FLUORIDE VARNISH IMPROVES THE FINANCIAL VIABILITY OF A SCHOOL-BASED SEALANT PROGRAM

Natalie A. Hagel, RDH, MS

Supported by:
National Institute of Dental and Craniofacial Research U54 DE 14264
The Oral Health Foundation

Boston University School of Dental Medicine
Co-Authors

- Michelle M. Henshaw, DDS, MPH
  Boston University School of Dental Medicine
- Brandon Leickly, BS
  Boston University School of Dental Medicine
- Lynn A. Bethel, RDH, BSDH, MPH
  Massachusetts Dept. of Public Health
- Kathryn Dolan, RDH, MEd
  Tufts University School of Dental Medicine
- Michael Monopoli, DMD, MPH, MS
  DSM, Delta Dental of Massachusetts
Statewide Oral Health Survey

- Conducted by the Massachusetts Department of Public Health
  - Office of Oral Health
- Conducted in the year 2003
2003 Statewide Oral Health Survey

Boston Children have **Poorer Oral Health than the State-Wide Average**
Survey Results

- 27% of Massachusetts third graders had untreated decay
- 43% of Boston third graders had untreated decay
Compared with the statewide average Boston’s children have...

- 16% greater untreated decay
- 16% greater history of disease
- 17% less sealants placed
- 5% greater need for urgent treatment
Boston Sealant Program
Smart Smiles - Inception: 2004
Smart Smiles Partners

- Boston Public Health Commission
- Boston University
- Delta Dental of Massachusetts
- Forsyth School for Dental Hygienists
- Harvard University
- Massachusetts Department of Public Health
- Tufts University
Smart Smiles Program

- Focus on Second & Third Grades
- Components Include
  - Education
  - Screenings
  - Sealant Placement
  - Fluoride Varnish
Program in Action

Sealants
Program Expansion

- **Y1 - 2004-2005**: 20 Elementary Schools
- **Y2 - 2005-2006**: 48 Elementary Schools
- **Y3 - 2006-2007**: 59 Elementary Schools
Population Served

82% of the Boston Public Schools’ second and third grade families in our program are eligible for the free and reduced lunch program.
Insurance Status

- 19% Children with private insurance
- 21% Uninsured children
- 60% Children with Medicaid
Evidence Based

Based on the study by Dr. Jane Weintraub:
**Efficacy in Preventing Early Childhood Caries**

Fluoride Varnish Applications were introduced in Y-2
# Cost of Fluoride Varnish in 2005-2006

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of FVs applied</td>
<td>1178</td>
</tr>
<tr>
<td>Cost of one FV application (Materials &amp; Labor)</td>
<td>X $2.70 Application</td>
</tr>
<tr>
<td>Total cost of FVs applied</td>
<td>$3,180</td>
</tr>
</tbody>
</table>
## Potential Revenue for FV Applications

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of FVs billable to insurance (79%)</td>
<td>931</td>
</tr>
<tr>
<td>Medicaid fee</td>
<td>X $20.70/FV Application</td>
</tr>
<tr>
<td>Billable Income</td>
<td>$19,264</td>
</tr>
<tr>
<td>Minus cost of FV (100%)</td>
<td>- $ 3,180</td>
</tr>
<tr>
<td>Billable income potential Net revenue</td>
<td>$16,084</td>
</tr>
</tbody>
</table>
### Potential Revenue with FV applications

<table>
<thead>
<tr>
<th>Fluoride Varnish</th>
<th>Net Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>one application a year</td>
<td>$16,084</td>
</tr>
<tr>
<td>two applications a year</td>
<td>$32,168</td>
</tr>
</tbody>
</table>
Fluoride Varnish Applications

- Takes only 1-2 minutes to apply
- Nets $18.00 an application
- Enhances Financial Viability of Sealant Program so that we may work towards a self sustaining program
Fluoride Varnish

WIN-WIN SITUATION

FV not only improves financial viability of our Smart Smiles program but most importantly prevents tooth decay in our Boston Public Schools’ Children
Thank You!