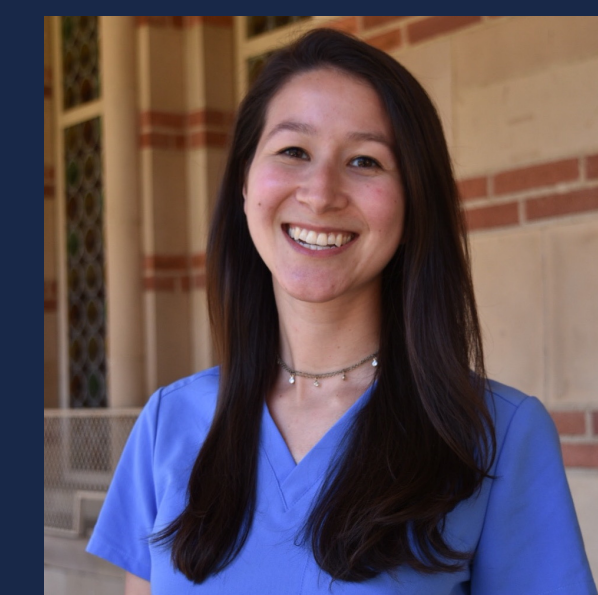


Medicaid Managed Care and Dental OR Access in North Carolina

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ABSTRACT

Objectives: This study examined the impact of North Carolina's transition of medical Medicaid to Managed Care (while retaining fee-for-service dental Medicaid) on young children's access to dental services in an operating room environment.

Methods: This investigation utilized the NC Hospital Outpatient and Ambulatory Surgery Discharge Data to observe general anesthesia visits for fiscal years (FY) 2017-2022. A pre-test/post-test design with concurrent comparison groups were used to compare: (1) children treated for dental caries compared to those treated for otitis media and (2) children whose treatment for dental caries was reimbursed by Medicaid compared to those whose treatment for dental caries was not reimbursed by Medicaid.

Results: In the pre-managed care period (FY2017; FY2018), there were 24,211 visits for dental caries and 38,016 visits for otitis media. Following transformation to medical Managed Care (FY2021; FY2022), dental visits increased to 28,301 (17%) and otitis media visits decreased to 19,872 (-48%), ($P<.05$). Increase in dental visits was significantly higher ($P<.05$) for children whose visits were paid by non-Medicaid sources (70%) versus visits paid by Medicaid (9%). The contrast between payer sources for otitis media visits was less severe, with the visits paid by non-Medicaid sources decreasing by 54% versus a 32% decrease in visits paid by Medicaid. These differences were consistent when adjusting for population and enrollment changes.

Conclusions: Following NC's transformation to medical Medicaid Managed Care while retaining fee-for-service dental Medicaid, there was a greater increase in dental OR visits for those covered by non-Medicaid payers than those covered by Medicaid.

INTRODUCTION

- Dental caries is the most common chronic disease of childhood¹.
- Children with ECC who received treatment under general anesthesia experienced improved health and quality of life².
- Most young children being seen for dental rehabilitation under GA in NC are enrolled in Medicaid³ and are more likely to experience ECC than their higher SES counterparts⁴.
- Coverage for dental treatment in the OR involves both dental and medical insurances.
- NC transitioned medical Medicaid to Managed Care on **July 1, 2021** while retaining dental Medicaid as fee-for-service⁵. The impact of this transition on young children's access to OR dental services is unclear.
- This investigation aims to **examine trends in access to dental services in the OR for young children before and after the NC Medicaid Transformation**

METHODS & MATERIALS

Study Design

- Time-series design
- Comparison groups: 1) dental caries vs. otitis media 2) Medicaid vs. non-Medicaid
- OR visits before and after NC Medicaid Transformation

Data and Sample Selection

- NC Ambulatory Surgery Discharge Database for FY2017-2022, including outpatient data for hospital and ambulatory surgery centers.
- Inclusion Criteria: age ≤ 5 years, seen in a hospital or surgery center for diagnosis of dental caries or otitis media
- Exclusion Criteria: incomplete data

Statistical Analysis

- Descriptive statistics of OR visits before and after NC Medicaid Transformation for both payer and diagnosis groups
- Pre-test/post-test design with concurrent comparison groups to compare: (1) children treated for dental caries vs. otitis media and (2) children whose treatment was reimbursed by Medicaid vs. non-Medicaid

RESULTS

Table 1. Pre- and Post-Transformation Changes in OR Visits for Children ≤ 5 in NC

	No. of visits FY2017-18 (pre- legislation)	No. of visits FY2021-22 (post- transformation)	Actual change	% change
All dental (children ≤ 5 ys)	24211	28301	4090	16.9
Dental by pay source (Medicaid)	21208	23189	1981	9.3
Dental by pay source (non-Medicaid)	3003	5112	2109	70.2
All otitis media (medical comparison)	38016	19872	-18144	-47.7
Otitis media by pay source (Medicaid)	27883	12937	-14946	-53.6
Otitis media by pay source (non-Medicaid)	10133	6935	-3198	-31.6

Group	Dental Caries (%)	Otitis Media (%)
Medicaid	9.3	-53.6
Non-medicaid	70.2	-31.6

- In the pre-managed care period (FY2017; FY2018), there were 24,211 visits for dental caries and 38,016 visits for otitis media.
- Following transformation to medical Managed Care (FY2021; FY2022), dental visits increased to 28,301 (17%) and otitis media visits decreased to 19,872 (-48%), ($P<.05$).
- Increase in dental visits was significantly higher ($P<.05$) for children whose visits were paid by non-Medicaid sources (70%) versus visits paid by Medicaid (9%).
- The contrast between payer sources for otitis media visits was less severe, with the visits paid by non-Medicaid sources decreasing by 54% versus a 32% decrease in visits paid by Medicaid.
- The difference between these payer differences for dental vs. otitis media visits was found to be significant ($P<.05$)

Figure 1. Trends in OR Visits for NC Children ≤ 5 for Dental Caries By Payer

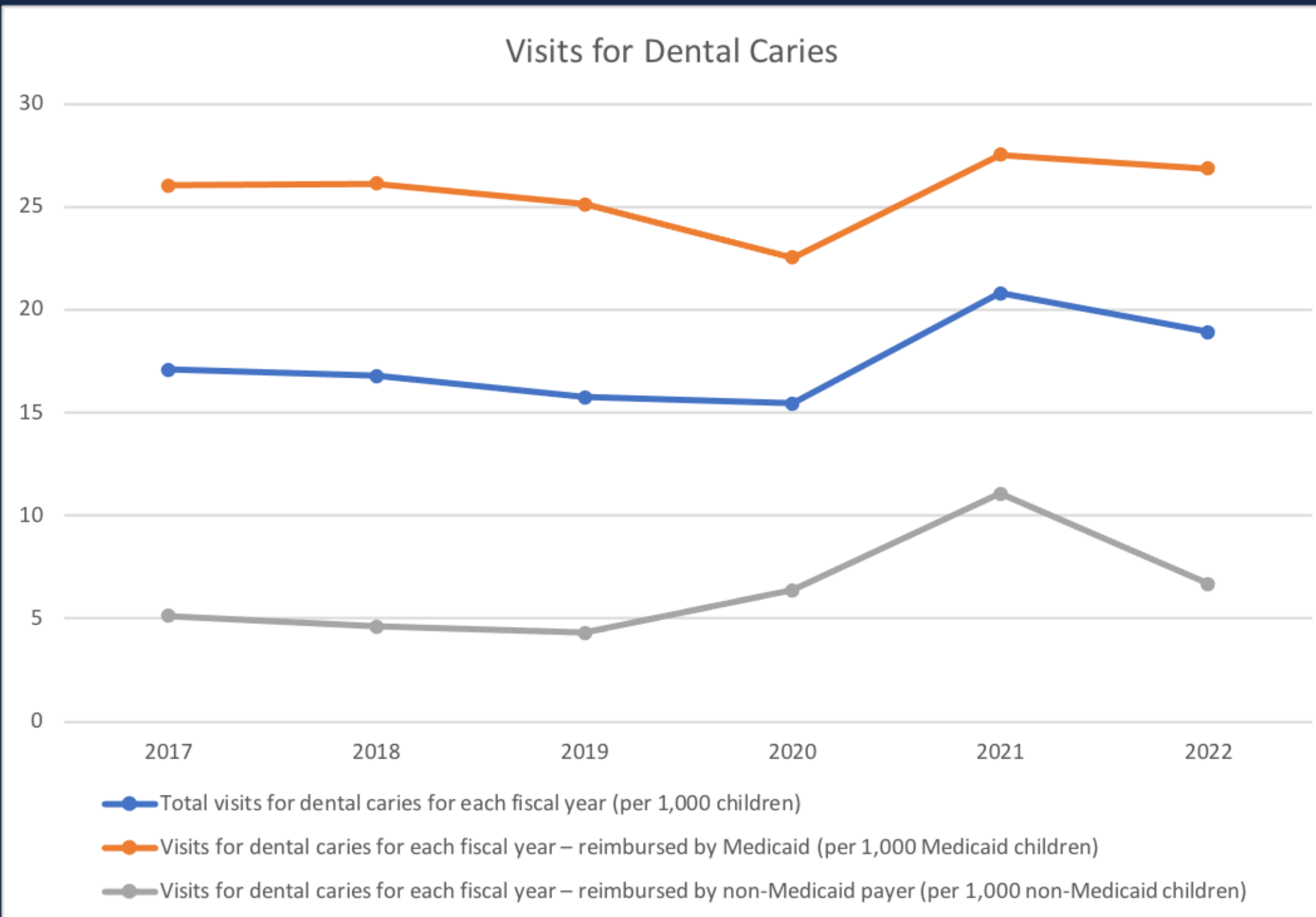
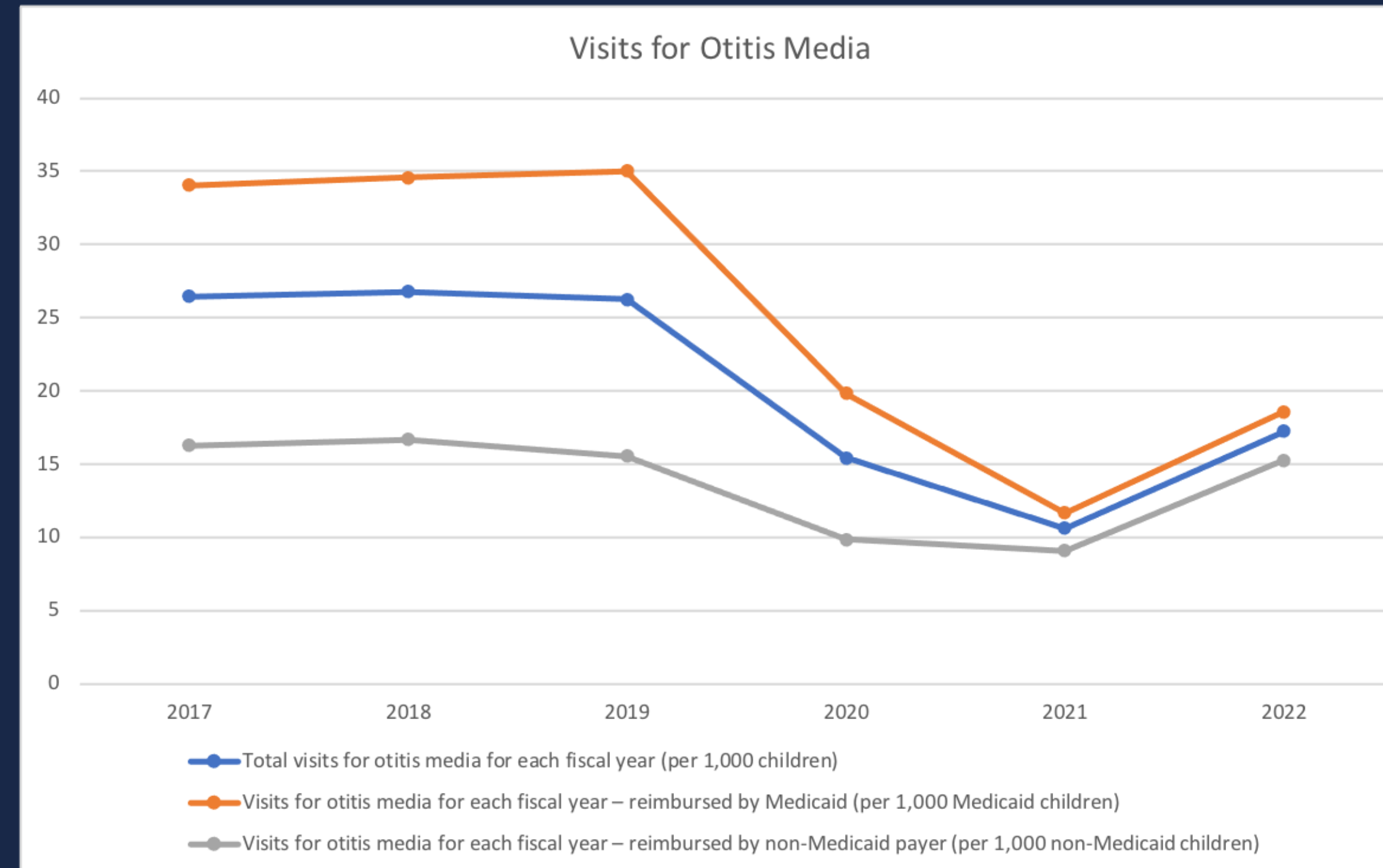


Figure 2. Trends in OR Visits for NC Children ≤ 5 for Otitis Media By Payer



CONCLUSIONS

- Following NC's Medicaid Transformation, there was a **greater increase in dental OR visits for those covered by non-Medicaid payers** than those covered by Medicaid.
- Differences in trends by payer type were more evident for dental caries** than for otitis media cases, indicating a differential impact of NC Medicaid Transformation
- When planning transitions to public insurances such as Medicaid, **considerations must be made for potential impacts on young children requiring dental care in the OR** environment due to the unique intersection between medical and dental insurance coverage

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REFERENCES

