

Introduction:

- Vision loss is associated with detriments to quality of life, mortality, activities of daily living, and the economy.
- The prevalence of vision loss is projected to increase substantially in the coming decades.
- Previous research primarily considers insurance as a black-and-white issue with the presence of insurance essentially guaranteeing care.
- This study examines the effect of under-insurance with Medicaid plans and the role that under-insurance plays in the physical proximity to vision care.
- This study quantifies the distribution of providers (specifically in rural versus urban areas) and considers the acceptance of different insurance types within these individual counties.

Objective:

- To determine the role of under-insurance and location in access to vision services.

Methods:

- Data from the Centers for Medicare & Medicaid Services, Georgia Department of Community Health, Georgia Governor's Office of Planning and Budget, and Georgia Department of Labor between December 2019 and May 2021 was used to calculate the number and density of providers, insurance acceptance, and the estimated insurance loss due to the COVID-19 pandemic.
- NPIs and provider names were used to count the total number of unique providers in the state and the number of unique providers per county.
- Employment and job turnover data was used to estimate the extent of health insurance loss using formulas published in recent literature.
- County population data was used to determine the density of providers across the state.

	Total Vision Providers per County	Ophthalmologists per County	Optometrists per County	Unique Office Locations per County
Mean (SD)	21.55 (71.59)	11.15 (46.73)	10.40 (26.64)	6.47 (15.75)
Median (IQR)	5.00 (15.00)	1.00 (6.00)	3.00 (9.00)	2.00 (5.00)
Maximum	780.00	542.00	238.00	141.00
First Quartile (Q1)	0.00	0.00	0.00	0.00
Second Quartile (Q2)	5.00	1.00	3.00	2.00
Third Quartile (Q3)	15.00	6.00	9.00	5.00

Table 1. Aggregate data of vision providers per county

Results:

- In Georgia, 49 (30.8%) of 159 counties have no vision providers, and providers disproportionately work in population centers.
- Although 93.9% of providers accept Medicaid, only 46.6% accept new Medicaid patients.
- Unemployment reached 12.5% because of the COVID-19 pandemic with an estimated 238,403-to-365,479 Georgians losing health insurance and many more shifting to Medicaid plans.

Conclusions:

- Many counties in Georgia lack adequate vision providers while many Georgia residents have recently lost insurance or shifted to care-limiting Medicaid plans indicating worsening of access to vision care in the state and likely across the nation.
- Health policy is failing to incentivize ophthalmologists and optometrists to serve those most in need of care: the residents of rural areas who have higher rates of visual impairment and under-insurance with Medicaid.
- Without rural practice incentivization and a halt to Medicaid reimbursement cuts, an untold loss of life and dollars will occur.

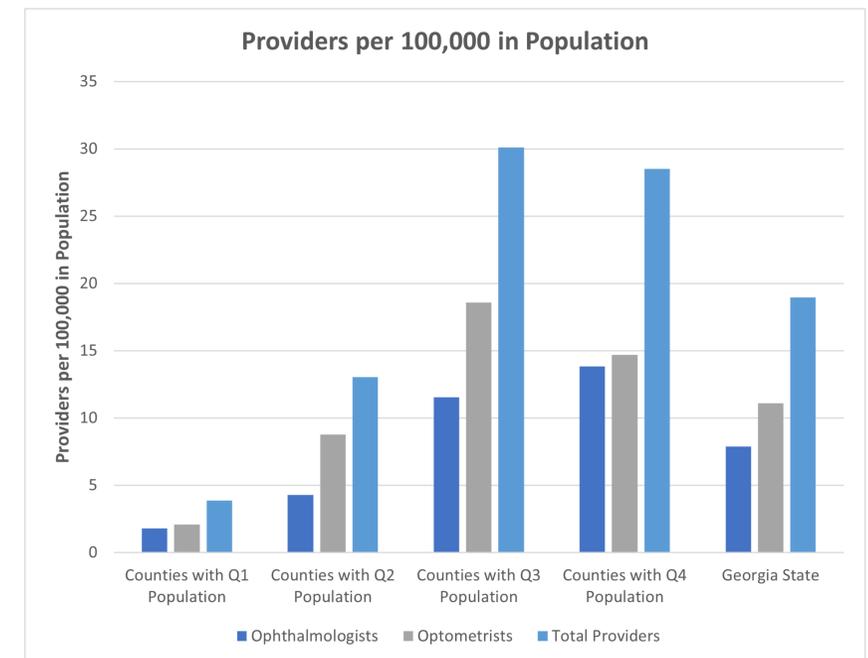


Figure 2. Vision providers per 100,000 across Georgia counties, divided into quartiles by total population

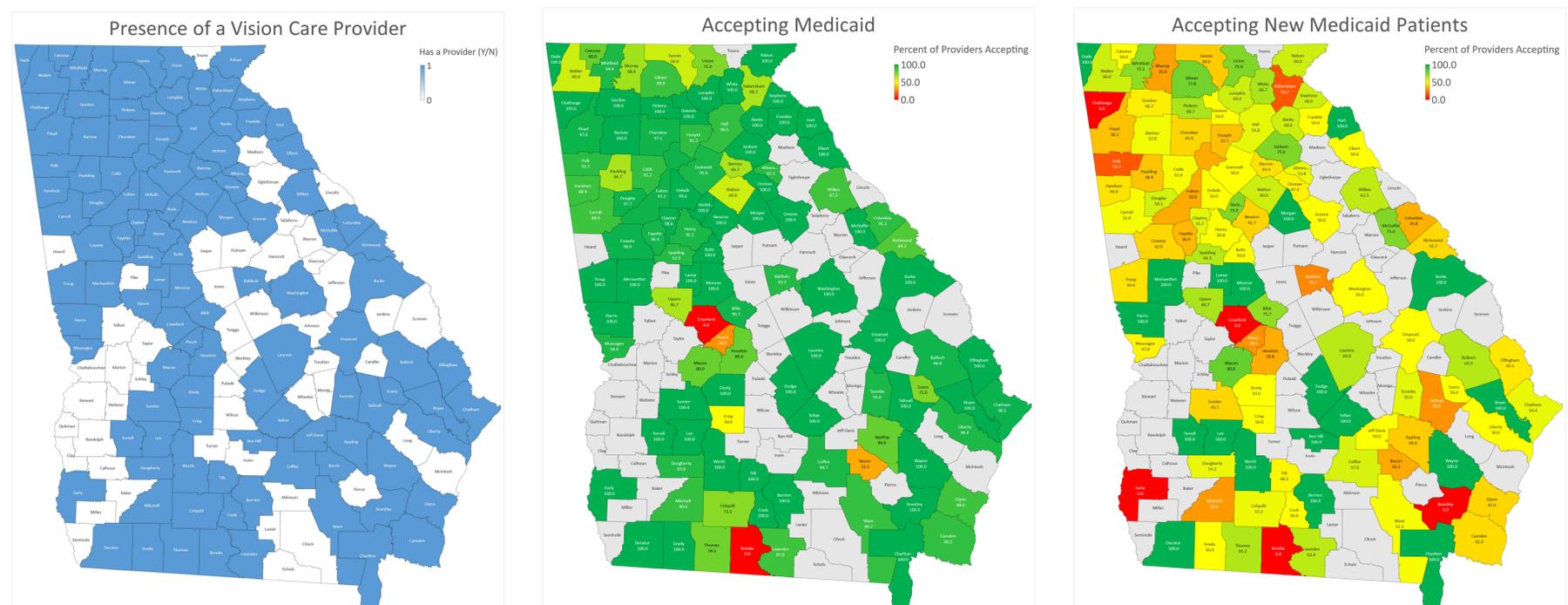


Figure 1. Maps of Georgia counties with presence of vision provider (left), vision provider acceptance of Medicaid (middle), and acceptance of new Medicaid patients (right)