County Income is Associated with Missed Cases of Autism in Georgia Public Schools

TEAL BENEVIDES, PHD, MS, OTR/L, AUGUSTA UNIVERSITY

BRIAN BARGER, PHD, GEORGIA STATE UNIVERSITY

Background

- A large body of literature suggests that differences in access to services among children with autism spectrum disorder (ASD) are not accounted for by actual differences in need for services.
- Most disparities literature suggests that child and family factors, such as race/ethnicity or insurance status, is predictive of lack of service receipt.
- Only 1 study to our knowledge has examined county-level predictors of disparities in autism services (Boswell et al., 2014).
- The **purpose** of our exploratory study was:
  - 1) To identify rates of unidentified children with ASD using county and state-level education records in Georgia; and
  - 2) To understand county level socio-demographic factors that are related to lower expected rates of autism identification at the county level.

Methods

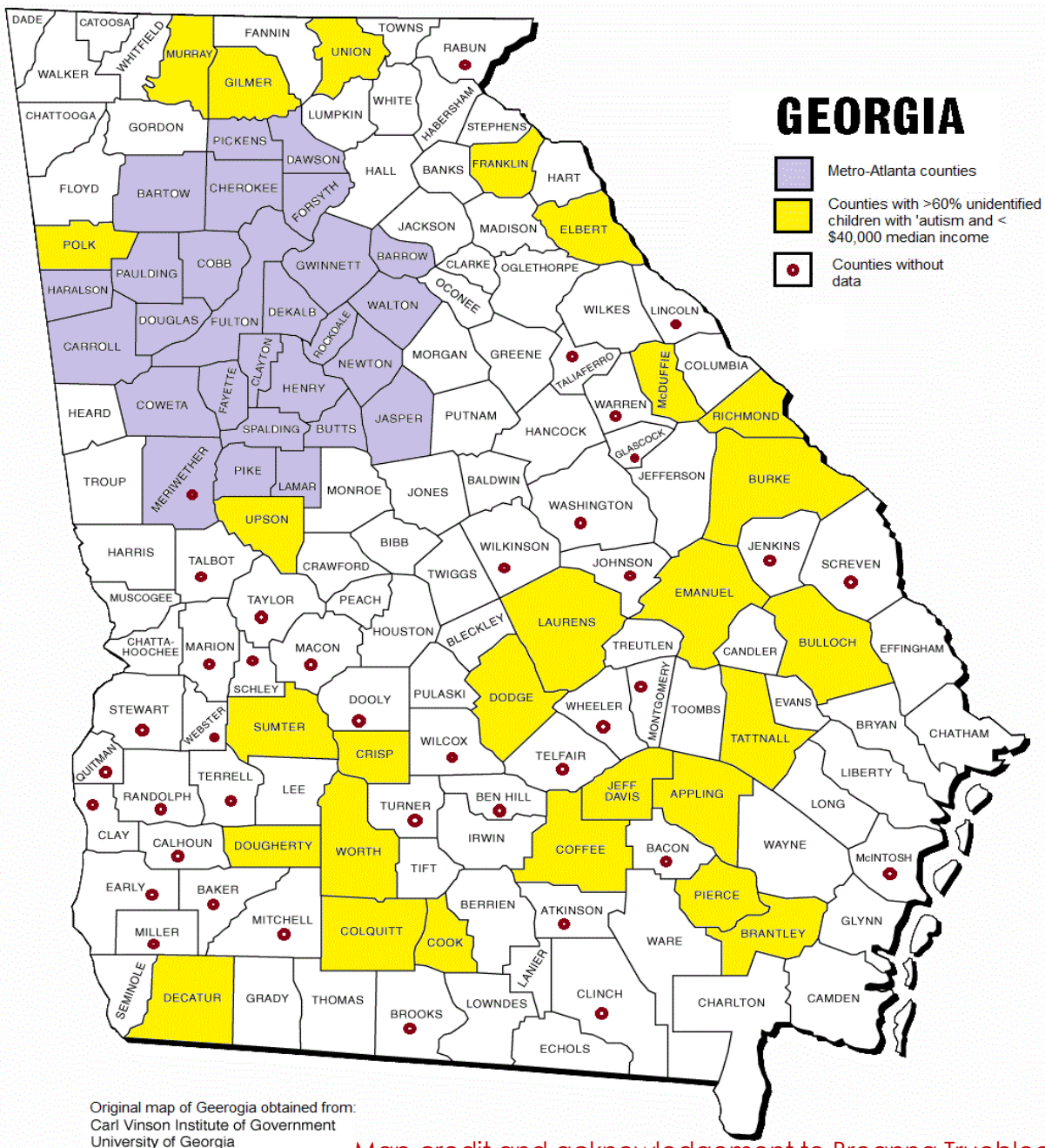
- **Primary Outcome Variable: Rates of Unidentified children with ASD in schools**
  - Quantified by comparing the known number of children *served with an autism classification* to the *expected number* of children with ASD in that county.
  - Expected number of children with ASD in each county was based on Census 2013 known population of children under 20 years of age per county, and the CDC autism prevalence rate (2014).
- **Predictor variables** included:
  - Rural or urban status of county
  - Median household income in the county
  - Percentage of minority individuals in the county
  - High-school graduation rate in the county
  - Number of primary-care providers per 100,000 people in the county
- **Linear regression** was used to evaluate the contribution of county factors on rate of unidentified children.

Results

- In Georgia, 113 (71%) of 159 counties had available educational data on children with an autism classification in 2013.
- Counties without educational data on autism classification were significantly more likely to be rural and have lower counts of children (overall) than those with data.
- *The only statistically significant predictor of missed autism classification was county-level median household income.*

Conclusions

- For each $10,000 reduction in median income, the unidentified autism rate increased by 6%.
- Some GA counties had 'missed autism classification' rates of > 60%; these counties were significantly more likely to have <$40,000 median county income.
- Our exploratory analysis suggests that **county median household income** is an important predictor related to school-based autism classification in Georgia.
- Limitations: assumptions about 'missed cases', lack of complete county educational data (relied on public data)



Original map of Geerogia obtained from:
Carl Vinson Institute of Government
University of Georgia

Map credit and acknowledgement to Breanna Trueblood, OTS, Federal Work Study student