



How Socio-Economic Factors Impact Cancer Mortality in U.S. Counties?

An analysis for TruBridge Externship

Presented by: Smit Patel

Our Agenda



The Core Finding

The main conclusion on income and mortality.



The Supporting Evidence

Statistical and geographic data analysis.



The TruBridge Opportunity

Connecting findings to strategic action.



Project Scope & Methodology



Data Source & Scope

County-level data from "cancer_reg.csv," analyzing 3,000+ U.S. counties.

Methodology

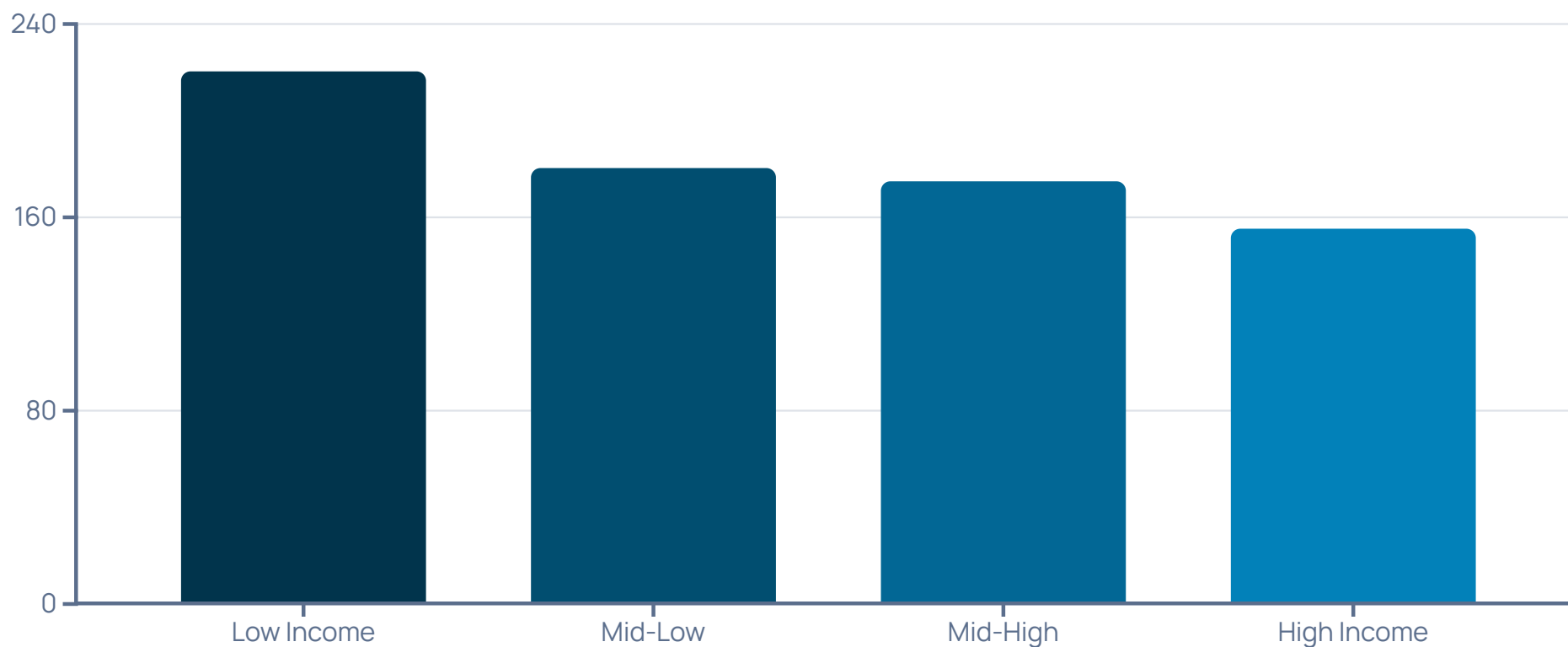
Used Exploratory Data Analysis (EDA) and Linear Regression to quantify correlations (e.g., median income, poverty, mortality).

Limitation

Analysis highlights strong correlations; it does not establish direct causation.

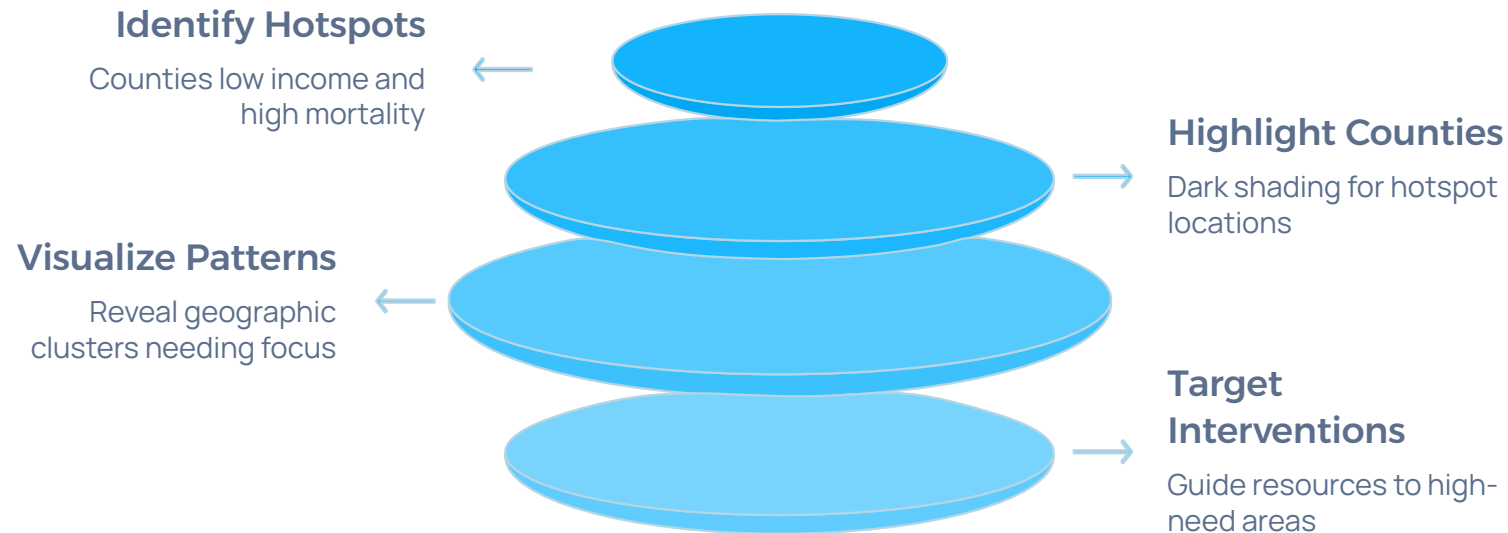
The Bottom Line: Higher Income Correlates Directly with Lower Cancer Mortality

This graph presents an important conclusion. The data clearly shows a stepwise decrease in death rates as income rises.



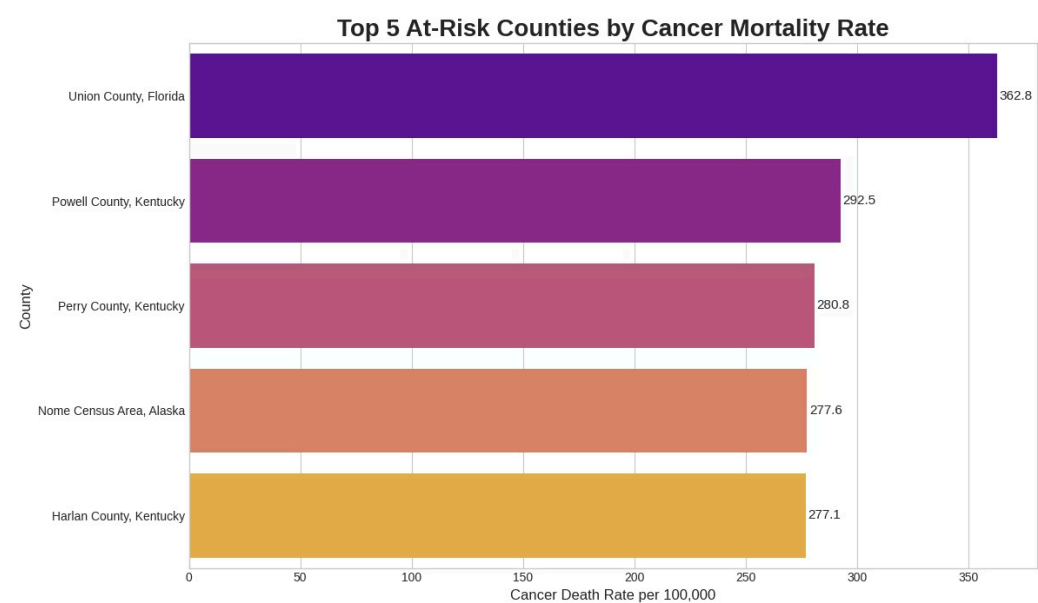
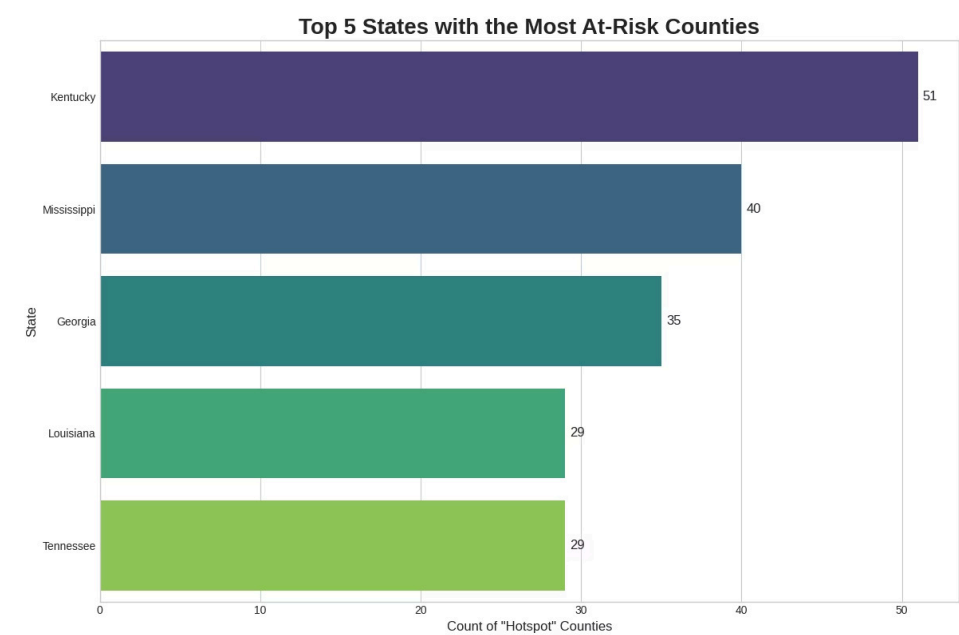
Mapping the Disparity: High-Poverty, High-Mortality Counties are the Epicenter of the Crisis.

Moving from the "what" to the "where," this map makes the data tangible and shows where interventions could be targeted.



Hotspots: U.S. States and it's Counties At Most Risk of Cancer Mortality Rates

Following are the top 5 states and top 5 U.S. counties which are most at risk and need immediate intervention.



❏ These "hotspot" counties represent areas where socio-economic disadvantage and poor health outcomes converge, indicating high-priority targets for intervention.



Opportunity for Impact: Positioning TruBridge as a Leader in Health Consulting

Our analysis reveals a critical market need at the intersection of healthcare and socio-economic data.



For Technology & Innovation

Develop an SDOH Analytics Platform.



For Mission & Talent

Enhance Brand and Attract Talent



Drive Strategic Growth

Forge partnerships with public health organizations

Recommendations & Discussion

Recommendation 1: Develop a Pilot Program for SDOH Analytics Dashboard

Goal: Demonstrate the dashboard's value to one of our key hospital clients by identifying their at-risk patient populations.

Recommendation 2: Launch a Signature Corporate Social Responsibility Initiative.

Goal: Create a tangible, story-driven initiative that can be a centerpiece for our 2026 brand and talent acquisition campaigns.

Based on this analysis, some recommendations can be such as capturing the **commercial opportunity** with the analytics dashboard, and building **brand and mission** through the CSR initiative.

Thank You!

Q&A

Fortune.com x
TruBridge healthcare extension
Healthbridge extension financial
program extending financial
engineering planning
program
Detention by chair Faval

The Extern.com x
TruBridge Healthcare Data
TruBridge Healthcare Healthcare
Data Analytics Data Analytics

Creator of the program: Smit Patel
Creator and Smit Patel

Thank You!

Q&A

Built as part of "Extern.com" x
"TruBridge Healthcare Data
Analytics" externship program

by Smit Patel