

# State to State Variation in Rules Governing the Application of and Reimbursement for Silver Diamine Fluoride (SDF)

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# **ABSTRACT**

# **Research Objective**

The objective of this study was to describe variation in state-level rules and regulations governing the practice of dental hygienists (DHs) relative to the application of and reimbursement for SDF, a promising agent for both the prevention and arrest of dental caries.

### Study Design

This study examined state regulations and dental board dicta describing permissions for DHs to apply SDF including level of supervision, required education, limitations on populations and settings, requirements for prior dental authorization, and payment policies.

# Principle Findings

This research found variation across states in classifications of SDF, levels of required supervision for DHs, prior authorization requirements, and payment policies. About half of states allowed DHs to apply SDF under general supervision in November 2020. About a quarter of state Medicaid programs did not reimburse for SDF applications, while those that did had different conditions and rates. This study resulted in production of an interactive infographic that supplies detailed information by individual state.

#### Conclusions

Creating a single consistent source of reliable information on SDF can allow policymakers, advocates, and clinicians, among others, to promote changes in state laws, rules, and regulations governing SDF use and ultimately increase access to an effective approach to prevent and treat caries.

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# INTRODUCTION

- Silver diamine fluoride (SDF) is considered one of many tools in a caries management protocol that also includes educational and motivational interviewing interventions with patients
- SDF is useful for patients who have limited access to routine oral health services including children and elders (as it forestalls incipient decay and reduces pain/sensitivity in carious teeth)
- SDF is ideal for use in patients with limited ability to cooperate with traditional dental treatments (ie, with behavioral/developmental disabilities that affect compliance, those with dental anxiety)
- Dental hygienists (DHs) are well positioned by training and education to provide preventive and educational services, including application of SDF
  - Many states permit expanded scope of practice for DHs in public health settings
- The objective of this study was to depict variation in state-level rules and regulations governing the practice of DHs relative to the application of and reimbursement for SDF, a promising agent for both the prevention and arrest of dental caries

#### **METHODS**

#### Study Design:

- Examined state-level regulations and dental board opinions describing permissions for DHs to apply SDF including level of allowable supervision, specific required education, limitations on populations and settings, requirements for prior dental authorization, and state payment policies
- Examined state Medicaid rules to ascertain whether SDF application was reimbursable, under what conditions, and whether there were any age restrictions on patient eligibility
- Examined dental practice acts, state regulations, and dental board opinions for all 50 states and the District of Columbia
  - State Medicaid fee schedules and dental manuals were reviewed to determine current coverage policies related to SDF

#### Infographic Development:

- The infographic and its components were developed with the guidance of a national advisory committee that included dentists, DHs, and others
- Key components identified as essential for DHs to apply SDF in the community were coded independently by 2 researchers based on statespecific statutes and regulations effective as of November 2020

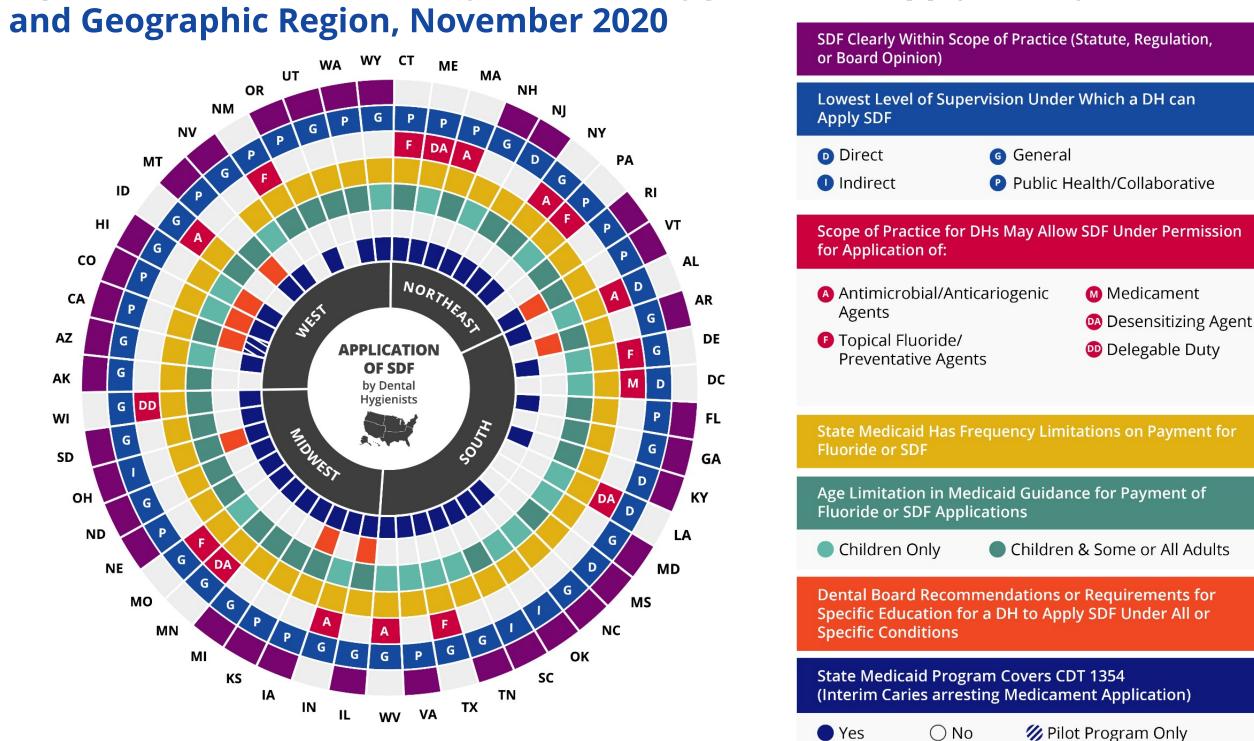
# **METHODS** (cont.)

- When discrepancies arose between the reviewers' codes, other professional resources, including materials from professional associations and dental boards, were consulted to resolve differences
- The final infographic is interactive and is hosted on the OHWRC webpage: <a href="https://oralhealthworkforce.org/silver-diamine-fluoride-sdf/">https://oralhealthworkforce.org/silver-diamine-fluoride-sdf/</a>

# **RESULTS**

- Application of SDF by DHs varied widely across states in terms of:
  - SDF clearly within scope of practice (statute, regulation, or board opinion)
  - Lowest level of supervision under which a DH can apply SDF
  - Scope of practice for DHs may allow fluoride or SDF applications
  - State Medicaid frequency limitations on payment for fluoride or SDF
  - Age limitation in Medicaid guidance for payment of fluoride or SDF applications
  - Dental board recommendations or requirements for specific education for a DH to apply SDF under all or specific conditions
  - State Medicaid program covers CDT 1354 (interim caries arresting medicament application)

# Figure 1. Variations in Ability of Dental Hygienists to Apply SDF by State

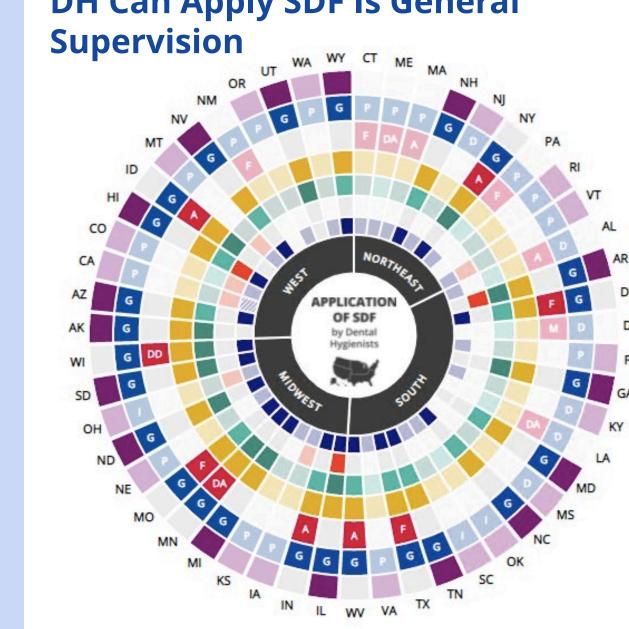


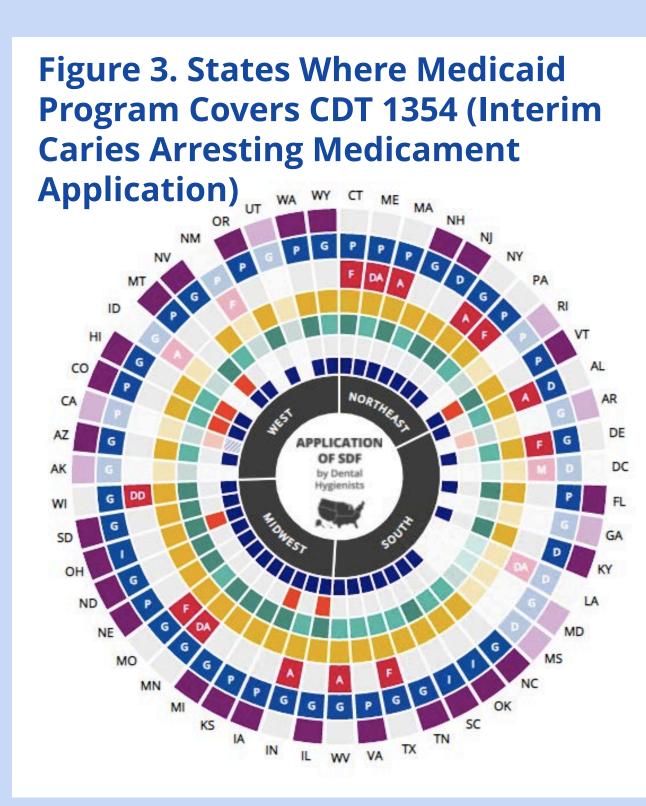
- Level of required supervision is critical to enabling provision of SDF in public health settings
  - About half of states (n=25) allowed DHs to apply SDF under general supervision in November 2020 (Figure 2)

# RESULTS (con't)

- Payment restrictions: state Medicaid program covering the provision of services
  - More than 3-quarters of state Medicaid programs (n=39) reimbursed for SDF applications in November 2020; yet, they had different conditions under which it was allowed and different reimbursement rates and age restrictions (Figure 3)

Figure 2. States Where the Lowest Level of Supervision Under Which a DH Can Apply SDF Is General Supervision





# CONCLUSIONS

- Significant variation in conditions for the application of SDF across states may discourage its integration into practice
  - Medicaid reimbursement is essential to foster wider uptake and use of SDF
- Interest in effective preventive and palliative dental interventions has increased during the COVID-19 pandemic
- Creating a single consistent source of reliable information on SDF can allow policymakers, advocates, and clinicians to promote changes in state laws, rules, and regulations governing SDF use and ultimately increase access to an effective approach to prevent and treat caries.

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