

# A Comprehensive Dental Prevention Program

---

**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.

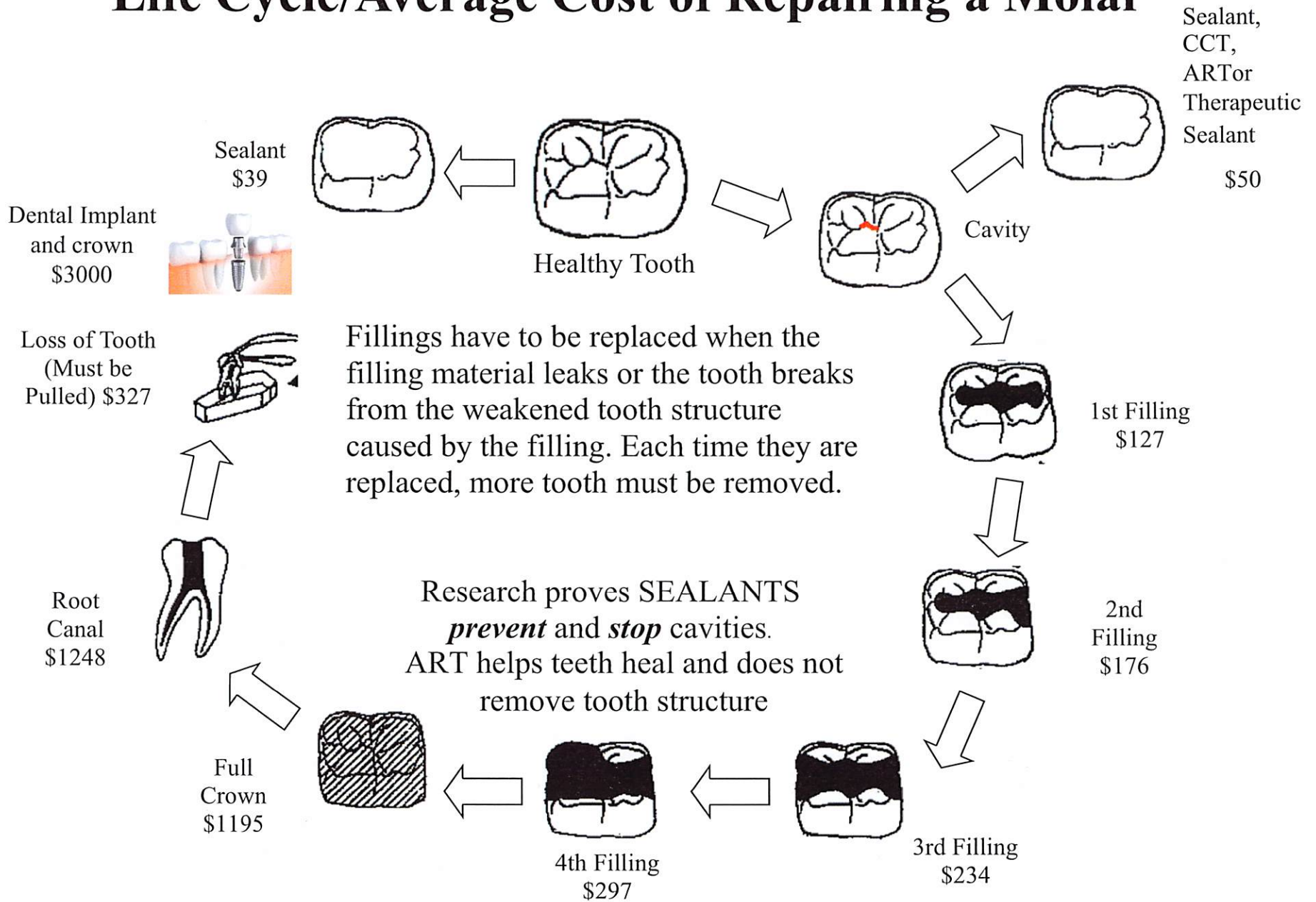
Incorporating a comprehensive dental prevention program in FQHCs, pediatricians' offices, oncology offices, cardiology offices, and hospitals will improve the quality of life for significant populations and has the potential to increase employment opportunities and to save millions of dollars spent on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

## Caries Control Technique (CCT)/Intermediate Restorative Technique (IRT)/Atraumatic Restorative Technique (ART)/SMART Facts:

- Has over 40 years of research supporting it
- Is a fraction of the cost of traditional fillings
- Is a “no needles” and “no drills” procedure
- Has a success rate comparable to traditional surgical fillings that cut into teeth removing tooth structure.
- ART is superior to traditional fillings because, unlike traditional fillings, ART addresses the underlying cause of the disease.
  - Glass Ionomer used for ART/SMART recharges with fluoride at every brushing with a fluoride toothpaste, thereby continuously protecting the tooth and healing tooth structure
- Because it does not require drills, it does not create aerosols that spread disease such as Covid
- Has been shown to be an effective treatment for very young children and children with special needs
- Studies show that patients are happy with this minimally invasive approach
- Research shows that ART can greatly lessen the need for:
  - Prefabricated crowns/SSC/silver crowns
  - Baby teeth root canals
  - Hospital Dentistry
  - Sedation Dentistry
- January 2018, the SC Board of Dentistry approved dental hygienists to provide ART in public health settings.
  - 41 RDHs and the faculty of the state dental hygiene programs were trained to provide SMART in 2018. For the past three years, all dental hygiene students have been taught the SMART technique as part of their curriculum.
  - Health Promotion Specialists provided this service to 6,081 children (19,119 teeth) with a cost **savings** to Medicaid of \$1.4 million vs. traditional fillings in a dental office.
  - During the same timeframe:
    - 23,185 children were either treated in a hospital or sedated at a cost of \$3.1 million that could have potentially been avoided with the use of ART
    - 37,666 children (92,598 teeth) were treated with prefabricated crowns and baby tooth root canals) at a cost of \$10.4 million. These same teeth had the potential to be treated with ART at much less cost, much less trauma for the child and millions in savings for the payers.
    - There have been **NO** known adverse consequences or complaints related to the delivery of ART by registered dental hygienists in SC

**Through licensure, education and training, the SC workforce is in place.  
Remove the barriers to the care!**

# Life Cycle/Average Cost of Repairing a Molar



## 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.

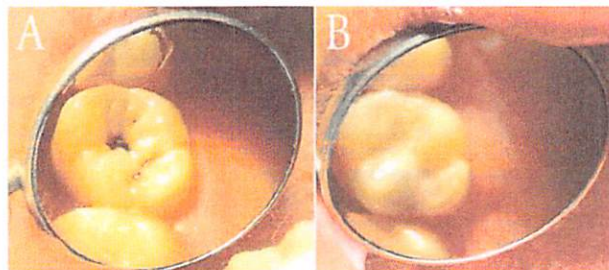
### Benefits of SMART

- 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

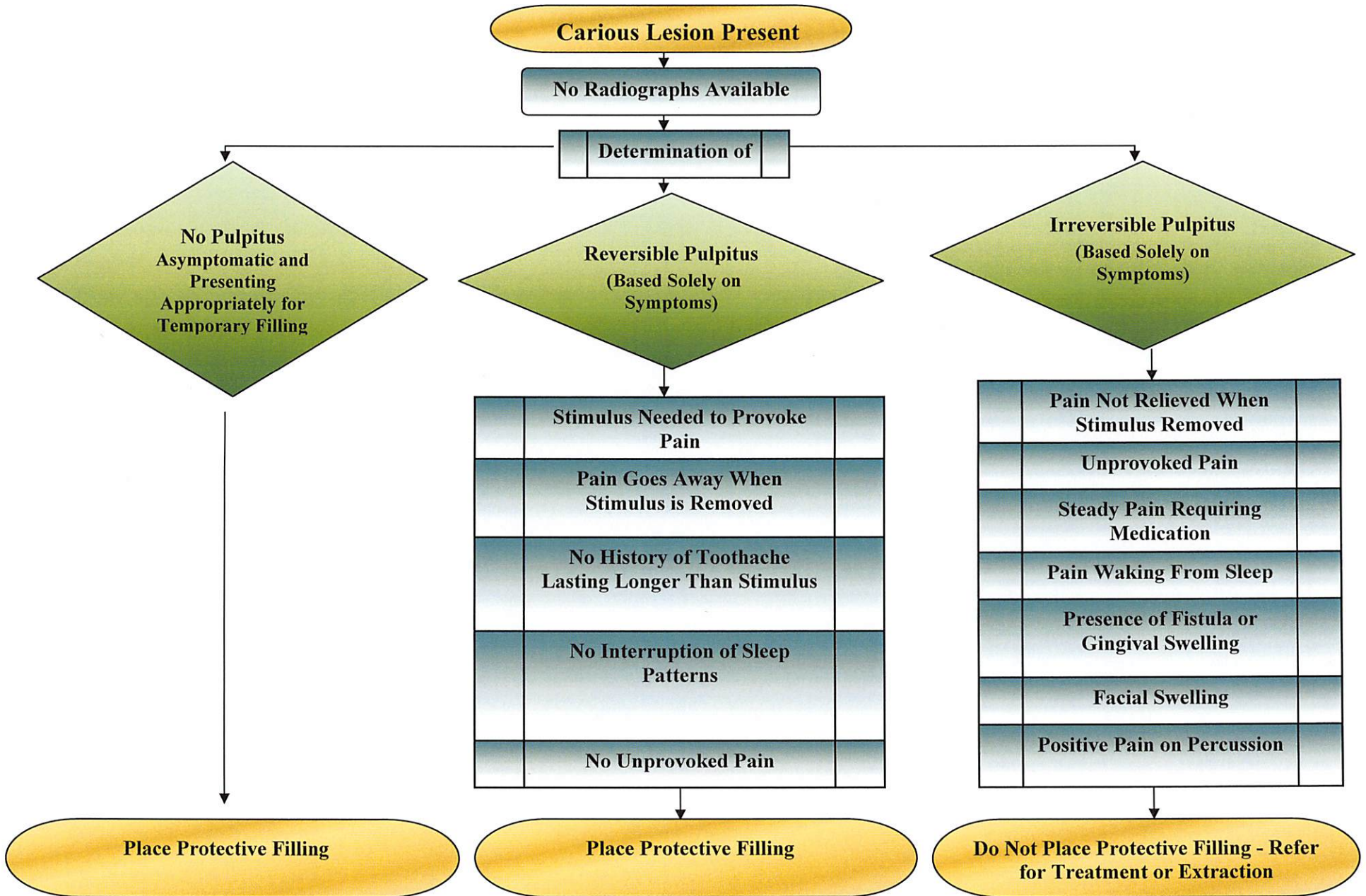
- SDF only stains cavities, not healthy parts of a tooth
- Treatment stops the spread of disease
- The tooth staining associated with SDF can take days to appear. If SDF inadvertently touches your child's skin, you will see temporary tattooing. This is not a health concern and will fade on 2-3 days



SDF before ART

After ART

## 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)**

**Place Protective Filling**

**Place Protective Filling**

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

<b>Stimulus Needed to Provoke Pain</b>	
--	--

<b>Pain Goes Away When Stimulus is Removed</b>	
--	--

<b>No History of Toothache Lasting Longer Than Stimulus</b>	
---	--

<b>No Interruption of Sleep Patterns</b>	
--	--

<b>No Unprovoked Pain</b>	
---------------------------	--

<b>Pain Not Relieved When Stimulus Removed</b>	
--	--

<b>Unprovoked Pain</b>	
------------------------	--

<b>Steady Pain Requiring Medication</b>	
---	--

<b>Pain Waking From Sleep</b>	
-------------------------------	--

<b>Presence of Fistula or Gingival Swelling</b>	
---	--

<b>Facial Swelling</b>	
------------------------	--

<b>Positive Pain on Percussion</b>	
------------------------------------	--



## MASON-DIXON POLLING & STRATEGY

---

WASHINGTON, DC - 202-548-2680  
JACKSONVILLE, FL - 904-261-2444

---

### HOW THE POLL WAS CONDUCTED

This poll was conducted by Mason-Dixon Polling & Strategy, Inc. of Jacksonville, Florida from December 6 through December 10, 2017. A total of 625 registered South Carolina voters were interviewed statewide by telephone.

Those interviewed were randomly selected from a phone-matched South Carolina voter registration list that included both land-line and cell phone numbers. Quotas were assigned to reflect voter registration by county.

The margin for error, according to standards customarily used by statisticians, is no more than  $\pm 4$  percentage points. This means that there is a 95 percent probability that the "true" figure would fall within that range if all voters were surveyed. The margin for error is higher for any subgroup, such as a gender or age grouping.

**QUESTION:** In order to provide dental care to those in need, many states permit dental hygienists to perform oral exams, cleaning and apply fluoride and sealants in public health settings like schools, community clinics, hospitals and nursing homes **without the supervision of a dentist.** Would you support or oppose such a law in South Carolina?

	<u>SUPPORT</u>	<u>OPPOSE</u>	<u>UNDECIDED</u>
STATE	78%	15%	7%
<u>REGION</u>	<u>SUPPORT</u>	<u>OPPOSE</u>	<u>UNDECIDED</u>
Charleston/Low Country	81%	12%	7%
Columbia/Piedmont	77%	16%	7%
Greenville/Upstate	76%	17%	7%
Florence/Pee Dee	81%	13%	6%
<u>SEX</u>	<u>SUPPORT</u>	<u>OPPOSE</u>	<u>UNDECIDED</u>
Men	73%	18%	9%
Women	82%	12%	6%
<u>AGE</u>	<u>SUPPORT</u>	<u>OPPOSE</u>	<u>UNDECIDED</u>
<50	83%	13%	4%
50+	73%	17%	10%
<u>RACE</u>	<u>SUPPORT</u>	<u>OPPOSE</u>	<u>UNDECIDED</u>
White	75%	18%	7%
Black	84%	9%	7%
<u>PARTY IDENTIFICATION</u>	<u>SUPPORT</u>	<u>OPPOSE</u>	<u>UNDECIDED</u>
Democrat	87%	9%	4%
Republican	71%	20%	9%
Independent	76%	16%	8%



## DEMOGRAPHICS

### PARTY IDENTIFICATION:

Democrat	205 (33%)
Republican	267 (43%)
Independent or Other	153 (24%)

AGE:	18-34	104 (17%)
	35-49	184 (29%)
	50-64	183 (29%)
	65+	148 (24%)
	Refused	6 (1%)

RACE:	White/Caucasian	433 (69%)
	Black/African American	176 (28%)
	Other/Refused	16 (3%)

SEX:	Male	297 (48%)
	Female	328 (52%)

REGION:	Charleston/Low County	135 (22%)
	Columbia/Piedmont	170 (27%)
	Greenville/Upstate	220 (35%)
	Florence/Pee Dee	100 (16%)

## SOUTH CAROLINA POLL REGIONS

**CHARLESTON/LOW COUNTRY:** Voters in Charleston, Berkeley, Dorchester, Colleton, Bamberg, Allendale, Hampton, Jasper, and Beaufort counties.

**COLUMBIA/PIEDMONT:** Voters in Richland, Lexington, Newberry, Aiken, Barnwell, Edgefield, Saluda, Fairfield, Kershaw, Sumter, Clarendon, Calhoun and Orangeburg counties.

**GREENVILLE/UPSTATE:** Voters in Greenville, Spartanburg, York, Chester, Lancaster, Union, Cherokee, Laurens, McCormick, Greenwood, Abbeville, Anderson, Pickens and Oconee counties.

**FLORENCE/PEE DEE:** Voters in Florence, Darlington, Lee, Chesterfield, Marlboro, Dillon, Marion, Horry, Georgetown and Williamsburg counties.

#### **SECTION 40-15-80.** Practicing dental hygiene.

(A) Any person is considered to be practicing dental hygiene who engages in those clinical procedures primarily concerned with the performance of preventive dental services not constituting the practice of dentistry including, but not limited to, removing all hard and soft deposits and stains from the surfaces of human teeth, root planning, performing clinical examination of teeth and surrounding tissues, and charting of oral conditions for diagnosis by a dentist, and performing such other procedures as may be delegated by regulations of the board.

(B) In school settings, licensed dental hygienists may apply topical fluoride, including silver diamine fluoride, and may perform the application of sealants, and oral prophylaxis and primary preventive care that is reversible under general without supervision, with written permission of the student's parent or guardian.

**JUSTIFICATION -- The FTC states that there is NO evidence that allowing dental hygienists to provide preventive services without supervision is a safety issue. The FTC further argues that restricting the practice, without evidence that the restriction limits public safety, unnecessarily reduces competition. Supervision is cost prohibitive when working with underserved populations providing the lowest reimbursed services. This has occurred for over 20 years with no adverse problems. The majority of SC citizens support this change.**

(C) In hospitals, nursing homes, long term care facilities, rural and community clinics, medical offices, homebound settings, health facilities operated by federal, state, county, or local governments, hospices, education institutions accredited by the Commission on Dental Accreditation that give instruction in dental hygiene, and in bona fide charitable institutions, licensed dental hygienists may apply topical fluoride, including silver diamine fluoride, and perform the application of sealants, and oral prophylaxis and primary preventive care that is reversible under general without supervision. Treatment may not occur in these settings unless medical emergency care is available within the facility.

(D) Licensed dental hygienists may provide oral hygiene instruction and counseling, perform oral screenings, and provide nutrition and dietary counseling without prior authorization.

(E) Upon certification by the board and when under ~~the direct~~ general supervision of a practicing dentist, a licensed dental hygienist may administer local infiltration anesthesia.

(F) This section is not intended to establish independent dental hygiene practice.

(G) No person other than a licensed dentist or dental hygienist may use the title "dental hygienist", present ~~themselves-him or herself~~ as being a dental hygienist, or perform oral prophylaxis. This does not preclude an expanded duty dental assistant from polishing restorations and supra-gingival tooth structure. Dental hygienists practicing without supervision and/or under general supervision must maintain professional liability insurance. Dental hygienists practicing interdependently in public health settings without supervision shall be recognized as providers by Medicaid and other payers and can be directly reimbursed by said payers.

#### **SECTION 40-15-85.** Definitions.

16) Primary Preventive Care that is Reversible – comprehensive preventive services that prevent the spread of dental disease, protect a tooth from further deterioration and/or promote healing. The services address dental decay that has no pulpal involvement and does not involve the removal of all decay. Radiographs are not necessary to perform these services. These services shall be reimbursed by Medicaid and include, but are not limited to, Atraumatic Restorative Technique (ART)/Caries Control Technique (CCT)/Intermediate Restorative Technique (IRT) and Therapeutic Dental Sealants.

**Justification: This defines what was adopted by the SC Board of Dentistry January 2018. It must be added to Statute to ensure the services are protected and paid for.**

#### **SECTION 40-15-102.** "Authorized" defined; general supervision restrictions; billing for services of hygienists.

~~(D) A dentist authorizing treatment by a dental hygienist in school settings or nursing home settings is subject to the general supervision restrictions provided for in this section unless the dentist or dental hygienist is working in a public health setting with the Department of Health and Environmental Control, as provided for in Section 40-15-110.~~ **JUSTIFICATION – This section requires that every patient be seen by a dentist before being seen by a dental hygienist. HOW MANY TIMES ARE YOU SEEN BY A DENTIST BEFORE THE DENTAL HYGIENIST SEES YOU? No other settings require this. Removal of this section is SAVINGS for the State at a MINIMUM of \$500,000/year**