

A Mixed Method Approach to Identifying Unique Catchment Area Needs

BACKGROUND

Huntsman Cancer Institute (HCI) serves the large geographic region of Utah, Montana, Nevada, Idaho, and Wyoming. This 5-state catchment area has unique population needs and challenges for cancer control strategies. HCI uses its System for Health Assessment and Population Evaluation (SHAPE) to integrate patient and population data to understand heterogeneous catchment area need.

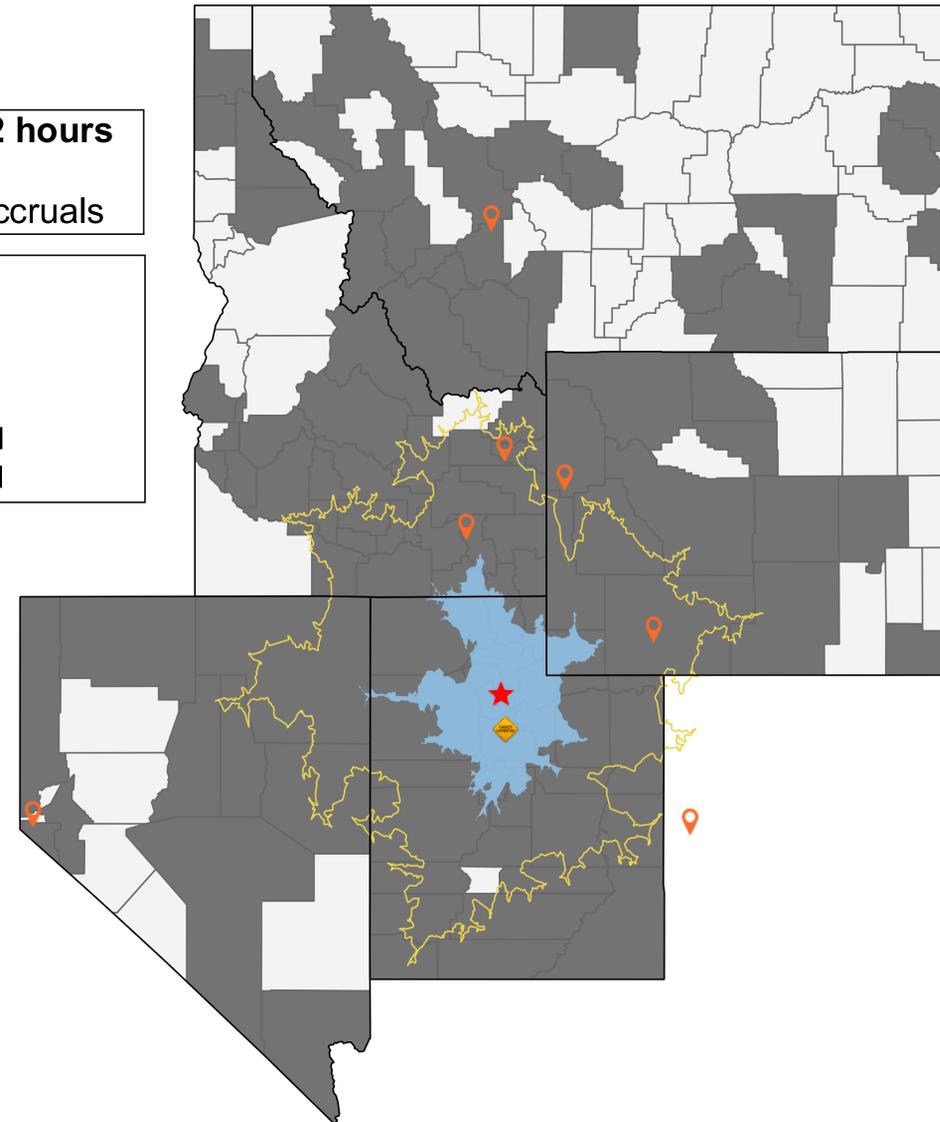
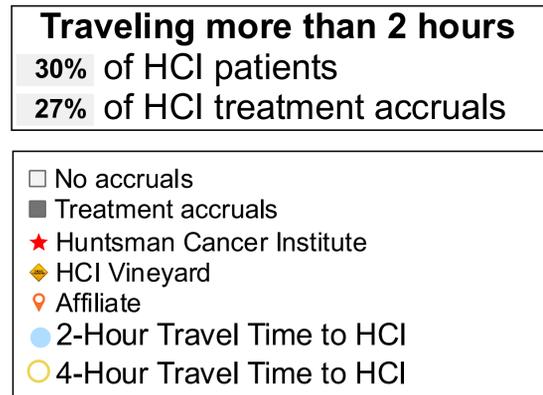
GOALS

Our main priorities were (1) Identify the burdensome geographic and socioeconomic characteristics facing the residents of our catchment area, and (2) Use them to help inform institutional priorities to address the needs of our population.

METHODS

Travel time from HCI was visualized using Tableau [Figure 1.]. Visuals displayed travel time ranges of one, two, three, and four hours, as well as 150-mile distance, helping us assess the extent of the issue. Data from American Community Survey (ACS), United States Department of Agriculture (USDA), U.S. Census Bureau, and Social Vulnerability Index (SVI) were visualized to inform which counties were facing poverty, rurality, and social vulnerability metrics.

Figure 1.



OUTCOMES

Quantified the disproportionate percentage of frontier land residents living in frontier areas compared to the United States overall [Figure 2.]. Two of the states in our catchment (MT, WY) have most of their population in frontier areas, which are commonly underserved. We found that the median percentage of people below the poverty level is 1%-1.3% higher in rural and frontier counties [Figure 3.], respectively, than metropolitan counties in our catchment area. We now have a more comprehensive understanding of the implications of travel for individuals within our catchment area, such as 31% of HCI patients and 28% of clinical trial participants travel over 150 miles [Figure 4.]. The combination of long travel distances, poverty, and rurality/frontier residence in our catchment area pose unique challenges for cancer control efforts.

LESSONS LEARNED

HCI's automated population data integration system identifies priority areas to address the unique needs of our population. The SHAPE resource serves the Office of Community Outreach and Engagement (COE) in ensuring that our outreach efforts are reaching the right places.

Figure 2.

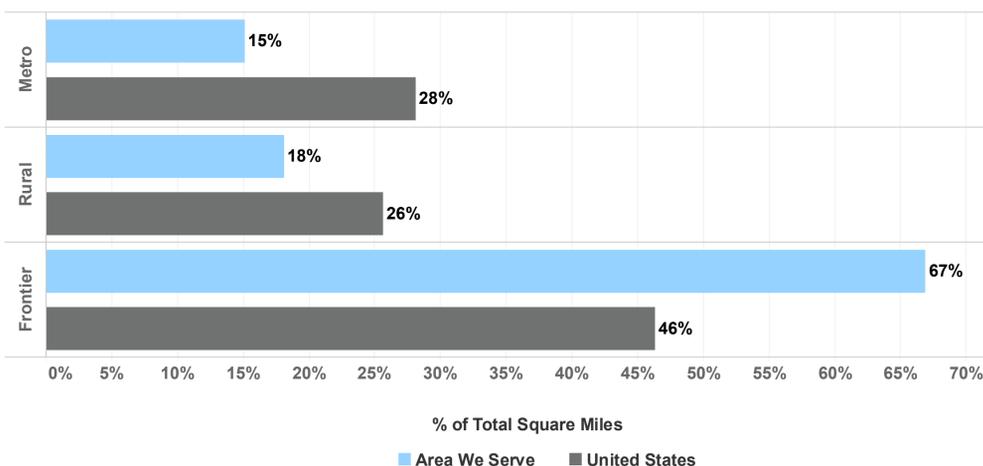


Figure 3.

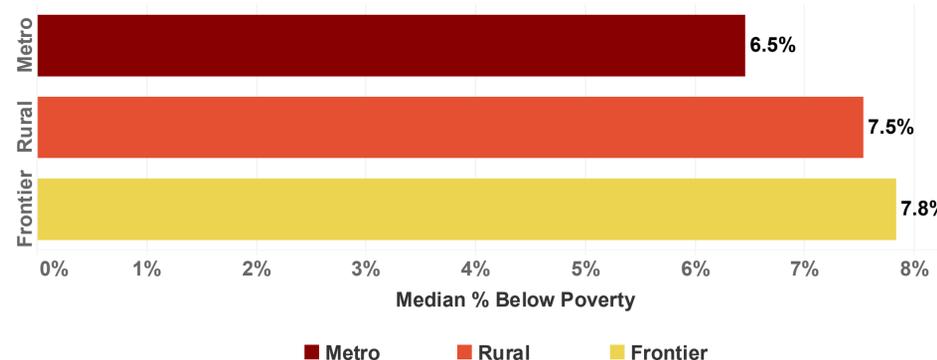


Figure 4.

HCI Treatment Trials Reach Distant Patients (2019-2024)						
Distance	New Patients			Accruals		
	n	%	Cumulative	n	%	Cumulative
<50 miles	19363	59%	59%	2249	60%	60%
50 to <100 miles	2137	6%	65%	325	9%	69%
100 to <150 miles	1245	4%	69%	131	3%	72%
>150 miles	10208	31%	100%	1074	28%	100%
Total w/ driving distance	32953	100%	100%	3779	100%	100%