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PURPOSE/OBJECTIVE

- To evaluate how proximity to an active Medicaid-participating dentist influences preventive dental utilization and continuity of care among children enrolled in Medicaid.

METHODS

- Medicaid claims data from calendar years 2023 and 2024
- Inclusion:** Children ages 1-18 with at least 10 months of continuous enrollment in each year.
- Exposure:** Drive time to nearest active Medicaid participating dentist
 - Active dentist: treats 52 children in a year
- Outcomes:** 1) preventive dental visits and 2) continuity of care across 2 consecutive years.
- Chi-square tests and regression analyses

RESULTS

- N=200,820 children
- 89% had a preventive dental visit in either year
- 45% had continuity of care in consecutive years
- Greater travel time was negatively associated continuity of care.
 - 16–30 minutes: OR 0.84 (95% CI: 0.80-0.88)
 - 31–60 minutes: OR 0.66 (95% CI: 0.48-0.92)
- However, in sensitivity analysis of only rural-residing children, continuity of care outcomes were not explained by incremental geographic distance.
 - 16–30 minutes: OR 1.11 (95% CI: 1.06-1.16)
 - 31–60 minutes: OR 0.99 (95% CI: 0.86-1.14)

Rural children living “close” to dentists still experience lower preventive dental and continuity of care outcomes.

Moderate travel distance does not reduce care in rural areas.

Physical proximity alone does not explain access gaps.

Figure 1. Travel time distribution for included subjects to the nearest active Medicaid-participating dentist. The significant right skew confirms most included children lived in urban areas, which justified a sensitivity analysis including only rural-residing children

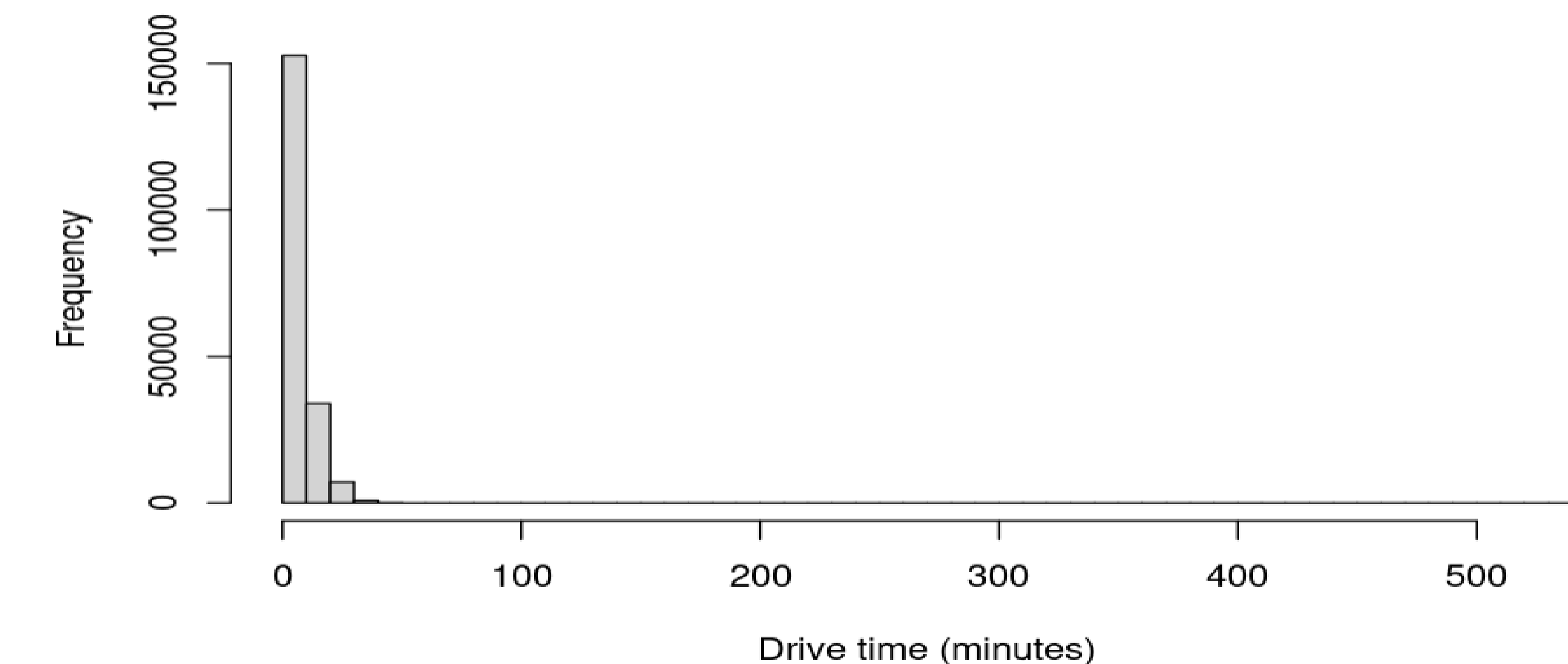
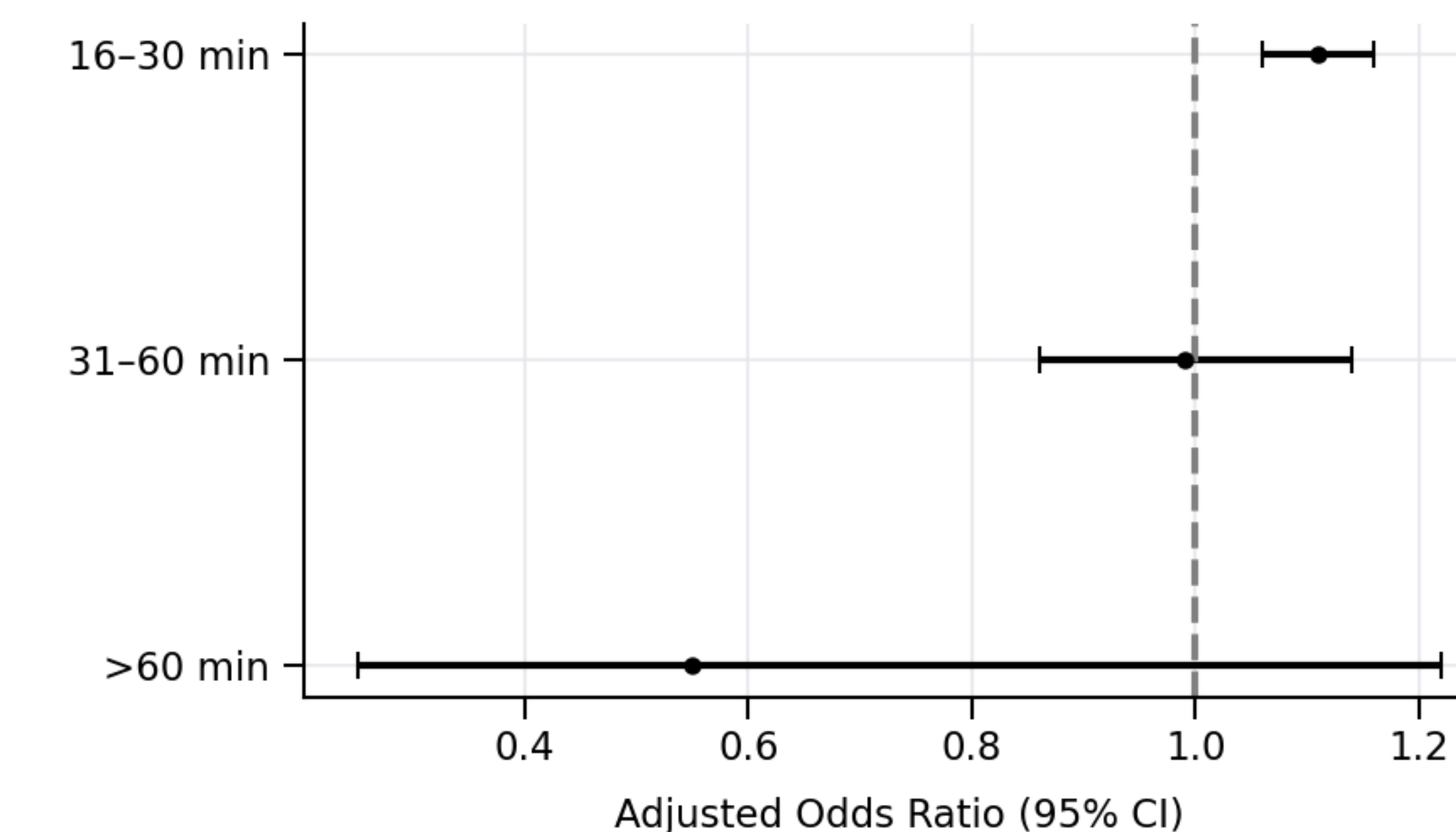


Figure 2. Sensitivity analysis of only rural-residing children shows the association between drive time and continuity of care differed from traditional distance-based expectations.



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