

# A Comprehensive Dental Prevention Program

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**WHAT --** Adding Caries Control Technique (CCT)/Intermediate Restorative Treatment (IRT), also known as ART/SMART, to preventive dental programs creates a comprehensive program that will reduce the prevalence of tooth decay and other diseases related to poor oral health. Systemic reviews of randomized control trials show that fluoride, dental sealants, and IRT/ART (Atraumatic restorative treatment) are safe, cost-effective and proven to slow and stop dental disease. All of these services are reversible, yet less traumatic, with longevity as good or greater than traditional tooth fillings. These programs can be easily utilized to treat a variety of target populations.

**WHY --** For over one hundred years, dentists have been trained and compensated to surgically treat dental disease rather than prevent or heal the disease. This has made dental disease the second costliest disease in the United States. Recent research indicates that twenty-three percent (23%) of dentists choose to fill teeth with no radiographic evidence of decay and less than thirty-six percent (36%) of dentists deliver recommended preventive interventions. This can lead to an irreversible restorative cycle, with replacement restorations of increasing size and costs and potential iatrogenic damage for lesions that do not need to be surgically treated. There must be a paradigm shift in order to control costs and prevent disease. Caries prevention is available, underutilized, varies widely, and its value is unmeasured.

**HOW --** The Blue Cross Blue Shield Foundation of SC funded training for practicing public health dental hygienists and dental hygiene faculty across the state. Adding comprehensive prevention to all public health settings without unjustified barriers to S.C. Code ANN § 40-15-80 will allow licensed dental hygienists to take care directly to the patients, whether children, adults, or the elderly in the places where they live, learn, work, pray and play.

# Target Populations

## **Head Start and School-Aged Children –**

- Dental Decay is the most common childhood disease – five times more common than asthma.
- Untreated decay disproportionately affects racial minorities and children covered by Medicaid are twice as likely to have decay as their more affluent peers.
- Poor oral health has been related to decreased school performance, poor social relationships, and less success later in life.

Dental hygiene students and practicing dental hygienists have received training, IRT/ART/SMART could easily be added to the services currently delivered, thereby creating a comprehensive dental prevention program.

## **Older Americans --**

- One-third of adults aged 65 years and older have untreated dental decay; slightly over forty percent (40%) have periodontal disease.
- Many older adults take medications for chronic conditions that have side effects that are detrimental to their oral health.
- Poor oral health has been directly linked to pneumonia in nursing home residents.
- More than fifty percent (50%) of nursing home residents have some form of dementia. Moving these patients from their familiar surroundings for treatment is traumatic and potentially expensive.

Incorporating a comprehensive prevention program for nursing homes and assisted living facilities will improve the quality of life for the elderly and has the potential to save millions of dollars spent on transportation and the far-reaching effects of poor oral health, including pneumonia and diabetes.

## **Underserved Adults –**

- Untreated dental decay is significantly higher among adults aged 20-64 living in poverty than those living at 200% poverty level or higher.
- There are very few “safety nets” available for uninsured adults with the majority of them ending up in emergency rooms for treatment.
- Adults undergoing chemotherapy, radiation, kidney dialysis, and cardiovascular surgeries would greatly benefit by having teeth repaired rather than removed.

Incorporating a comprehensive dental prevention program in FQHCs, pediatricians' offices, oncology offices, cardiology offices, and hospitals will improve the quality of life for significant populations and has the potential to increase employment opportunities and to save millions of dollars spent on the far-reaching effects of poor oral health, as it relates to total health.

# Pulpal Pathology Protocol

**Carious Lesion Present**

**No Radiographs Available**

**Determination of**

**No Pulpitis**  
Asymptomatic and  
Presenting  
Appropriately for  
Temporary Filling

**Reversible Pulpitis**  
(Based Solely on  
Symptoms)

**Irreversible Pulpitis**  
(Based Solely on  
Symptoms)

Stimulus Needed to Provoke Pain	
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Pain Goes Away When Stimulus is Removed	
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No History of Toothache Lasting Longer Than Stimulus	
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No Interruption of Sleep Patterns	
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No Unprovoked Pain	
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Pain Not Relieved When Stimulus Removed	
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Unprovoked Pain	
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Steady Pain Requiring Medication	
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Pain Waking From Sleep	
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Presence of Fistula or Gingival Swelling	
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Facial Swelling	
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Positive Pain on Percussion	
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**Place Protective Filling**

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**Do Not Place Protective Filling - Refer for Treatment or Extraction**

## SMART Management of Tooth Decay: -- Silver Diamine Fluoride (SDF) followed by Atraumatic Restorative Technique (ART)

Tooth decay is a contagious disease. SMART is a drill-less and needle-less treatment for tooth decay and the reduction of pain. It combines SDF and ART. SDF is a clear liquid applied to a tooth for 60 seconds. SDF has been used globally for decades and was cleared for use by the U.S. FDA in 2014. ART is the application of a glass ionomer over tooth decay. It is done after the application of SDF and has over 40 years of supporting research.

It has been determined that cavity treatment with SMART is appropriate since access to dental care is not always available and the needs are great. Rather than sending anyone home with active disease, we stop the disease progression with a SMART treatment.

### Benefits of SMART

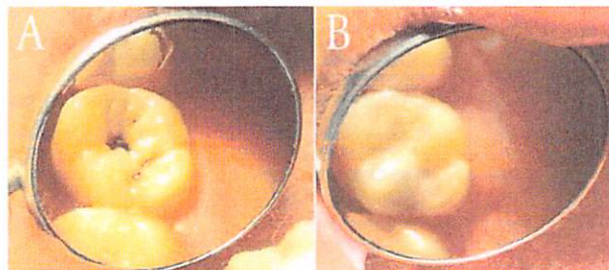
- SMART stops the progression of cavities
- SDF stains visible and hidden tooth decay making it easy to see
- Is a No Needle/No Drill alternative
- SMART treatment can stop tooth pain
- No known side effects other than cavity staining by SDF
- ART involves placing a glass ionomer material (tooth colored) over the arrested tooth decay to fill in the area of missing tooth, increase cavity protection, and improve appearance
- Causes less damage to teeth than traditional fillings resulting in less nerve damage (abscessed teeth)

- Teeth that cannot have SMART will need care by a dentist and will be noted on take home letter



### What to Expect

- SDF only stains cavities, not healthy parts of a tooth
- Treatment stops the spread of disease
- The tooth staining associated with SDF can take days to appear. If SDF inadvertently touches your child's skin, you will see temporary tattooing. This is not a health concern and will fade on 2-3 days



SDF before ART

After ART