Oral Health
Healthcare Claims- Based Analysis

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Agenda:

Quick History of Project
Oral Health Report Suite
Ad-hoc Data Analysis
History of the Project

2017
- Quality checks of dental claims data
- Preliminary analysis of commercial and Medicaid FFS data

2018
- Prototype of online reporting tool
- Development of ad-hoc analytic plan with Oral Health Stakeholder Group

TODAY
- Release of Oral Health Report Suite
- Presentation of Oral Health Report Suite and ad-hoc analysis
Data Sources (research data set):

- Commercial dental claims data; July 2015 - June 2017
  Approximately 578,000 commercially covered lives
  - Delta Dental Plan of NH (approx. 400,000 covered lives)
  - Metropolitan Life (approx. 100,000 covered lives)
  - Cigna (approx. 35,000 covered lives)
  - Guardian Life (approx. 30,000 lives)
  - Delta Dental Insurance Company (approx. 13,000 lives)

- Medicaid Fee-for-service dental claims data; July 2015 - June 2017
  Approximately 200,000 Medicaid covered lives
Demonstration:
Oral Health Report Suite
Ad-Hoc Data Analysis

Analysis of dental claims data for the following types of services:

- Restorative
- Extractions
- Emergency Dental Care
- Oral Surgery

...and evidence of history of preventive care in the last 12 months prior to the service
Restorative

Percent of members that had a restorative dental treatment from July 2016 to June 2017
Restorative

Percent of members with a restorative dental treatment who also had preventive treatments in the 12 months prior

Commercial

<table>
<thead>
<tr>
<th>Ages 1-4</th>
<th>Ages 5-9</th>
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<tr>
<td>95.01</td>
<td>98.07</td>
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- Had at Least 1 Preventive Treatment
- Had 2 or More Preventive Treatments

Medicaid

<table>
<thead>
<tr>
<th>Ages 1-4</th>
<th>Ages 5-9</th>
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<tbody>
<tr>
<td>92.73</td>
<td>95.14</td>
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- Had at Least 1 Preventive Treatment
- Had 2 or More Preventive Treatments
Percent of members that had an extraction in the period July 2016 to June 2017
Percent of members with an extraction who also had preventive treatments in the 12 months prior

Commercial

- Ages 1-4: 88.89% (Had at Least 1 Preventive Treatment), 74.6% (Had 2 or More Preventive Treatments)
- Ages 5-9: 96.24% (Had at Least 1 Preventive Treatment), 82.01% (Had 2 or More Preventive Treatments)

Medicaid

- Ages 1-4: 84.62% (Had at Least 1 Preventive Treatment), 47.25% (Had 2 or More Preventive Treatments)
- Ages 5-9: 90.83% (Had at Least 1 Preventive Treatment), 67.52% (Had 2 or More Preventive Treatments)
For emergency care:

- Analysis of medical claims for dental-related CPT codes, and place-of-service = 23
- Analysis of medical claims for dental-related ICD procedure codes, and type of service is facility-outpatient-emergency room
Percent of members that had a dental-related service in the Emergency Room in the period July 2016 to June 2017
Percent of members with a dental-related service in the Emergency Room who also had preventive treatments in the 12 months prior.
Limitations and Challenges

- Tooth numbers in the commercial dental claims data (required 1/1/2019)
- Medicaid FFS and medical claims
- Cross-walking CDT codes to CPT and ICD to examine dental procedures in the Emergency Room and Operating Room
Questions/Discussion for OH Group

- What is considered “adherent” for preventive oral health? (e.g. 2 preventive services within one calendar year) and does this vary among payers?
- What constitutes completed treatment for restorative treatments? (e.g. how many visits/procedures)?
- Are the number of encounters (person per day) relevant to this group?
Future Analysis

- Reverse the analysis conducted to date, and examine patterns of events following preventive care. For example, of those with a preventive service in year 1, how many had an extraction in year 2?

- Medicaid medical claims for dental-related services in the emergency room and operative room

- Examine the difference between commercial and Medicaid for restorative with 2+ preventive services
  - Examine number and location of providers that accept Medicaid
  - Survey Medicaid members to assess knowledge of available benefits; and assess any potential barriers to seeking preventive care in children (e.g. childcare, distance)