

OPTIK - Organize Prioritize Trends to Inform KU Cancer Center Members

D. Mudaranthakam, L.M. Harlan-Williams, H. Krebill, H. Kuo, D. Koestler, Q. Xia, R. Chen, L. Chollet-Hinton, M. Mayo, R. Jensen

The University of Kansas Cancer Center

1. Background

An increasingly diversified demographic landscape in rural and urban America warrants the attention of The University of Kansas Cancer Center (KU Cancer Center) researchers, clinicians, outreach staff, and administrators as the institution assesses ways to reach its expansive, bi-state catchment area. Within the counties of the KU Cancer Center catchment area, patient level and public health data are available and categorized by varying geographic regional boundaries. Multiple data sources and different data collection processes complicate summarizing catchment area data.

2. Goals

A tool that can consistently blend data from multiple sources to provide KU investigators data and visualization can be used to draw inferences.

3. Solutions and Methods

A curated data warehouse that retrieves and structures the data, with a common denominator, can support meaningful use of the data in a standard and consistent format. The KU Cancer Center built a data warehouse, Organize and Prioritize Trends to Inform KU Cancer Center (OPTIK), which functions to streamline the process of synthesizing data regarding Kansas and Missouri demographics, cancer risk factors, and incidence and mortality rates.

4. Outcomes

OPTIK standardizes these diverse data sources to enable analyses of the cancer burden at local, regional, and national levels while upholding a strict standard of patient privacy. The OPTIK database enables researchers to use available data and create heat maps and other visualizations to aid in funding proposals, presentations, and research activities.

5. Lessons Learned

Furthermore, using knowledge provided by OPTIK, the KU Cancer Center is able to prioritize action items for research and outreach, and more effectively communicate the impact of those efforts.

Citation: <https://academic.oup.com/database/article/doi/10.1093/database/baaa054/5876850>
<https://optik.shinyapps.io/OPTIK/>.