

2023 NPCR NEW HAMPSHIRE SUCCESS STORY

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Partners Use Registry Data to Address Cancer Disparities in Rural Catchment Areas

National Program of Cancer Registries SUCCESS STORY

SUMMARY

The Dartmouth Cancer Center (DCC) is a Comprehensive Cancer Center designated by the National Cancer Institute (NCI), which serves the catchment population of Vermont and New Hampshire. Using New Hampshire State Cancer Registry (NHSCR) data, the DCC Community Outreach and Engagement (COE) team – led by Dr. Judy Rees, NHSCR Director – is using a data-driven approach to guide the direction of catchment priority interventions through a comprehensive analysis of the catchment area’s cancer burden, incidence, mortality, state ranking, and risk factors. Evidence-based interventions are designed to promote health equity and reduce cancer incidence and mortality. Cancer registry data provide the starting point for the identification of disparities and the Cancer Center’s work toward promoting health equity in the region.

CHALLENGE

- National Cancer Institute-designated cancer centers are tasked with addressing cancer disparities in their catchment populations. Identifying priority areas requires an assessment of disparities and an understanding of their causes.
- We analyzed NHSCR and United States Cancer Statistics data to identify how NH ranks among other states for mortality and incidence, and the DCC COE team worked with their Community Advisory Board to identify four priority areas: melanoma, breast, colorectal, and lung cancers.

SOLUTION

- Disparities in our rural states were identified using national cancer registry data. We formally tested the hypotheses that incidence and mortality were higher in Northern New England than the rest of the United States overall and stratified by race/ethnicity.
- We also reviewed county-level cancer data within New Hampshire and Vermont and followed up with a population survey to dig deeper into the disparities experienced by rural residents and individuals with lower educational attainment.
- Community members in the catchment area were engaged in group discussions (“community engagement studios”) to help guide interventions and approaches to address cancer burden, incidence, and mortality. For example, we identified less frequent sun safety behaviors among rural residents and individuals with lower educational attainment.

- The issues were discussed with community members who highlighted the need for education, clear concise messaging, and improved access to sunscreen in communal areas such as parks.
- In partnership with others, COE has launched a series of sun safety interventions including deployment of sunscreen dispensers in rural community areas and, having identified hosts for the dispensers in Vermont though a competitive application process, we are seeking community-based organizations to host the dispensers in New Hampshire.
- The COE team also implemented a variety of interventions to address breast, colorectal, and lung cancer risk and promotion of colorectal and lung cancer screening through education and public health messaging.

RESULTS

- We published our formal comparisons of adult cancer incidence and mortality in the Northeast Region and Northern New England when compared with the rest of the United States. Our paper concluded that cancer incidence and mortality in Northern New England are significantly higher than the rest of the country, even though cancer mortality in the Northeast is significantly lower than the US (Rees et al, 2023). This may relate to high cancer mortality in rural areas.
- Using our population survey data, we published a manuscript on disparities (Skipper et al, 2023) and another on the effect of the COVID-19 pandemic on cancer screening in New Hampshire and Vermont, (Gunn et al, 2023). The ideas for these manuscripts originated from disparities identified in cancer registry data.
- For lung cancer screening, a coalition of researchers and clinicians distributed more than 16,000 pieces of print media about lung cancer screening; implemented a press campaign in 12 local newspaper, radio, and TV outlets, reached more than 100,000 people through a social media campaign, and generated more than 83,0000 impressions via social media campaigns.
- Dartmouth Cancer Center established a Breast Cancer Screening Equity Workgroup. The COE team conducted two community engagement studios to solicit community input on strategies to increase screening in these communities; community members recommended focusing on low perceived susceptibility to breast cancer and lack of awareness of free screenings available through state programs.
- Guided by the data and studio feedback, the Workgroup plans to develop and evaluate a communication intervention in two high deprivation communities with low screening rates.

- For colorectal cancer screening, our educational intervention, implemented from 2020-2023, significantly increased knowledge about colorectal cancer risk factors and intent to increase physical activity, eat healthier foods, and screen for colorectal cancer.

SUSTAINING SUCCESS

- The DCC COE team will continue to evaluate cancer registry data as the basis for defining priorities within the catchment population. Based on these systematic assessments, further information will be obtained from explorations using population surveys and community discussions. It is critical that cancer registry data are publicly available for cancer centers and others to assess disparities and implement interventions to address them.
- With funding and partnership from NH DHHS, and building upon the DCC COE results described above, in 2024, the DCC COE team will begin to rebuild NH’s state cancer coalition.
- We will continue to conduct data analyses and other community-engaged approaches to identify opportunities and assess challenges over time.

STORY QUOTE

“The New Hampshire State Cancer Registry has been based at Dartmouth for 37 years and has strong ties to the Dartmouth Cancer Center, the only NCI-designated comprehensive cancer center in northern New England. Cancer registry data has allowed my Community Outreach and Engagement team to identify cancer disparities in our catchment area and implement interventions to reduce the burden of cancer for our population. We’re excited about the successful partnerships DCC enjoys with the state, and we look forward to expanding and strengthening our statewide collaborations.”
– Dr. Steven Leach, Director of the Dartmouth Cancer Center, and the Preston T. and Virginia R. Kelsey Distinguished Chair

REGISTRY CONTACT

<https://geiselmed.dartmouth.edu/nhscr/>

REFERENCES

Rees JR, et al. Cancer Epidemiology in the Northeastern United States (2013-2017). Cancer Res Commun. 2023; 3(8):1538-1550. PMID: PMC10424700.
Skipper TA, et al. A Survey of Cancer Risk Behaviors, Beliefs, and Social Drivers of Health in New Hampshire and Vermont. Cancer Res Commun. 2023;3(8):1678-1687. PMID: PMC10464638.
Christine M Gunn, et al. A population-based survey of self-reported delays in breast, cervical, colorectal and lung cancer screening, Prev Med. 2023;175:107649. PMID: 37517458.



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