool or practice**, including but not limited to use of an Advanced Practice Centers (APC) development tool, The Guide to Community Preventive Services, Healthy People 2020 (HP 2020), Mobilizing for Action through Planning and Partnerships (MAPP), Protocol for Assessing Community Excellence in Environmental Health (PACE EH). Examples of an inventive use of an existing tool or practice are: tailoring to meet the needs of a specific population, adapting from a different discipline, or improving the content.

- Statement of the problem/public health issue
- What target population is affected by problem (please include relevant demographics)
  - What is the target population size?
  - What percentage did you reach?
- What has been done in the past to address the problem?
- Why is the current/proposed practice better?
- Is current practice innovative? How so/explain?

- Is it new to the field of public health

**OR**

- Is it a creative use of existing tool or practice:

What tool or practice did you use in an original way to create your practice? (e.g., APC development tool, The Guide to Community Preventive Services, HP 2020, MAPP, PACE EH, a tool from NACCHO's Toolbox etc.)

- Is the current practice evidence-based? If yes, provide references (Examples of evidence-based guidelines include the Guide to Community Preventive Services, MMWR Recommendations and Reports, National Guideline Clearinghouses, and the USPSTF Recommendations.)

Please state the Responsiveness and Innovation of your practice (2000 Word Maximum) : \*

Oral health is a public health issue. The Surgeon General's report referred to oral health conditions as the most common unmet health need. It has been labeled a 'silent epidemic'. There are 50 million Americans living in regions where there is a shortage of dental health professionals. In areas where there are an adequate number of general dentists, they are not seeing pediatric patients especially those under the age of 3. Recent studies showed that only 3% of practicing dentists are pediatric dentists. Clinton County has been defined as a health care shortage area. The county has one pediatric dental practice that was established in 2011. Prior to that, families, especially with Medicaid, had to travel up to 2 hours for dental care. The lack of available care can lead to a multitude of barriers related to access to care. One quarter of children in low income families do not see a dentist by age 5. Dental conditions, which are largely preventable, account for millions of emergency department (ED) visits and billions of dollars in associated costs. Children in the United States are 2.5 times more likely to lack dental coverage than medical coverage and early childhood caries are five times more common than asthma. Data shows that 25% of U.S. children have dental caries and the prevalence in the pediatric population will eventually translate to 85% of adults with some sort of decay. Statistics show that 80% of the decay occurs in 20% of the population. This indicates that once decay starts, the patient is less likely to go back to primary prevention and will enter the constant repair and rehab cycle of care. The medical home has become the default dental home. Populations at highest risk for oral health conditions are affected by socioeconomic factors, culture, and personal habits. Lower income populations are more susceptible to dental decay, as are Hispanic and Native American populations. Individuals with enamel defects, poor feeding habits, poor oral hygiene, inadequate fluoride exposure, chronic medical conditions like Gastroesophageal Reflux Disease (GERD) and decreased saliva production or those that are taking certain medications are more likely to have oral health concerns. Studies have shown that children that have parents, caretakers, or siblings with dental decay are at higher risk due to similar diets, living conditions, and habits. All of these influences prove that social determinants of health play a significant role in one's risk for poor dental health. The target population for this initiative was identified as all children, from first tooth eruption to age 5. Each local pediatric practice, of which there are three, completed an office demographic survey through the Obesity Prevention in Pediatric Health Care Setting grant that mapped out number of patients seen annually. It was determined that 30-50% of each of the practice's patients received Medicaid and another 15-25% fell under an income determined payer like Fidelis. Across the 3 offices, there were approximately 8,500 patients seen each year that were under the age of 5. The goal of this project was to varnish at least 50% of these patients, one year post implementation. Offices have self-reported that varnish numbers are on the rise. Two offices have been varnishing for almost 5 months and the third has just begun implementation. Data will be collected this spring and summer to ensure that the 50% mark is achieved. Between now and then, CCHD is in contact with the office manager and/or office champion monthly to ensure continuous progress and to provide support in this effort. Utilizing fluoride to protect teeth against decay is not a new concept. Dentists have been applying fluoride gels, foams, varnishes and sealants to teeth at regular check-ups for years as a primary prevention tool. The main barrier with these applications is that it is contingent upon patients seeing a dentist. Since dental insurance coverage is not as universal as medical coverage, there are identified 'dental deserts'. Fear of the dentist is also a commonly reported reason for lack of dental care, enough so there is a population that is missing out on these procedures. This practice can be successful for those seeing a dentist but not for those that are not seeking care; most recent data shows 25% of low income children do not see a dentist before their fifth birthday. Communities have made great strides with establishing fluoridated water systems. Unfortunately this is not available in every community. In Clinton County, only 3 of the 14 townships have fluoride in their water and a large segment of the population has well water due to the rural nature of the region. Therefore, even if a town water system is fluoridated, individual houses might not have access to that water. Provider offices are prescribing fluoride supplement, drops or chewable tablets, that are recommended until age 16 but typically prescriptions stop after age 9 or 10. Local providers are good about supplying the prescription for the younger population but this intervention is dependent on patient compliance of filling and taking the fluoride as recommended. Another source of fluoride is toothpaste. This is most often the most effective and has the highest buy-in due to the social norm, education behind the benefits of brushing and the inexpensive investment in toothpaste for the family. An oral health paradigm was established in the pediatric primary care setting. In the formalized process, oral health preventative services are initiated in the medical home and the patient is referred to a dental home by age 1. Local providers were asked if this paradigm was working, 100% of providers, nurses and administration staff said, 'No'. The new paradigm proposed, consisted of oral health screening and risk assessment in the primary care, specifically at each well visit. The patient would then be monitored or counseled based on findings and fluoride varnish application would occur every 3-6 months. High risk patients can be varnished up to 4 times a year and low risk patients twice a year. Finally the patient would be referred to a dental home or specialist. Once established in the dental home, varnish may not be required at the medical visit. This paradigm brings oral health back into the medical home and provides primary prevention at one appointment without requiring a 'next step' on the part of the patient. Applying the varnish in the medical home, where a patient is seen 13 times in the first 3 years of life leads to greater compliance and coverage. Patients develop a comfort level and trust with their child's provider who is responsible for their little one's health. Bringing the 'whole' child concept to life and offering additional preventative services at the well visit aligns with best practice. It is still recommended that all children have a dental home by age 1 but for those that do not, having oral health prevention in the primary care setting is just one intervention that can reduce risks of costly health concerns down the road. The practice of fluoride varnish implementation in the pediatric primary care setting is in-line with the Healthy People (HP) 2020 objectives for oral health. The Healthy People 2020 (HP 2020) objectives focus on increasing awareness of the importance of oral health to overall health and well-being, increasing acceptance and adoption of effective preventive interventions, and reducing disparities in access to effective preventive and dental treatment services. Providing public health detailing to pediatric provider offices and implementing system change within each practice to offer fluoride varnish application to all patients under the age of 5 fits into each of the stated objectives. HP 2020 discusses barriers to preventive intervention like limited access and awareness, cost and fear. Incorporating this reimbursable preventive measure in the primary care setting eliminates all of these barriers by providing existing access, establishing a medical billing code for the procedure and offering a service through a trusted source. One potential strategy suggested by HP 2020 is to increase the number of community health centers with an oral health component. This project takes that strategy one step further and expands the dental component in the pediatric primary care setting that includes screening, assessment, fluoride varnish application, counseling and a dental home referral. Increasing the opportunities and locations for patients to access

preventative dental care, like fluoride varnish, will directly increase the number of patients that receive the service and related education. Using fluoride varnish as a preventative tool to decrease early childhood caries is an evidenced-based, proven technique. There are over 110 studies and 40 clinical trials that have demonstrated its' effectiveness. Fluoride varnish treatment is recommended by the American Dental Association, the American Academy of Pediatric Dentistry, the United States Preventative Task Force (USPSTF) and the American Academy of Pediatrics. Having the support of the USPSTF and fluoride varnish written into the Bright Futures Periodicity Schedule, opens up insurance coverage from all payers to ensure this is a reimbursable medical service for all children.

## LHD and Community Collaboration

The LHD should have a role in the practice's development and/or implementation. Additionally, the practice should demonstrate broad-based involvement and participation of community partners (e.g., government, local residents, business, healthcare, and academia). If the practice is internal to the LHD, it should demonstrate cooperation and participation within the agency (i.e., other LHD staff) and other outside entities, if relevant. An effective implementation strategy includes outlined, actionable steps that are taken to complete the goals and objectives and put the practice into action within the community.

- Goal(s) and objectives of practice
- What did you do to achieve the goals and objectives?
  - Steps taken to implement the program
- Any criteria for who was selected to receive the practice (if applicable)?
- What was the timeframe for the practice
- Were other stakeholders involved? What was their role in the planning and implementation process?
  - What does the LHD do to foster collaboration with community stakeholders? Describe the relationship(s) and how it furthers the practice goal(s)
- Any start up or in-kind costs and funding services associated with this practice? Please provide actual data, if possible. Otherwise, provide an estimate of start-up costs/ budget breakdown.

**5000 words maximum**

The goals of the project include completing public health detailing on fluoride varnish at 100% of pediatric primary care practices in Clinton County, increasing the number of pediatric primary care providers and staff that apply the varnish to patients at each well visit, increase the number of patients 5 years and under who are varnished at their primary care provider's office and ultimately decrease the number of early childhood caries. In order to implement this initiative, CCHD staff completed a 'train the trainer' series of webinars with NYSACHO to train local department staff on everything related to fluoride varnish from the general overview to application and billing. Once the training was complete, staff used existing relationships to establish buy-in, recruit and train pediatric provider offices. The CCHD completed public health detailing relating to oral health with a focus on implementing fluoride varnish in the primary care setting. Office staff was trained on screening, assessment, counseling, proper application, potential barriers, billing and evidenced based research. Upon completion of the training all offices agreed to implement varnishing in their practice. An office champion was selected at each practice to ensure progress was being made on this initiative. Resources were supplied to the offices to simplify billing, enable office staff to train new staff, strengthen oral health messaging and provide patient education. LHD staff completed weekly and then monthly check-ins to confirm advancement in goals and objectives, determine if there are any barriers and also capture successes. The entire project was aimed at reaching patients under the age of 5 with the goal of preventing the development of early childhood caries. Based on the criteria, it was determined the best course of action was to target the three large pediatric provider offices that serve as primary care providers for over 90% of pediatric patients in the county. By selecting these particular practices, it was ensuring the greatest impact on the targeted population. NYSACHO launched the 'Train the Trainer' series in March of 2016 in collaboration with Dr. Melinda Clark from Albany Medical Center. One CCHD staff member, a Supervising Public Health Educator, completed the trainings over the course a month. LHD staff was able to fine-tune training materials and began recruitment in April. The first pediatric practice was recruited and trained in April. The second office was recruited in April and trained in May. The third was recruited in May and trained in June. All three offices were trained and recruited within 3 months of the initial contact. Once trainings were completed, bi-weekly follow-ups occurred for approximately month to ensure the pilot stage and implementation was on track. Once implementation was established, the check-ins decreased to once a month to maintain contact and act as a resource. The project is 8 months in from its initiation. All offices are officially varnishing. The next step will be to collect outcome data at the one year mark and expand public health detailing to family care practitioners that are seeing a significant number of patients under the age of 5. In an effort to establish community stakeholder support in the initiative, a number of presentations were completed to promote the project. CCHD staff completed an overview of the fluoride varnish work to the Board of Health to ensure they were up-to-date on what was happening in the community and allowed them the opportunity to ask questions, voice opinions and add insight. The Board overwhelmingly supported the project. CCHD staff also did an overview of the project for the LHD to make staff aware of the service availability in the community and to enlist their assistance with supporting and promoting the effort. This presentation reached Women, Infants and Children (WIC) employees, Maternal Child Health program staff, Early Intervention and the Environmental Health Division that focuses on community water sources and implements the Healthy Neighborhood Program, a program that offers in-home visits with a focus on children's safety products. The group was very receptive, questions were generated and there were numerous requests for resources to give to their patients to encourage them to advocate for their children when at the provider offices. A presentation was also given to the NYSACHO group, where local public health directors from across the state were in attendance. The CCHD was selected to present barriers and successes when it came to implementing fluoride varnish in the primary care setting at the local level. LDH presented the fluoride varnish initiative to the Action for Health Consortium, a group of 45 community agencies working together on health related strategies within the community. The work directly complements other efforts within the community to increase the overall health of county residents. Sharing this information will garner support, facilitates promotion through multiple entities and will hopefully motivate others to implement this initiative in their community. There were minimal costs associated with this project. The CCHD used a core staff educator to participate in the training series, recruit and complete public health detailing within the offices, and provide technical assistance along the way. There were also costs associated with printing and developing training packets for each office. Overall the biggest commitment was time, not materials. An estimated total of 35 hours were devoted to this project over an 8 month timeframe, which was approximately a \$950 investment in salary. The basis of this project was educating the offices and helping to develop a sustainable system change within each practice. This particular system change did not require a big financial investment but does require mentoring and support. CCHD fully supported and invested staff time and effort into this project because of the long term positive impacts of this intervention on the smiles of Clinton County residents.

## Evaluation

Evaluation assesses the value of the practice and the potential worth it has to other LHDs and the populations they serve. It is also an effective means to assess the credibility of the practice. Evaluation helps public health practice maintain standards and improve practice. Two types of evaluation are **process** and **outcome**. Process evaluation assesses the effectiveness of the steps taken to achieve the desired practice outcomes. Outcome evaluation summarizes the results of the practice efforts. Results may be long-term, such as an improvement in health status, or short-term, such as an improvement in knowledge/awareness, a policy change, an increase in numbers reached, etc. Results may be quantitative (empirical data such as percentages or numerical counts) and/or qualitative (e.g., focus group results, in-depth interviews, or anecdotal evidence).

- What did you find out? To what extent were your objectives achieved? Please re-state your objectives.
- Did you evaluate your practice?
  - List any primary data sources, who collected the data, and how (if applicable)
  - List any secondary data sources used (if applicable)
  - List performance measures used. Include process and outcome measures as appropriate.
  - Describe how results were analyzed



- Were any modifications made to the practice as a result of the data findings?

## 2000 Words Maximum

Please enter the evaluation results of your practice (2000 Words Maximum): \*

Process Measure 1: Increase the number of pediatric primary care practices in Clinton County that received fluoride varnish training from 0% to 100% by August 1, 2016. CCHD generated feedback from all Clinton County pediatric practices. Practices were asked if fluoride varnish was available as a primary preventative measure within their offices. The results showed no offices were offering fluoride varnish to their patients. There was one office who briefly attempted to incorporate varnishing into their practice in 2009 when the initial recommendations were released but the practice was unable to sustain this change. Since it had been 7 years since the last attempt it was difficult to get accurate reporting of what caused the first attempt to be unsuccessful but the primary reason was thought to be billing and reimbursement issues. Each office was recruited by targeting key contacts in each practice based on previous relationships with other projects that focused on the pediatric population. CCHD reached out to specific office managers, nursing staff, medical assistants and providers at each office to determine their willingness to implement varnishing into their everyday work. All three offices, 100% of pediatric primary care practices in Clinton County, were receptive to the recruitment technique that involved a personalized e-mail with background information provided by NYSACHO. Immediately two presentations were set up and the third required one additional follow-up. Initial recruitment began in April 2016 and all 3 trainings were complete by June of 2016. Public health detailing on fluoride varnish occurred at 100% of pediatric practices within three months of the initial contact. Process Measure 2: Increasing the number of pediatric primary care providers and staff that apply the varnish to patients at their well visits from 0% to 50% by December 31, 2016. Baseline data was collected by CCHD to see how many providers were applying varnish prior to the intervention. The results showed zero providers were performing the procedure in office. There was only one office that had the varnish and applicators on site prior to CCHD making contact. Once trainings were scheduled and completed the individual offices developed plans to implement the practice of fluoride varnish in-house. In 3 offices, 7 MDs, 4 RNs, 6 LPNs, 3 Medical Assistants and 16 administration or billing staff were trained by CCHD for a total of 36 staff. An office champion was selected at each practice. The champions were provided all of the training materials to ensure additional trainings were available for staff that was unable to attend the initial detailing sessions and are maintained as additional staff is hired. Today, 2 of the 3 offices are regularly varnishing patients and one office just started implementation. A total of 7 billable providers were trained through the public health detailing process and 2 additional providers were trained by the office champions. There are a total of 14 billable providers at 3 offices and at least 64% of them are adequately trained to apply varnish. There are 6 providers actively varnishing (42.8%) with 3 that will pilot the process this month. By the end of the year the goal will be met and exceeded. Process Measure 3: Increase the number of patients 5 years and under who are varnished at their primary care provider's office from 0% to 50% by May 2017. In order to streamline data collection, CCHD decided to use the electronic medical records to run reports to gauge baseline results and determine progress. Communication between CCHD and office managers led to the conclusion that the billable code 99188, specific to fluoride varnish, was not being used at any practice. The coding was not being used because the procedure was not offered at that time. Now that varnish has been implemented and the use of CPT code 99188 is used for all fluoride varnish application, a report can be run to track the number of patients that have had varnish applied. The office staff can also run reports by age to establish the total number of patients seen in a specific age group, by appointment type, to further strengthen the accuracy of the data. After trainings were complete offices were encouraged to do PDSA cycles with one provider, one patient and one day to be able to troubleshoot potential issues prior to completely rolling out fluoride varnish implementation. Offices started out with small scale implementation and have continued to increase the number of patients varnished over the past 5-8 months depending on training dates and logistics. A report to determine the number of fluoride varnish CPT codes utilized has not been done at this time. The practices are still in the implementation phase and have not reached the one year mark at this point. Preliminary data shows the numbers are increasing month to month based on office champion reports. Outcome Measure: Decrease the percentage of early childhood caries. Decreasing the number of early childhood caries is more complex and can only be determined over a number of years. The results will not be measurable overnight. The local data for oral health indicators exists through the New York State Department of Health. Data from 2009-2011, showed 59.6% of 3rd grade children had experience with dental caries and 31.9% have dental caries that are untreated. The county data rate for caries was 14.2% higher than the state average indicating a distinct need for preventive interventions. [https://www.health.ny.gov/statistics/chac/chai/docs/ora\\_9.htm](https://www.health.ny.gov/statistics/chac/chai/docs/ora_9.htm) Based on the existing data, it may take over 10 years to fully see the shift in caries rates in local and state statistics. The intervention is occurring from birth to 5 whereas, the data is measured at age 8 or 9. It is also important to note that large scale, comprehensive data can often take 5 years from the point of collection to release, further delaying the results. Using fluoride varnish as a preventative tool to decrease the number of early childhood caries is an evidenced-based, proven technique. The 'Into the Mouths of Babes' study in North Carolina showed a 17% reduction in treatment related to dental caries for children under the age of 6 compared to those who did not receive the varnish. There are over 110 studies and 40 clinical trials that have documented effectiveness. Fluoride varnish treatment is recommended by the American Dental Association, the American Academy of Pediatric Dentistry, the United States Preventative Task Force and the American Academy of Pediatrics. Therefore, even though the outcome measures may take more time to 'prove' from a data standpoint, the support and documentation of effectiveness is clear and can have immediate effects of decreasing demineralization and increasing re-mineralization of the tooth's enamel.

## Sustainability

Sustainability is determined by the availability of adequate resources. In addition, the practice should be designed so that the stakeholders are invested in its maintenance and to ensure it is sustained after initial development (*NACCHO acknowledges that fiscal challenges may limit the feasibility of a practice's continuation.*)

- Lessons learned in relation to practice
- Lessons learned in relation to partner collaboration (if applicable)

- Did you do a cost/benefit analysis? If so, describe.
- Is there sufficient stakeholder commitment to sustain the practice?
  - Describe sustainability plans

## 1500 Words Maximum

Please enter the sustainability of your practice (2000 Words Maximum): \*

Sustainability was the driving force behind this initiative. This project required an investment of time in the beginning but was ultimately set up to be fully functional and self-sufficient with full buy-in from each of the physician's offices. Once training and guidance was complete, the project was set up to be a system change within the practices that would involve slight modifications to an existing practice. The goal is to transform this change, the addition of fluoride varnish to the well visit appointment for children under the age of 5, into a routine procedure. The goal is to make fluoride varnish application as common as a vaccine at a child well visit. There were a variety of lessons learned through the process of implementing fluoride varnish in primary care. Utilizing strong, existing and trusted relationships to generate support for a new initiative is key. Previous experience getting these offices through change and having notable successes within the practice settings proved to be an extremely valuable tool to get them to try something new. A pattern of potential speed bumps occurred within each practice. It was apparent that full staff buy-in was necessary since implementing this practice required cooperation from all levels of staff. Actual application of the varnish was only one piece of the process. All levels of medical staff had to be able to answer the patients' questions on fluoride and the varnish, as well as, obtain consent. Support staff needed to be able to bill appropriately to get adequate reimbursement and higher level administration had to sign off on the change. It has been apparent that the best way to get everyone on board is to get full buy-in from the provider champion or decision makers first. The idea that change is hard is not a surprise to anyone. Incorporating another step to the already busy well visit appointment takes time to become a routine. In most practices it is an ongoing process but the majority of providers have established a protocol to order the varnish for patients under the age of 5 to help simplify the process. In these practices, staff turnover can also be a challenge. Establishing an office champion within each practice and supplying that individual with a copy of the training has made it easier to ensure fluoride varnish is a part of new staff trainings. There was some concern about the strong views by certain families about fluoride use in general but after having the offices varnish for a few months, the consensus is that this is the minority. As is the case with all procedures, the medical professional gives the information and then the patient's parent chooses to consent or not. The biggest lesson learned was navigating the challenges of insurance. Practices have identified issues with billing and reimbursement from Fidelis. A lot of work has been done to resolve this issue. Fidelis was requiring prior authorization but this has been resolved by supplying certificates of training for each provider. NYSACHO was able to get the LHD trainings recognized and approved by Fidelis' cooperate office. A billing requirement form was developed to ensure all proper paperwork and documentation was sent to Dentaquest per requirements of Fidelis. This facilitates adequate and timely reimbursement. At this point improvements have been made and all payers are reimbursing for the service. Reimbursement for the fluoride varnish continues to be an incentive to implement this procedure into the practice. The application of the varnish takes a total of one to two minutes for full application. The varnish itself costs \$1.50 to \$2.00 per application to purchase from the distributor. On average, the local insurance companies are reimbursing \$26-\$30 per application. Therefore, the provider offices net a minimum of \$24 per application. This application can be and is billed on top of the standard well visit code, further increasing their profit margin. The primary prevention technique can also save families and insurance companies money on dental treatment and other health conditions linked to poor oral health in the future. Preventable dental conditions accounted for 4 million emergency department visits in 2008-2010, totaling \$2.7 billion. Uninsured patients account for 40% of emergency department visits for dental conditions. Fluoride varnish in the pediatric primary care setting is 100% sustainable. All three of the pediatric practices in Clinton County have made a commitment to offer this service to their patients. One practice wrote fluoride varnish implementation in as one of their National Committee for Quality Assurance (NCQA) measures. Another practice has a Registered Nurse who has become the office champion for this project within the practice because she has a passion for dental prevention and her husband is a local dentist whose practice serves a large number of Clinton County residents. The third office is on the forefront of pediatric obesity prevention and identifies the direct correlation between obesity and oral health. All three offices have demonstrated complete buy-in and investment in this initiative and have made solid progress in incorporating this system change within their practices. Fluoride varnish is becoming part of the well visit appointment for all children under the age of 5 in Clinton County. CCHD will continue monthly check-ins with each practice contact and will remain a resource for questions, concerns and guidance until the varnish initiative is completely up and running with no issues.

## Additional Information

How did you hear about the Model Practices Program?: \*

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|--|---|--|--|---|
| <input type="checkbox"/> I am a previous Model Practices applicant | <input type="checkbox"/> At a Conference      | <input checked="" type="checkbox"/> NACCHO Website | <input type="checkbox"/> Public Health Dispatch                      | <input checked="" type="checkbox"/> Colleague in my LHD |
| <input type="checkbox"/> Model Practices brochure                  | <input type="checkbox"/> NACCHO Exhibit Booth | <input type="checkbox"/> NACCHO Connect            | <input type="checkbox"/> Colleague from another public health agency | <input checked="" type="checkbox"/> E-Mail from NACCHO  |
| <input type="checkbox"/> NACCHO Exchange                           |   |  |  |   |