One-Third of Cancer-Related Crowdfunding Campaigns Share Medical Financial Hardship and Health-Related Social Needs, New Research Shows

American Cancer Society researchers used innovations in Artificial Intelligence to help highlight financial and social hardship for patients with cancer

ATLANTA, October 10, 2024 — In a new, large comprehensive analysis led by the American Cancer Society (ACS), researchers, using a form of Artificial Intelligence (AI), found that more than one-third of fundraising stories on the GoFundMe crowdfunding platform in the United States explicitly shared experiences of medical financial hardships and health-related social needs (HRSNs). The fundraising stories included hardships such as housing and food insecurities, transportation barriers, income loss, lack of sick leave, and disruptions to both work and school. The findings are published today in the *Journal of the American Medical Association (JAMA) Oncology*.

"Sadly, financial hardship is common among cancer survivors across the country, forcing a growing number of patients and their families to use personal crowdfunding as an alternative source to raise money," said Dr. Zhiyuan "Jason" Zheng, senior principal scientist, health services research at the American Cancer Society and lead author of the study. "These findings show the intense difficulties in meeting basic medical and social needs, underscoring the fragility of safety nets in the U.S."

For the study, researchers analyzed data from all cancer-related fundraising stories from January 1, 2021, to May 31, 2023, retrieved from the publicly available crowdfunding website GoFundMe. Scientists utilized extensive natural language processing (NLP) modeling

(Open AI's ChatGPT 3.5) to examine cancer-related crowdfunding campaigns, specifically their fundraising stories about reasons for financial assistance, including medical financial hardship and HRSNs. The advances in NLP enabled researchers to transform qualitative data to quantitative data and to help perform statistical analyses.

Study results showed a total of 91,113 cancer-related crowdfunding campaigns were identified and more than 24 million words were analyzed. The proportions with NLP outputs for individual campaign characteristics were age (19.6%), sex (61.1%), marital status (5.1%), family size (12.8%), health insurance coverage (18.3%), employment status (20.6%), living with dependent children (16.4%), and school attendance (9.2%). 79% had NLP interpretations (outputs) for cancer type. 33.9% for stage at diagnosis, 43.3% for new versus recurrent cancer status, 52.6% for cancer-related treatments, and 31% for time from diagnosis to campaign initiation. Among all fundraising stories, 25.5% had NLP outputs for any medical financial hardship, and 24.1% had mentioned HRSNs. Overall, 35.9% of fundraiser stories had NLP outputs with any medical financial hardship or HRSNs.

"This research further highlights the drastic reality people, especially cancer patients and survivors, are increasingly facing when it comes to the high cost of health care. This reality is unacceptable," said Lisa Lacasse, president of the American Cancer Society Cancer Action Network (ACS CAN). "No one should have to choose between lifesaving treatment and a roof over their head. Lawmakers must take action. Elected officials can help reduce medical financial hardship by expanding Medicaid in the 10 states that have yet to do so, making permanent the ACA enhanced tax credits that make marketplace plans more affordable for more than 20 million people, and passing legislation to alleviate medical debt."

Dr. Robin Yabroff is senior author of the study. Other ACS researchers contributing to the report include Dr. Shaojun Yu, Dr. Farhad Islami and Dr. Jingxuan Zhao.

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About the American Cancer Society
The American Cancer Society is a leading cancer-fighting organization with a vision to end cancer as we know it, for everyone. For more than 110 years, we have been improving the lives of people with cancer and their families as the only organization combating cancer through advocacy, research, and patient support. We are committed to

ensuring everyone has an opportunity to prevent, detect, treat, and survive cancer. To learn more, visit cancer.org or call our 24/7 helpline at 1-800-227-2345. Connect with us on Facebook, X, and Instagram.

For further information: FOR MORE INFORMATION, CONTACT: American Cancer Society, Anne.Doerr@cancer.org

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