Creating County-Level Cancer Profiles for Communities

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1. Background

Communities desire information about cancer burden, risks, and disparities, along with social determinants of health specific to their members. Harvesting these data into a single location that is both accessible and understandable is challenging, and more so for smaller/rural counties with limited resources. The University of Colorado Cancer Center, Office of Community Outreach and Engagement (COE) created an interactive data platform called <u>ECCO: Exploring Cancer in Colorado</u>. ECCO allows end users to visualize our catchment area (Colorado) in terms of cancer burden, risk factors, cancer disparities, health behaviors, and socio-demographic factors. We sought to create an easy way for communities to visualize and download county-specific cancer and socio-demographic data within ECCO.

2. Goals

The purpose of this project is to enhance the utility of ECCO by allowing communities to generate county-specific cancer data profiles that can be viewed and downloaded. Our end goal is that communities know how to access this information and use these data to understand the impact of cancer in their county and to support local cancer prevention and control efforts. Metrics for success include end-user satisfaction, number of website views, and downloads of county profile data.

3. Solutions and Methods

Using publicly available data in ECCO, we created standard templates to display Basic Data (cancer incidence, mortality, prevalence of common risk factors, screening adherence rates and trends in incidence), and All Data that includes information on socio-demographic factors, additional risk factors and environmental exposures (e.g. radon) for all 64 counties in Colorado. Where possible, statewide data are included for comparison. Users can access county profiles by clicking on any county on the Colorado map displayed on the ECCO home page, then clicking the "See All Data" button.

4. Outcomes

We have successfully created county profiles for all 64 counties in Colorado. An example of a Basic profile is displayed in the figure below. We are still working on making these profiles downloadable for end users.

5. Lessons Learned and Future Directions

Creating county-specific profiles highlighted a limitation to our approach. Notably, due to the relatively small populations in some of our rural counties, and small numbers of cancer cases, data were either not available or had to be suppressed (e.g. mortality trends for specific cancers). One way to overcome this limitation would be to include more years of data in our estimates (e.g. mortality over 10 vs. 5 years), however this approach would mask more recent trends. In terms of future directions, we will continue to add new data sources such as youth vaping rates that we will add to the county profiles, and we are exploring ways to allow users to create customized profiles, choosing the data they want to be included, in addition to the standard templates we created.

Figure

