ORAL HEALTH: WHY SHOULD WE CARE?

And What Can We Do?

Claude Earl Fox MD, MPH
Beautiful smiles
So, why are we here?

• What is the problem and why does it matter?
  • Magnitude and effects

• How is it being addressed? Current practice and parameters

• What can we do to solve it?
  • Medical
  • Dental
  • Community
Untreated tooth decay and gum disease impacts

Premature birth
Failure to thrive
Heart disease
Stroke
Diabetes
Immune deficiency and auto-immune
Dementia

DEATH
Tooth decay is the most common chronic disease among children

5 times more common than asthma

Nearly ½ of 5-year olds have tooth decay

Affects learning, play and healthy eating

Linked to poor school performance

“51 MILLION SCHOOL HOURS PER YEAR ARE LOST BECAUSE OF DENTAL RELATED ILLNESS.”

SURGEON GENERAL DAVID SATCHER
Health spending and lost productivity

Florida ER/ED spending for oral health

6.4% increase in visits
22% increase in charges

$25 million increase in charges between 2011 and 2012

164 million work hours are lost per year because of oral health problems.
Florida’s oral health ED spending increase between 2011 and 2012

<table>
<thead>
<tr>
<th>Year</th>
<th>Visits</th>
<th>Charges</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>130,941</td>
<td>$115,592,378</td>
</tr>
<tr>
<td>2012</td>
<td>139,298</td>
<td>$141,125,994</td>
</tr>
</tbody>
</table>

Graph showing the increase in ED Dental Visits and Charges from 2011 to 2012.
Highest increase = charges for uninsured

![Bar chart showing totals for 2011 and 2012 for different categories of charges. The categories include Medicaid, Commercial, Uninsured/self pay, Kidcare, Medicare, and Other. The chart highlights the significant increase in charges for uninsured compared to other categories.]
2011 ED Charges by Payer

![Bar chart showing total ED charges by payer in 2011. The payer categories are Medicaid, Commercial, Uninsured/self pay, Kidcare, Medicare, and Other. The vertical axis represents charges in millions of dollars, ranging from $0.00 to $45,000,000.00. Medicaid has the highest charges.](chart.png)
2012 ED Charges by Payer
2012 Charges by Age and Payer

- 0-19: $0.00
- 20-34: $5,000,000.00
- 35-49: $10,000,000.00
- 50-64: $15,000,000.00
- 65+: $20,000,000.00
- Medicaid
- Commercial
- Uninsured/self pay
- Kidcare
- Medicare
- Other
2011 and 2012 Medicaid and Uninsured Totals

![Bar chart showing Medicaid and Uninsured Totals for 2011 and 2012]
2011 and 2012 ED Charges for Young Children

<table>
<thead>
<tr>
<th></th>
<th>&lt;1</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>$371,158</td>
<td>$1,288,527</td>
<td>$992,537</td>
<td>$673,244</td>
<td>$597,789</td>
<td>$658,648</td>
</tr>
<tr>
<td>2012</td>
<td>$745,303</td>
<td>$1,474,665</td>
<td>$1,184,170</td>
<td>$762,098</td>
<td>$821,646</td>
<td>$820,970</td>
</tr>
</tbody>
</table>
How can we better measure and define the problem?

- ASTDD-BSS data
- State-level Medicaid/MCO cost of care
- Medicaid eligible children’s access/care
- BRFSS

What are some creative ways to collect the data we need?
Percentage of Medicaid/SCHIP eligible children receiving any dental services
How can we turn off the spigot of oral disease?
An ounce of prevention is worth a pound of cure.

What should we do?
Where should we do it?
Who should provide it?
How much will it cost?
What: Prevention through Medical-Dental and Community Collaboration

Where:
- Pediatrician and primary care offices
- Schools
- Head Start
- Daycare
- ALFs and nursing homes

Who:
- Dentists
- Hygienists
- Physicians
- Nurses
- PAs
Prevention is good business

Fluoride varnish application reduced decay by 43%; 37% in baby teeth

School-based and school-linked sealant programs reduce decay by 60%

Fluoride varnish = \textdollar 0.64 \text{ cents per application}

The average cost of applying a sealant is less than one-third the cost of filling a cavity.
## Ten States With the Worst Dentist Shortages

1. MISSISSIPPI 36.3%
2. LOUISIANA 24.4%
3. ALABAMA 24.4%
4. NEW MEXICO 24.2%
5. DELAWARE 21.9%
6. SOUTH CAROLINA 20.6%
7. TENNESSEE 19.8%
8. FLORIDA 18.0%
9. IDAHO 17.5%
10. OREGON 17.3%

Six out of the top ten are in the southeastern region of the U.S.

Florida Medicaid Access Crisis

In 2011, 76.5% of Florida’s Medicaid-enrolled children did not receive dental care, ranking as highest percentage in the nation, a full 4 points above #2 and 8.5 points above #3.

In 2010, only 15 percent of Florida dentists accepted Medicaid patients.

In 2013, 18% of Floridians designated as underserved living in dentist shortage area.
## Dental Hygiene Functions and Supervision: F/V and Sealants in the Southeastern States

<table>
<thead>
<tr>
<th></th>
<th>AL</th>
<th>FL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fluoride Varnish app</strong></td>
<td>Direct Supervision - Dentists needs to be present</td>
<td>G/A-4 General – Dentist needs to authorize but does not need to be present</td>
</tr>
<tr>
<td></td>
<td></td>
<td>G-4 – Public health supervision with fluoride varnish only</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A – Direct Access Supervision Levels – Hygienist can provide services as s/he determines appropriate without specific authorization</td>
</tr>
<tr>
<td><strong>Sealant app</strong></td>
<td>Direct Supervision - Dentists needs to be present</td>
<td>General – Dentist needs to authorize but does not need to be present</td>
</tr>
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<td></td>
<td></td>
<td>Direct Access Supervision Levels – Hygienist can provide services as s/he determines appropriate without specific authorization</td>
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Florida’s scope and billing

• In 2011, legislation authorized registered dental hygienists to provide preventive services in health access settings without prior authorization, examination or presence of a dentist.

• Medicaid billing glitch was discovered prohibiting full implementation of this cost saving access to care action. Presently Florida Statute (F.S.), 409.906 requires the supervision of a dentist for reimbursement.
Florida varnish coverage

- Who get fluoride varnish applications?
  - 6 months – 3 1/2
- How many times a year? – 4x
- Where can it be applied (dentist office only or other health access settings)?
- Can anyone other than dentist apply it? Apply without direct supervision?
Community Water Fluoridation

Every $1 invested saves $38 in unnecessary dental visits

Reduces tooth decay by about 25 percent

CWF supporters
Percentage of Florida population on community water systems receiving fluoridated water

Fluoridation data points

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>68.9</td>
</tr>
<tr>
<td>2004</td>
<td>74.1</td>
</tr>
<tr>
<td>2005</td>
<td>76.9</td>
</tr>
<tr>
<td>2006</td>
<td>77.6</td>
</tr>
<tr>
<td>2007</td>
<td>77.8</td>
</tr>
<tr>
<td>2008</td>
<td>78.7</td>
</tr>
<tr>
<td>2009</td>
<td>78.1</td>
</tr>
<tr>
<td>2010</td>
<td>77.9</td>
</tr>
<tr>
<td>2011</td>
<td>77.3</td>
</tr>
<tr>
<td>2012</td>
<td>76.6</td>
</tr>
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Source: Florida Department of Health, Florida CHARTS
Oral Health Coalitions:
The power of the community voice

- Unified community
- Concern
- Commitment
- Action

- Recognize the problem
- Different communities – different solutions
- What community wants

Whole = More than parts
Work together – collective impact
Sustainable
## Non-Dental Community Partners

<table>
<thead>
<tr>
<th>Federally Qualified Health Centers</th>
<th>School District</th>
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</thead>
<tbody>
<tr>
<td>Local Hospitals</td>
<td>Local Foundations</td>
</tr>
<tr>
<td>University/College</td>
<td>Local senior organizations</td>
</tr>
<tr>
<td>ARC</td>
<td>Health Department</td>
</tr>
<tr>
<td>Children’s Services Council</td>
<td>Community Health Center</td>
</tr>
<tr>
<td>WIC</td>
<td>Head Start/Early Head Start</td>
</tr>
<tr>
<td>Area Agency on Aging</td>
<td>United Way</td>
</tr>
<tr>
<td>Local legislators and local city, county and school board officials</td>
<td>Office of Minority Health</td>
</tr>
<tr>
<td>Local medical association</td>
<td>Publisher of local newspaper(s)/magazine(s)</td>
</tr>
<tr>
<td>Faith-based organizations</td>
<td>March of Dimes</td>
</tr>
<tr>
<td>AARP</td>
<td>Health Equity Council</td>
</tr>
</tbody>
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Looking ahead

- Florida move to Medicaid managed care
  - Expand access to prevention
- Work together
- Work things out
- Enlist unlikely partners with the influence and resources to improve the system
- Replicate successful programs
  - First Look
  - UAB School of Dentistry DentaQuest
Questions?
Thank you

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Professor Emeritus University of Miami,
Miller School of Medicine