Factors Associated with Receiving Treatment for Dental Decay for Medicaid-Enrolled Children Under 12

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Background- Access to Dental Care

- Factors associated with children's access include
 - Insurance Status (Public, Private, None)
 - Language Spoken
 - Race/Ethnicity
 - Gender of Child
 - Rurality
 - Parents' Education Level
 - Parents' Income

I-Smile Program



- Conducted through lowa's Title V child health system
- Goal link children to dental home
- Benefits low-income, uninsured, underinsured children 12 years and younger
- 55,089 dental screenings conducted in fiscal year 2011

Purpose of Study

Do children obtain treatment after being screened positive for decay?

What factors are associated with seeking treatment for decay?

Methods

Data Sources:

CAReS

- Dental screening records from January – April 2010 (N=23,949)
- Medicaid claims for specific restorative dental codes filed between January 2010 and October 2010 (N=153,008)

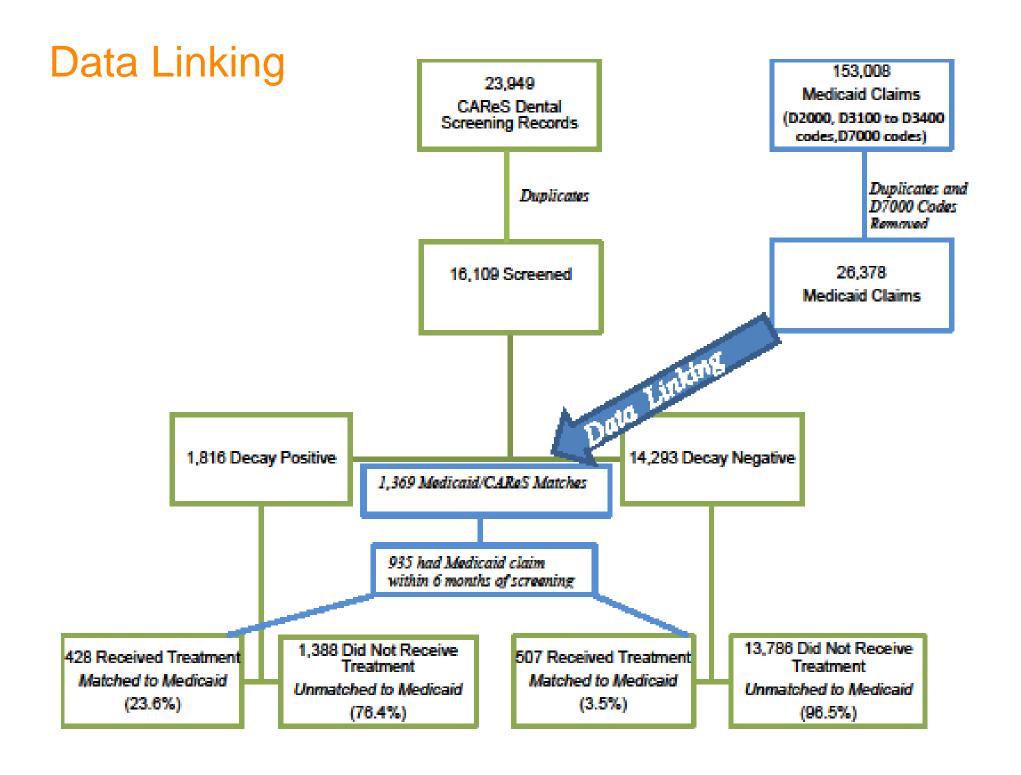
Variables

CAReS

- Screening Date
- Gender
- Language
- Race/Ethnicity
- Decay Status (Yes/ No)
- Child's Age
- Rurality
- Public Health Region
- Dental Home
- Medical Home

Medicaid

- Claim codes:
- D2120-D2954,
- D3110-D3352, and
- D7111-D7250



Percent Distribution of time interval for children treated within first six months after screening, by positive or negative for decay, Iowa 2010



Decay Positive and Decay Negative

Results

Decay Positive

- 29.9% from East Central lowa
- 29.1% Rural (Not adjacent to urban)
- 66.7% white, 16% unknown race/ethnicity
- 80.5% spoke English
- 92.2% had a Medical Home
- 69.3% had a Dental Home
- 52.7% Males
- 56.8% were younger than 5

Decay Negative

- 37.8% from East Central lowa
- 22.2% Rural (Not adjacent to urban)
- 70.5% white, 16% unknown race/ethnicity
- 85.2% spoke English
- 95.5% had a Medical Home
- 61.2% had a Dental Home
- 49.9% Males
- 73.5% were younger than5

Results

- Decay Positive
 - Not having dental home significantly associated with not receiving treatment
 (OR 1.90, CI:1.405, 2.579)
 - School-age children more likely to not seek treatment
 (OR 1.48, CI: 1.172, 1.878)

- Decay Negative
 - Not having dental home significantly associated with not receiving treatment
 (OR 4.07 CI:2.971, 5.564)
 - School-age children more likely to seek treatment
 OR 0.66 CF 0.542

(OR 0.66 CI: 0.542, 0.795)

Dental Home

- Dental home seems to be most important factor of receiving treatment (both for decay positive and negative)
- Consistent with literature with medical homechildren with medical home receive medical treatment
- Our results suggest that dental home is important for children- Both children with and without caries were more likely to go without treatment if they did not have a dental home

Age

- Children older than 5 were more likely to not receive treatment if screened positive for decay
- However, children older than 5 were more likely to receive treatment if screened negative for decay
- Possible explanations:
 - Children younger than 5 may have been screened through WIC meaning that parents may have interacted with dental hygienist.
 - Older children may be more capable of informing parent when they have oral health issues even if screened negative.

Limitations

- Data Linking only had one run
- Possible hesitation of screeners to identify decay
- Children may not have used Medicaid for treatment
- Medicaid claims procedures may not have been indicative of decay

Public Health Implications

- Unique study showing associations of children characteristics for children who seek care after screening
- Help to encourage dental home model as important for children to receive care
- More research needed to find if the 76% of children not receiving treatment is accurate

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Questions?