







North Carolina Multi-Payer Analysis

A Functional User Guide

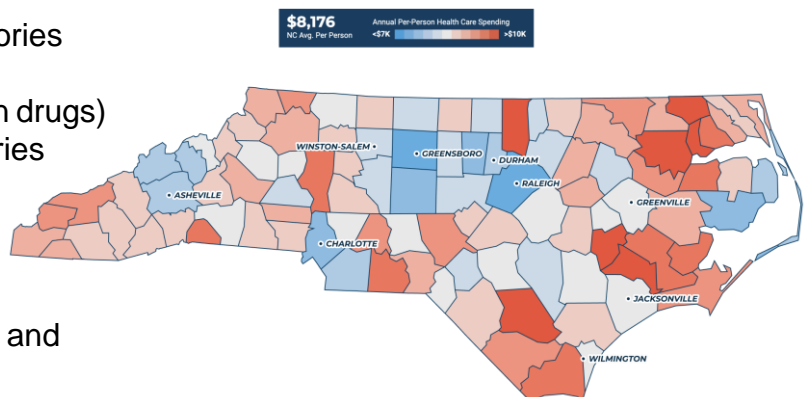
Project Overview:

This collaboration between Duke University, the Health Care Cost Institute (HCCI), and Blue Cross NC brings together health care claims data for people covered by multiple insurance types in order to help policy leaders and the public better understand some of the basic drivers of – and variations in – health care costs in North Carolina.

Project Stats

-  **Who?** The NC Multi-Payer Analysis project represents 6.3 million people annually, or about 60% of the state's population.
-  **Populations Included:** North Carolina residents with Medicare, Medicare Advantage, Medicaid, or employer-sponsored insurance.
-  **When?** The data cover 2016 and 2017; all spending is reported as 2017 US Dollars.
-  **What Did We Study?** On a per-person basis, we calculated total health care (medical and prescription drug) spending, and broke that down by/for:

- High-level service categories (inpatient, outpatient, professional, prescription drugs) and detailed sub-categories
- Age, gender, insurance coverage, and county
- People with diabetes, depression, lung cancer, and opioid use disorder
- Vaginal and Caesarian section delivery, lower joint replacement, and stroke episodes



For more information, [contact HCCI](#)
Project [homepage](#)



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Using the Project Resources

I Want To...

Visually explore health care spending trends in North Carolina.

The [interactive article](#) follows the project from beginning to end, visually displaying the data in a story format and allowing users to apply filters to the results. The final dashboard creates a snapshot of data for each county.


Get data to use for my own analyses and visualizations.

Machine readable data files can be found [here](#) to facilitate additional research and analysis. Our methods are described [here](#).

See formatted data tables with more detail on service categories, episodes of care, age, gender and chronic conditions.

The information in the online report, as well as more granular data, are available in easy-to-read tables [here](#).

Put visuals into presentations.

Many of the maps and data visualizations in the [interactive article](#) can be downloaded as .jpeg files. To download, click on the  symbol on the map or image you want to use.

Know more about the project.

More information about the project and project team is available [here](#).

Explore doing this in my area/with my data.

The project team would love to talk with you about how to replicate this project in your geographic area or with your data. Please contact us via email at info@healthcostinstitute.org

Get in touch with the project team.

Send an email to info@healthcostinstitute.org and we will connect you.



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Key Findings

Total spending for the study population was **just under \$50 billion per year**, or just under \$100 billion for the two-year study period.

Average per-person spending in North Carolina was **\$8,176**, ranging from:

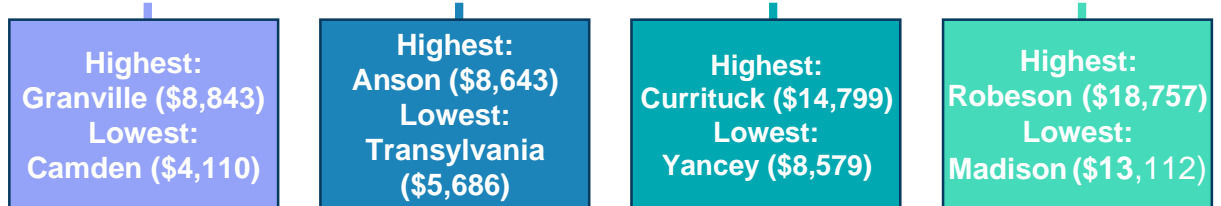


Spending varied **by age and gender**:

- In Medicaid, per-person spending on children was \$2,215 for females and \$2,711 for males, compared to \$19,282 and \$18,590 for elderly females and males, respectively.
- In ESI, females age 25-54 had higher average per-person spending than males of the same age.

Annual per-person spending varied across the **100 counties**:

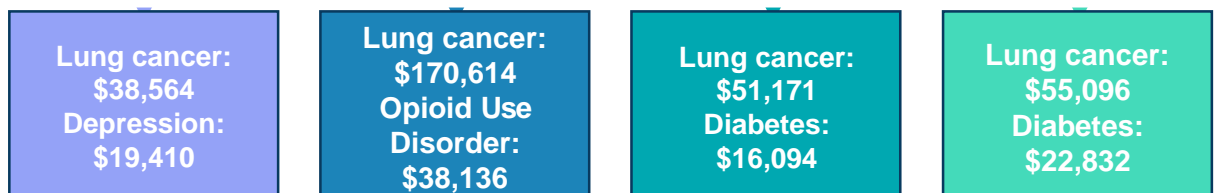
- Across all people, this was highest in Jones County (\$10,282) and lowest in Wake County (\$7,272).



Average spending per episode on **births, lower joint replacement, and stroke** varied greatly across populations and counties:

- Vaginal delivery episodes averaged \$4,022 in the Medicaid population and \$12,266 in the ESI population; Caesarian section episodes averaged \$5,470 in Medicaid and \$18,315 in ESI.
- Lower joint replacement episodes in the Medicare FFS population ranged from an average of \$17,248 in Cherokee County to \$27,200 in Greene County.
- Stroke episodes ranged from \$9,966 (Moore County, Medicaid population) up to \$39,501 (Washington County, Medicare FFS).

Average annual per-person spending on individuals with **depression, diabetes, lung cancer, and opioid use disorder** varied greatly across populations and counties:



Inpatient services accounted for the **largest share of per-person spending** in Medicare FFS, Medicare Advantage, and Medicaid populations, but the smallest share in ESI.