
Early Preventive Dental Care: the Wisconsin experience

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Overview

- Wisconsin Medicaid used claims data to replicate North Carolina's study of early preventive dental care
- In contrast to NC, we did not find a linear correlation of age of first preventive visit to 5-year cumulative cost
- Medicaid dental care for young children is episodic at best; if a child sees a dentist at an earlier age, it does not indicate continuous care

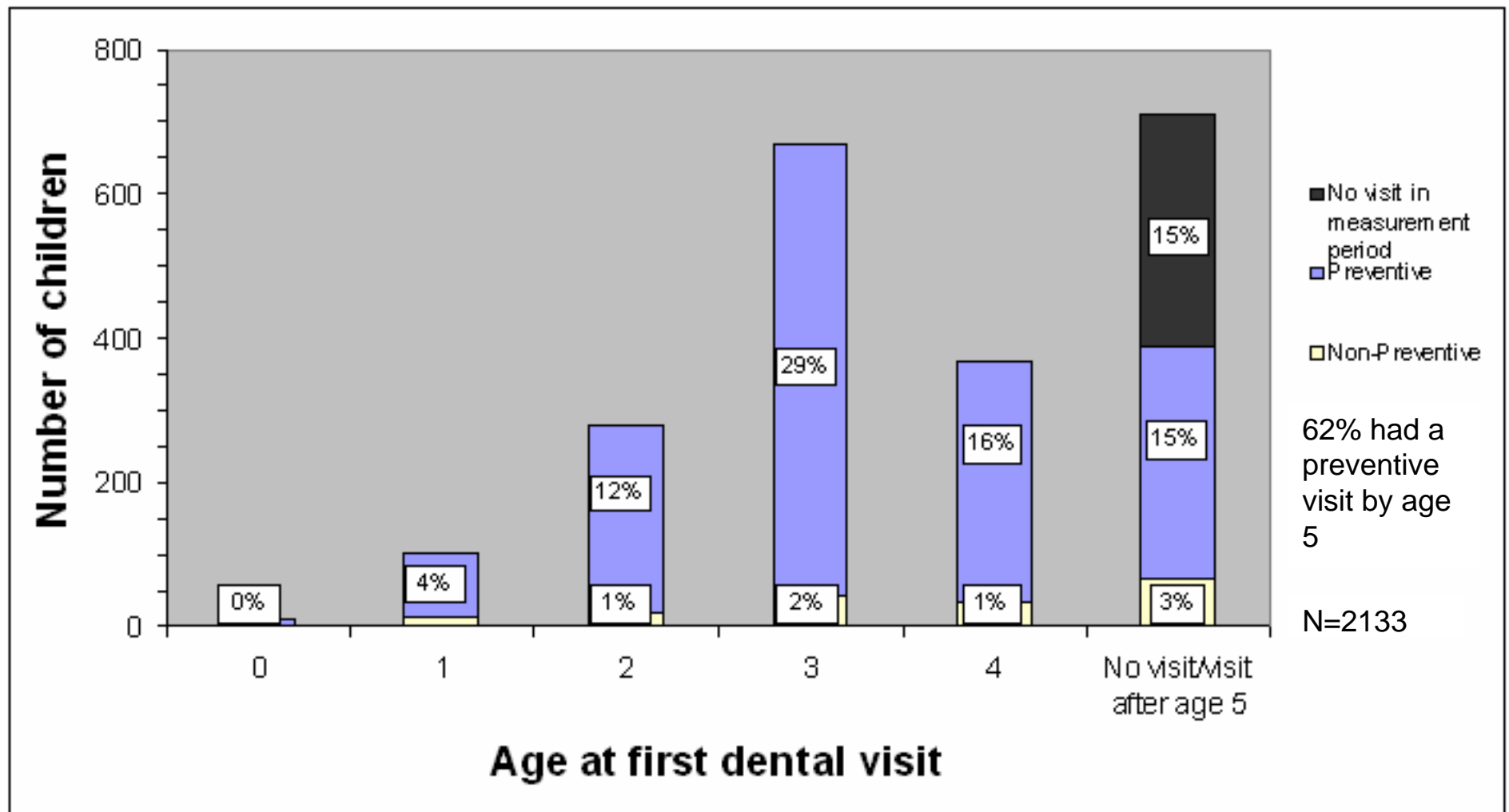
Wisconsin Background

- Medicaid dental services are delivered fee-for-service in 68 of 72 counties
- In the 4 counties surrounding Milwaukee, dental services are delivered through Medicaid-contracted HMOs (40-50% of total enrollment)
- Most beneficiaries across state receive medical services through HMOs
- Annual dental access rates across all beneficiaries are consistently below 30%
- Dental access is a recognized problem

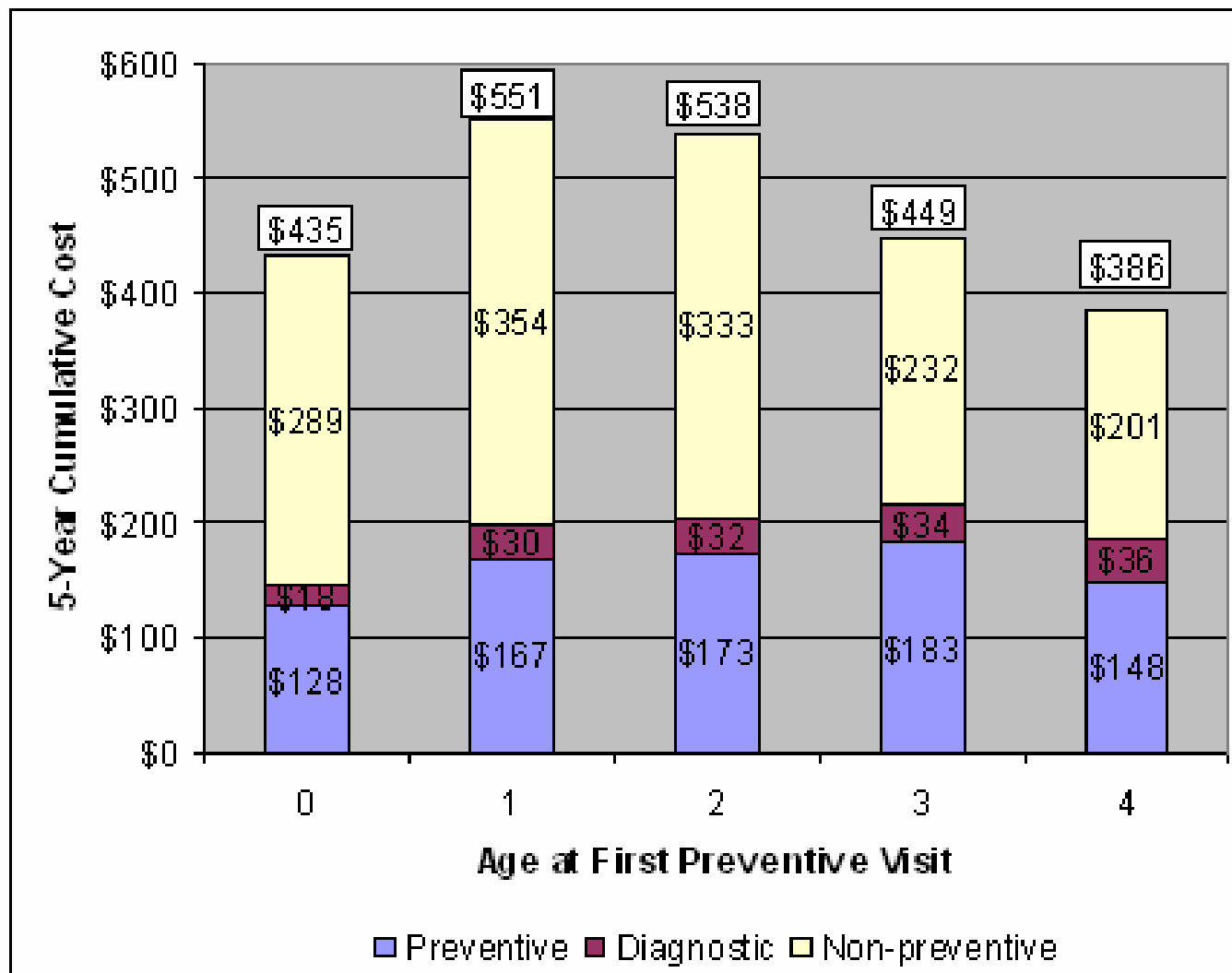
Study Methodology

- Cohort drawn of 2133 children born in 1993 and continuously eligible for 5 years
- Dental-related costs were aggregated for 5 years after the child's first preventive dental visit
- This study did not attempt probit regression of data; it is based on review of administrative claims only

Age and type of first dental visit: CY 1993



Average cumulative costs by age at first preventive visit (CY 93)



Results

- 5-year cumulative dental costs were not found to rise as a linear function of age of first preventive visit

Important Notes

- Because HMO encounter data was not available in 1993, cohort was drawn from the 68 FFS counties
- “Preventive visit” defined as a routine office visit or prophylaxis; this may differ from NC study
- Identified dental-related medical costs were included, but because of early adoption of managed care, they may be understated

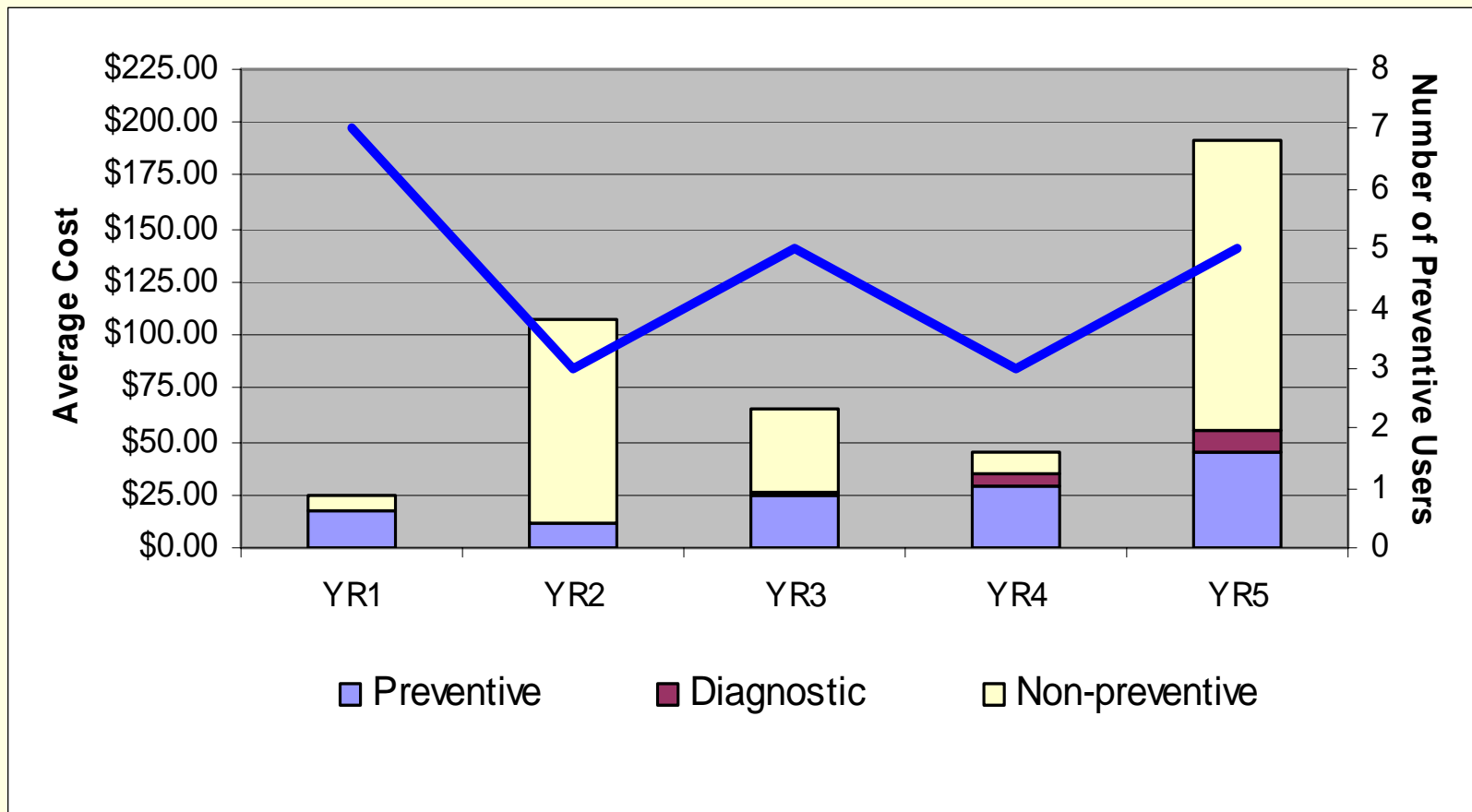
Important Notes

- “Cumulative costs” defined as cost in year of first preventive visit plus four subsequent years; not strictly a closed five-year window
- Extremely small sample of children receiving preventive care before their first birthday: 7 children
- No significant policy changes in this period; this study is not measuring the effect of a policy intervention
 - It is a natural experiment to test the hypothesis that early preventive care results in Medicaid program savings over a 5-year period

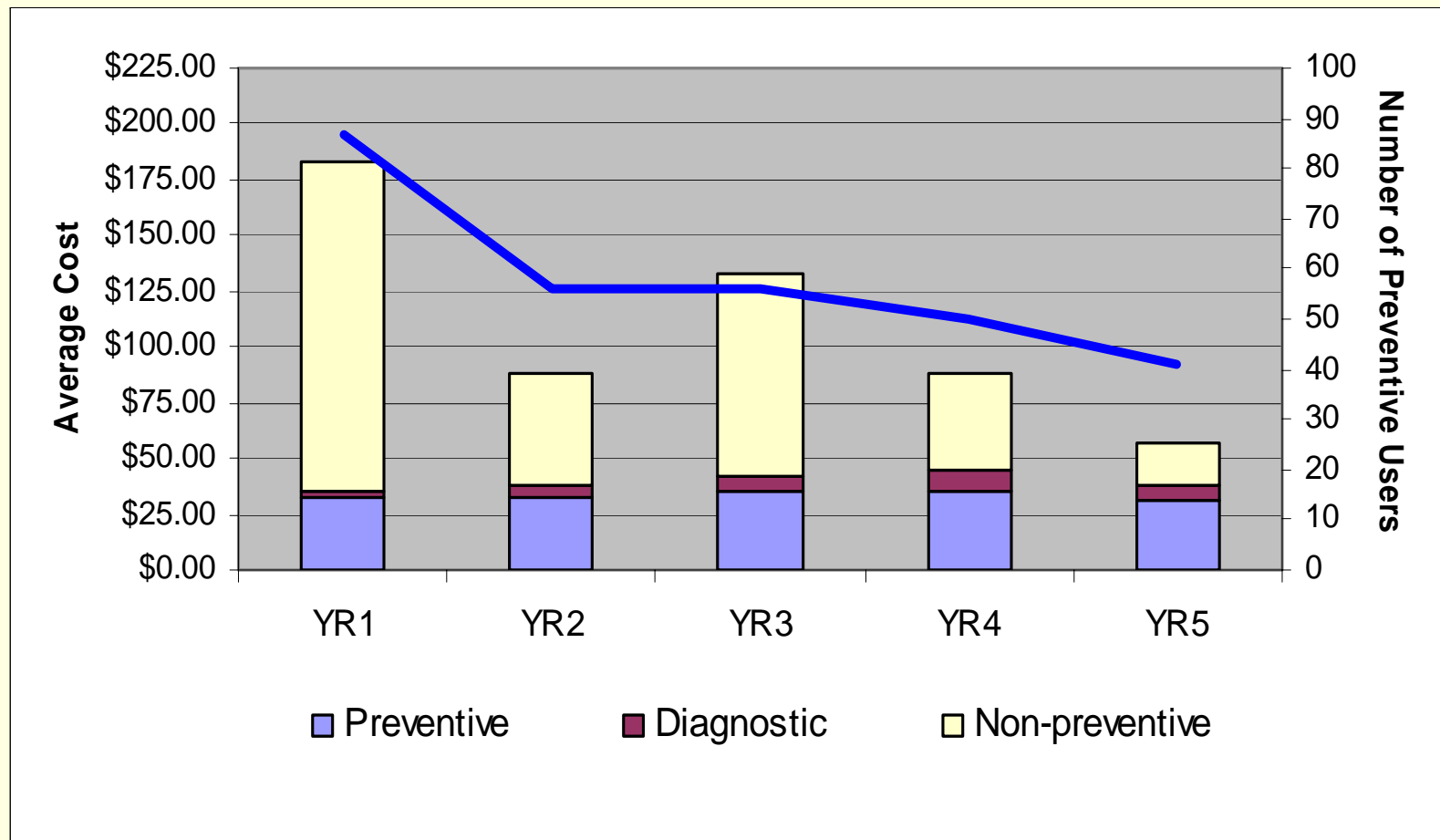
Interpretation

- Not an indictment of early, consistent prevention efforts; what this study reflects is not systematic, but episodic dental care
- This can be seen by taking a closer look at the year-to-year experience of each group of children
- In each group besides 0-1, there are high first-year costs, and the number of preventive users drops dramatically in subsequent years

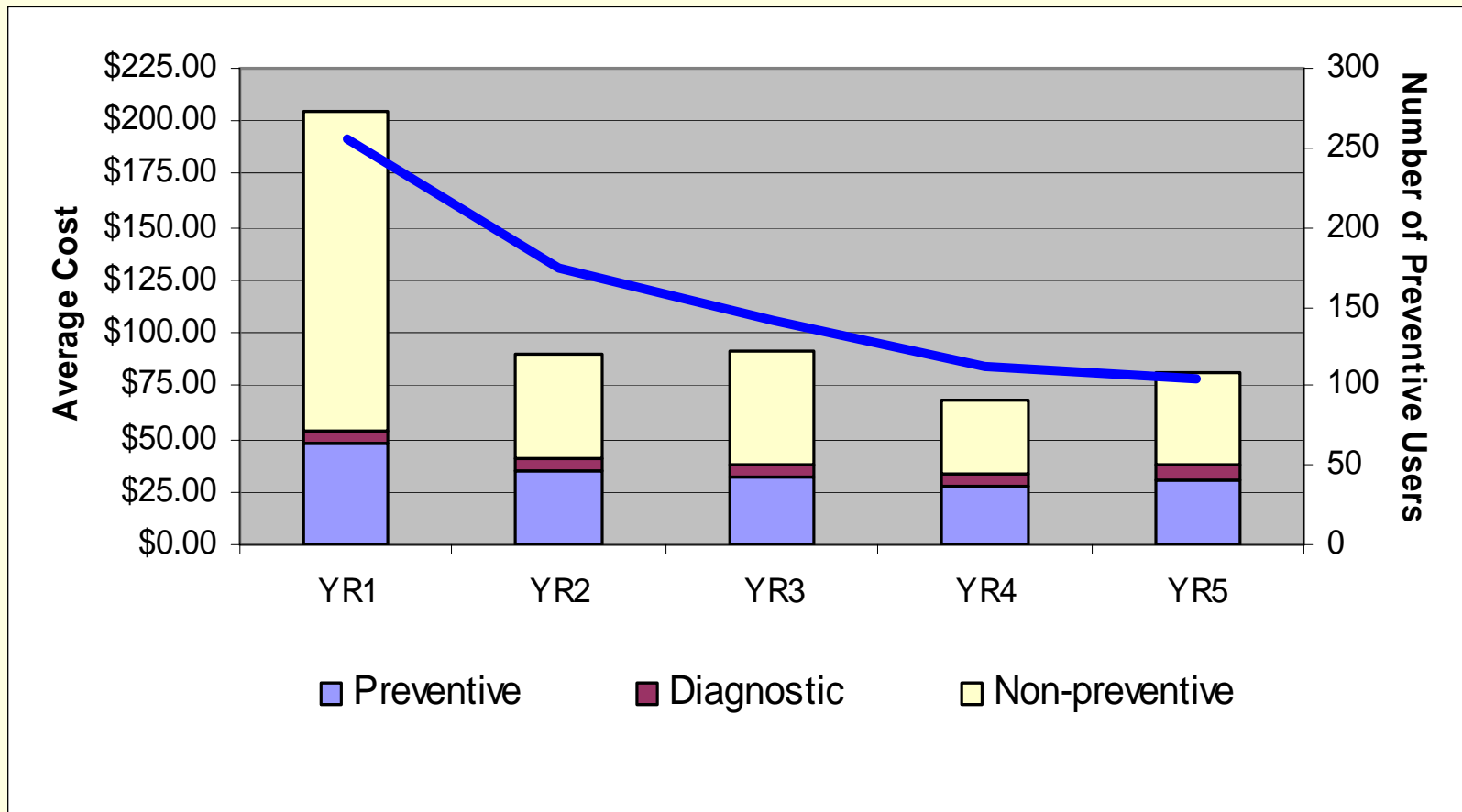
Average Cost over 5 years, first preventive visit at age 0-1



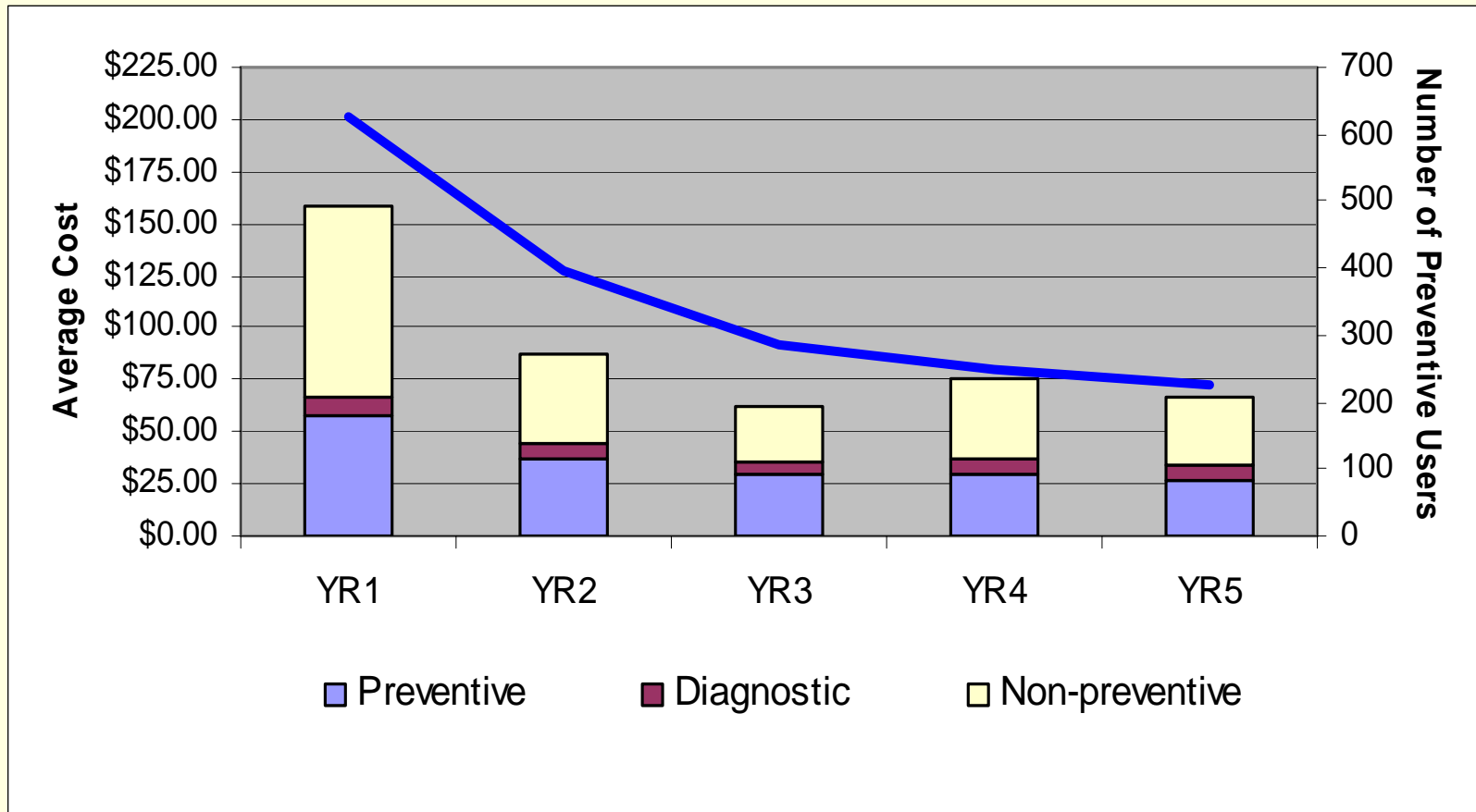
Average Cost over 5 years, first preventive visit at age 1-2



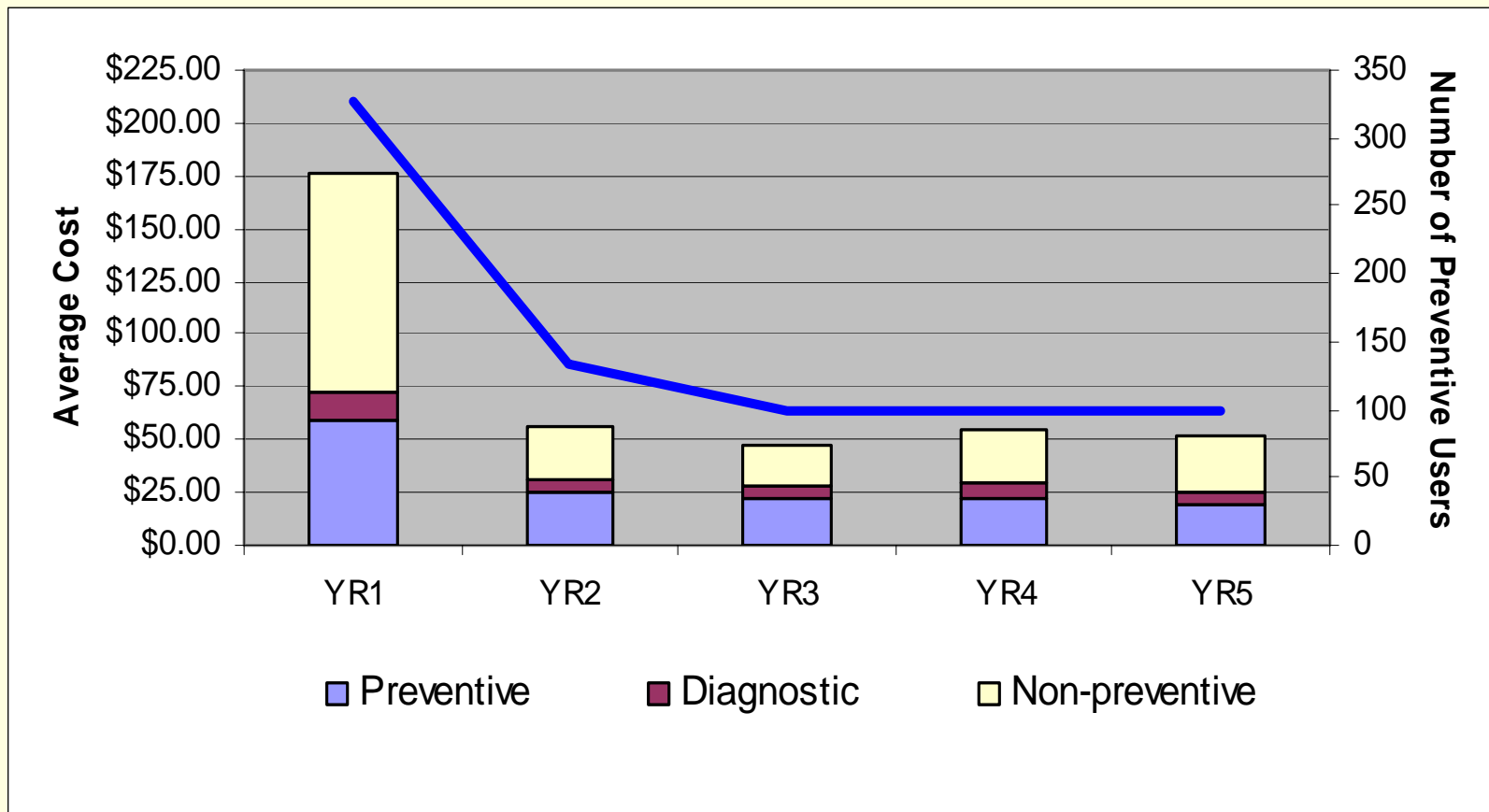
Average Cost over 5 years, first preventive visit at age 2-3



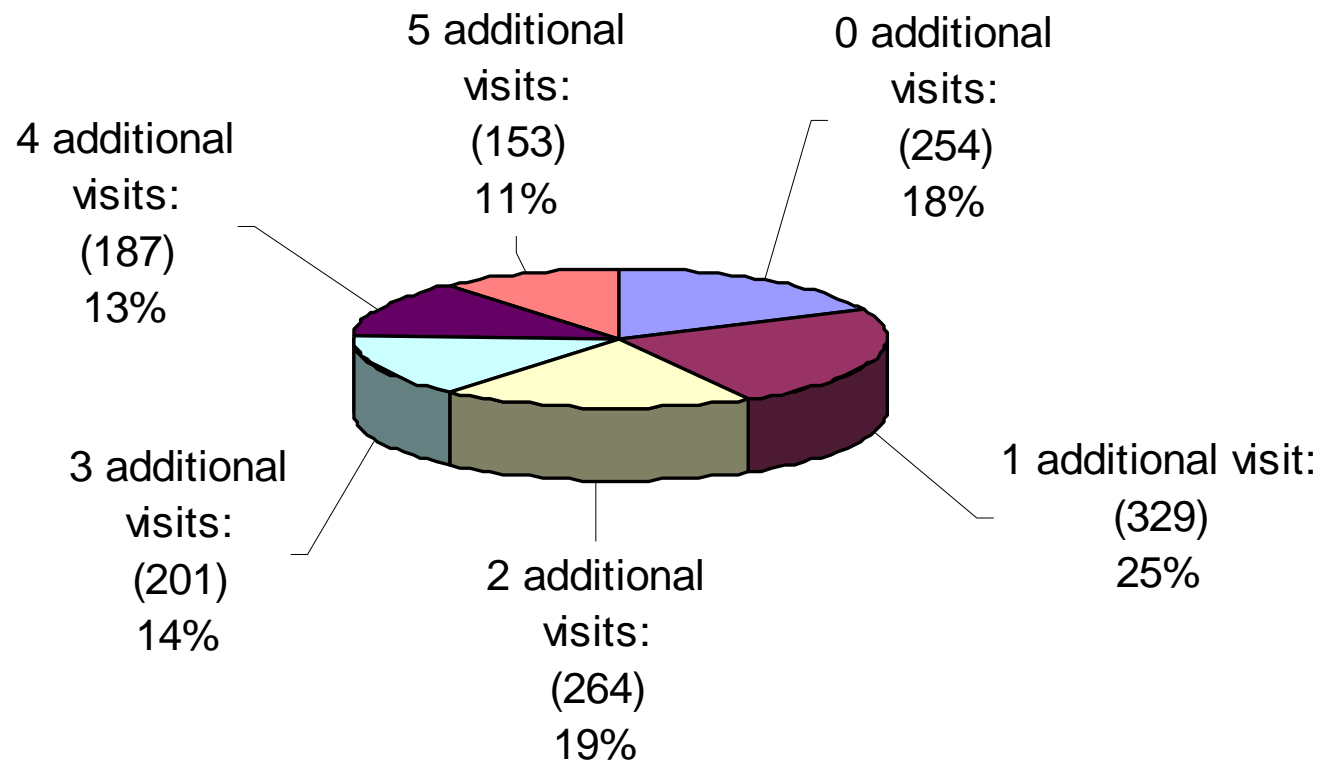
Average Cost over 5 years, first preventive visit at age 3-4



Average Cost over 5 years, first preventive visit at age 4-5



Additional preventive visits after the first



Summary

- Wisconsin's study reflects that about 60 percent of the state's continuously-enrolled young children encounter the dental service delivery system before age 5; however, that contact is episodic and not sustained.
- Suggests that Wisconsin Medicaid is not experiencing savings from consistent early preventive dental care

Quo Vadis?

- Small sample sizes (<.5%) of dental users ages 0-1 in both studies makes it hard to measure effects
- This study deviated from NC's strict use of continuous enrollment; is that right?
 - Pro: allowed for a fairer comparison – first year of contact with the dental system plus four additional years
 - Con: study didn't require 9 years of continuous enrollment, thus increases the likelihood that recipients' eligibility spells end, and they find care outside of Medicaid
 - Requiring 9 years of eligibility may restrict study to a very small subset of recipients

Quo Vadis?

- Researchers need common, precise definitions: procedure codes/combinations, methods for drawing cohorts
- Also needed is a common way of dealing with managed care encounter data for both medical and dental expenditures
- Approach may depend on the researchers: academic vs. state Medicaid agency

Contact Information

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