

## Oral Health Disparities in Publicly Insured Children

Presented at the NOHC

April 28<sup>th</sup>, 2008

Miami, FL

Tegwyn H. Brickhouse DDS PhD

Department of Pediatric Dentistry

VCU School of Dentistry

**VCU** Medical Center

## Oral Health Disparities



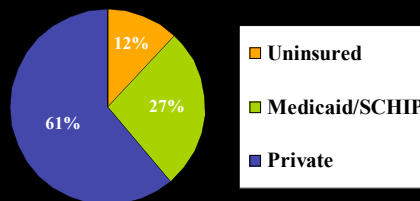
**VCU** Medical Center

## Background

- Publicly Financed Health Plans Providing Dental Services
- Medicaid
  - A joint federal-state-county program established in 1965 to provide health insurance to low-income populations
- State Children's Health Insurance Program (SCHIP)
  - A joint federal-state program established in 1997 to provide coverage to low-income uninsured children who are not eligible for Medicaid.

## Health Coverage for Children

- Private Insurance 61%
  - 48 million children
- Medicaid/SCHIP 27%
  - 21 million children
- Uninsured 12%
  - Over 9 million



## Effects of Public Insurance on Access to Dental Services

- Cohort of Publicly Insured Children
- Enrollment and Claims during 2002-2008
- Children 0-18 years of age
- Two State Programs
  - Similar size
  - Similar population distribution
  - Similar geography

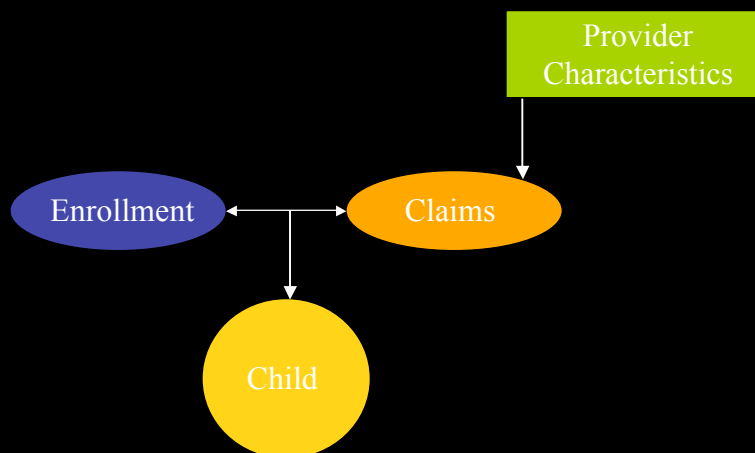
## Program Design Comparisons

- FFS Medicaid versus Managed Care Medicaid
- SCHIP/Medicaid Expansion versus Separate SCHIP programs
- State program reform versus static programs
  - single vendor ASO carve-out
  - Pre versus Post

## Analytical File Construction

- Claim summaries of utilization
- Provider-Level summaries
- Individual Child-level files
  - linked enrollment and claims across time periods.

## Person-Level File



## Enrollment Patterns of Publicly Insured Children

- Measures that characterize enrollment in public programs
- Length of Enrollment (duration)
  - Heterogeneous populations
- Patterns of Enrollment (continuity)
  - Monthly, quarterly, yearly determinations

## Impacts of Enrollment

- Impact on eligibility for dental services
  - Age and aid categories of eligibility determination
- Impact on reported levels of utilization
  - Bias
  - Use of 12-month continuously enrolled children overestimates utilization
  - Industry standards
- Impact on provider acceptance
  - Real-time eligibility determination (on-line, swipe methods)

## Impacts of Enrollment

- Nationally, only 15% of children at or below 200% of the federal poverty level had a dental visit in 1996.
- Few studies have examined the relationship of enrollment patterns and utilization.

## Outcomes

- Dental Visits
  - Utilization of dental services measured by at least one paid claim.
  - Annual Dental Visit (NCQA standards)
  - Which children utilize services/benefit most
    - Age
    - Geography
    - Income
  - Continuity of Care

## Outcomes

- Performance Measures of Dental Services
  - Preventive services
  - Restorative services
  - Tooth Loss (receipt of one or more extraction services)

## Outcomes

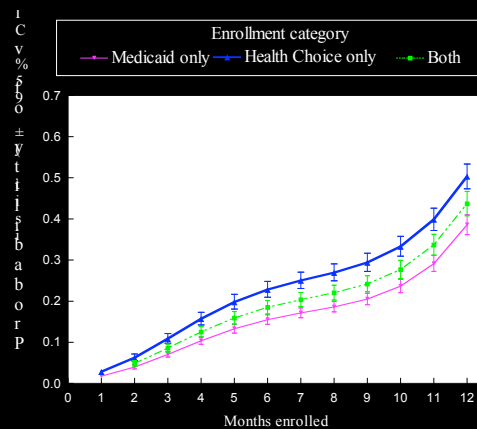
- Provider Measures
  - Participation in programs
  - Level of activity
  - Types of Services
  - Response to program changes
    - Program structure
    - Fee increases



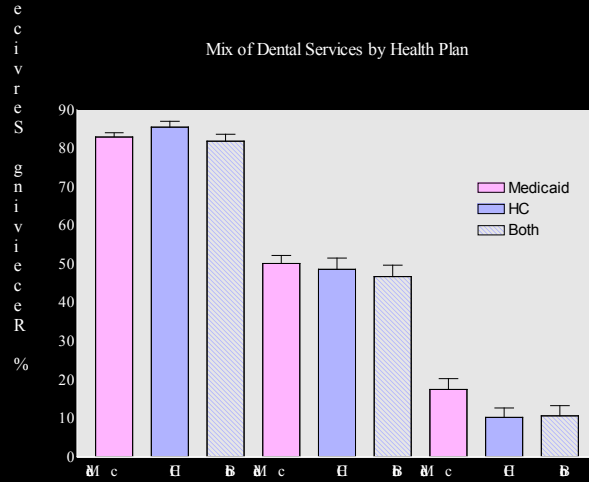
## Outcomes

- Costs
  - Per enrolled child
  - Per child with utilization
  - Vendor costs

## Medicaid versus Separate SCHIP Program



## Mix of Dental Services



## State Program Reform

- Single Vendor Carve Out
- Pre-Post Design

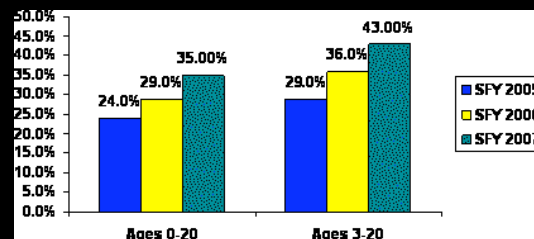


## Single Vendor Carve Out

	CMS 416 FFY 05 (10/1/04- 9/30/05)	Doral SFY 06 (7/1/05- 6/30/06)	Total Increase
Total Eligibles Receiving Any Dental Service	128,217	145,093	16,876 ↑ 13%
Total Eligibles Receiving a Preventive Dental Service	109,486	131,319	21,833 ↑ 20%
Total Eligibles Receiving a Dental Treatment Service	57,581	74,329	16,748 ↑ 29%

## Transition Year

- The percent of children ages 0-20 receiving dental services has increased from 24% in FY 2005 to 35% in FY 2007.
- For children ages 3-20, utilization of dental services has increased from 29% in FY 2005 to 43% in FY 2007.



## Mix of Services

- 69% of services rendered were for Diagnostic and Preventive Services.
- 31% of services rendered were for Treatment Services.