

Cancer-Related Crowdfunding Economy in the United States

Zhiyuan Zheng, PhD¹; Shaojun Yu, PhD^{1,2}; Fumiko Chino, MD³; Farhad Islami, MD, PhD¹; Jingxuan Zhao, PhD, MPH¹; Matthew P. Banegas, PhD⁴; Zhenan An, BS^{1,5}; Jing Zhang, PhD²; and K. Robin Yabroff, PhD, MBA¹

Abstract

Background: Crowdfunding campaigns are increasingly used by cancer survivors in the United States; however, fundraising goals and donation records have not been evaluated in detail at the campaign, state, and national levels. **Methods:** Cancer-related GoFundMe crowdfunding campaigns initiated between January 1, 2021, and February 28, 2023, with ≥ 90 days of follow-up for peer-to-peer donation records through May 31, 2023, were identified. Descriptive statistics of financial assistance amounts requested (ie, fundraising goals) and received (ie, money raised), and proportions of financial assistance received relative to requested were calculated. Separate bivariate and multivariate generalized linear regressions were conducted to examine associations between campaign-level characteristics and amounts of financial assistance received and requested, and whether the fundraising goal was achieved. **Results:** In total, 78,338 cancer-related crowdfunding campaigns with 4.45 million donation records were identified. Nationally, \$506 million was raised (\$233.7 million annually), accounting for 34.5% of total financial assistance requested (\$1.47 billion). A total of 4.45 million donation records were retrieved. After adjusting for population size, \$109,191 per 100,000 people was raised annually. Moreover, 75,813 (96.8%) campaigns listed fundraising goals (median requested, \$10,000 [IQR, \$5,000–\$25,000]) and 77,989 (99.6%) received donations (median raised, \$4,000 [IQR, \$1,835–\$8,485]). Only 11.5% of campaigns reached their fundraising goals during the 90-day follow-up period. Campaigns with fundraiser stories describing beneficiaries who were younger, male, married, living with dependent children, working or attending school, or diagnosed with metastatic disease were more successful in raising more money and achieving their fundraising goals. **Conclusions:** Cancer-related GoFundMe crowdfunding campaigns raised \$506 million from January 2021 to May 2023 in the United States, which is approximately one-third of the total amount of financial assistance requested and a fraction of patients' total out-of-pocket costs. Use of crowdfunding and shortages between financial assistance requested and received are substantial, underscoring unmet financial needs among cancer survivors in the United States.

J Natl Compr Canc Netw 2025;23(11):e257069
doi:10.6004/jncn.2025.7069

Background

In the United States, cancer survivors often experience medical financial hardship and unmet health-related social needs (eg, food insecurity and housing instability).^{1–4} As a result, personal crowdfunding has gained popularity for raising money to pay for medical expenses and daily living necessities.^{5,6} Understanding the cancer-related crowdfunding economy, especially shortages between financial assistance requested (ie, fundraising goals) and received (ie, money raised), can inform gaps in the knowledge of health care affordability among cancer survivors, because patients may require financial assistance for out-of-pocket (OOP) costs or basic economic needs. It has been shown that one-third of cancer-related crowdfunding campaigns explicitly mentioned unmet medical and social needs in the United States.⁷ Moreover, patients and health care providers may also want to learn about crowdfunding, especially when patients are in dire financial need.⁸ Information about the crowdfunding economy can also inform policy efforts to improve the safety net in the United States. However, little is known about the magnitude of the cancer-related crowdfunding economy, including the amounts of financial assistance requested and received at individual campaign, state, and national levels.

In 2023, national health care spending reached 4.9 trillion dollars, and the average medical expenditure was \$14,570 per person in the United States, of which 10% (\$1,514) was OOP costs.⁹

As a result, raising money in the private market by initiating medical crowdfunding campaigns may help some patients reduce their financial burden. There are several platforms for personal crowdfunding campaigns, with GoFundMe being the most popular platform for peer-to-peer (ie, individuals raising money and receiving donations directly from other individuals) medical donations,¹⁰ accounting for >90% of US peer-to-peer crowdfunding market.¹¹ GoFundMe leads online medical fundraising, with >250,000 medical fundraising events and \$650 million raised annually.¹² Because both recently diagnosed and longer-term cancer survivors frequently experience hardships, cancer is one of the leading diseases among all medical fundraising campaigns.^{13,14}

Previous studies examining cancer-related crowdfunding campaigns were often limited to single cancer sites, select treatments or patient populations; often with small sample sizes.^{5,15–18} This nationwide study examines the cancer-related crowdfunding economy by analyzing detailed donation records at the campaign, state, and national levels, measured by amounts of financial assistance requested and received. Moreover, this study extends prior research by examining campaign-level characteristics associated with greater financial assistance requested and received, as well as with achieving fundraising goals.⁷

Supplementary material is published online at <https://doi.org/10.6004/jncn.2025.7069>

¹Surveillance and Health Equity Science, American Cancer Society, Atlanta, GA; ²Computer Science Department, Emory University, Atlanta, GA; ³Department of Breast Radiation Oncology, The University of Texas MD Anderson Cancer Center, Houston, TX; ⁴Department of Radiation Medicine and Applied Sciences, University of California San Diego, San Diego, CA; and ⁵Department of Quantitative Theory and Methods, Emory University, Atlanta, GA.

Methods

All crowdfunding campaigns initiated between January 1, 2021, and February 28, 2023, with donation records available through May 31, 2023, were retrieved from the publicly accessible GoFundMe website. OpenAI's large natural language processing (NLP) model (ChatGPT version 3.5) was used to identify cancer-related campaigns and analyze fundraiser stories to extract campaign-level characteristics (ie, patient sociodemographic characteristics, cancer diagnosis, and treatment information). The detailed NLP process is documented elsewhere.⁷ The campaign-level characteristics included age of the cancer survivor, sex, marital status, family size, insurance coverage, employment status, living with dependent children, school attendance, cancer site, stage at diagnosis, new versus recurrent diagnosis, receipt of cancer-related treatment, and time since diagnosis. Other campaign-level characteristics included year of initiation, organizer type (patient vs families/friends/others), and fundraising story word count.

The crowdfunding economic measures included amounts of financial assistance requested (ie, fundraising goals), geographic location of the campaign organizer (ie, state where campaigns were initiated), and amounts of financial assistance received (ie, amounts of money raised through detailed donation records).

The maximum donations retrieved per campaign was 1,000. Donation records with >1,000 per campaign were hidden on the GoFundMe website and thus not retrievable (<0.01% [n=7] of all cancer-related crowdfunding campaigns). All donations were grouped at the campaign level to calculate the total financial assistance received during the entire study period for all cancer-related campaigns initiated between January 1, 2021, and February 28, 2023, with donation records through May 31, 2023, as well as within 30, 60, and 90 days after campaign initiation.

Descriptive statistics were calculated for financial assistance requested and received at campaign, state, and national levels, as were monthly median and IQRs of money raised per campaign. State-level analyses were based on the geographic location where campaigns were initiated. Separate bivariate analyses were conducted to examine associations between NLP generated campaign-level characteristics and (1) mean and median of financial assistance received per campaign and counts of peer-to-peer donations per campaign; (2) financial assistance received and requested $\geq$ \$10,000, respectively; and (3) financial assistance received $\geq$ 100% fundraising goals, respectively. Moreover, multivariate generalized linear regressions were conducted to examine the associations of key characteristics and total amount of financial assistance received per campaign (ordinary least squares regressions), money raised $\geq$ \$10,000, financial goal $\geq$ \$10,000, and financial assistance received $\geq$ 100% of fundraising goals (logistic regressions), respectively.

All data were analyzed using SAS 9.1 (SAS Institute Inc.) and Stata, version 16.1 (StataCorp LLC). The Strengthening of Reporting of Observational Studies in Epidemiology reporting guideline was followed for all statistical analyses. All data were publicly available, and this study was approved and exempted by the Morehouse School of Medicine Institutional Review Board.

Results

Summary Statistics of Financial Assistance Requested and Received

A total of 78,338 cancer-related crowdfunding campaigns were identified. To calculate the proportion of financial assistance

received versus requested, we noted that most cancer-related crowdfunding campaigns listed fundraising goals (96.8%; median = \$10,000; IQR, \$5,000–\$25,000; denominator) and received donations (99.6%; median = \$4,000; IQR, \$1,835–\$8,485; numerator) (Table 1). Only 349 (0.4%) campaigns did not receive any donations.

After excluding campaigns with fundraising goals below the 1st percentile (\$1,000) or above the 99th percentile (\$150,000), 74,452 cancer-related campaigns remained. Of which, a total of 74,120 cancer-related campaigns set fundraising goals and received donations. Among these, the average proportion of financial assistance received relative to requested was 43.8% (median, 36.2%; IQR, 16.3%–68.3%) over the study period. Most donations occurred within the first 30 days after campaign initiation; the median proportion received increased slightly, from 29.1% to 32.1% within 60 days and to 33.3% within 90 days. Only 11.5% of campaigns achieved their fundraising goals within 90 days (Table 1).

Campaign Characteristics Associated With Financial Assistance

Among 74,120 campaigns with fundraising goals that received donations, the proportions of NLP outputs for campaign-level characteristics were 19.6% for cancer survivors' age, 61.8% for sex, 5.1% for marital status, 12.9% for family size, 18.6% for insurance coverage, 20.9% for employment status, 16.6% for living with dependent children, 9.3% for school attendance, 80.6% for cancer sites, 34.2% for stage at diagnosis, 44.1% for new or recurrent cancer diagnosis, and 53.0% for time since diagnosis.

In analyses of 74,120 campaigns, results from both bivariate (Table 2, Supplementary Table S1 [available in the supplementary material]) and multivariate (Table 3, Supplementary Table S2) generalized linear regressions showed that cancer survivors who were younger (aged 1–17 years), male, had fundraising stories mentioning school attendance, and whose campaigns were organized by family members, friends, or others rather than by the patients themselves, received greater financial assistance and were more likely to reach their fundraising goals. Campaigns that mentioned living with dependent children raised more money (excess financial assistance received: \$898 [95% CI, \$733–\$1,062]; $P < .001$) but were less likely to reach their fundraising goals ($\geq$ 100% of goal raised: odds ratio [OR], 0.92 [95% CI, 0.86–0.99]; $P = .032$) because they requested higher amounts of financial assistance (fundraising goal $\geq$ \$10,000: OR, 1.18 [95% CI, 1.13–1.25]; $P < .001$) (Table 3, Supplementary Table S2). Similar patterns were observed for campaigns that mentioned marital status, health insurance coverage, new or recurrent cancer diagnosis, or stage IV disease, or included longer fundraiser stories (measured by word count; Table 3, Supplementary Table S2). Moreover, the amount of financial assistance received varied by cancer site in bivariate analyses, with brain, pancreas, and blood cancers receiving the most support (Table 2, Supplementary Table S1).

Cancer-related crowdfunding campaigns generally received less money, with the monthly median campaign-level financial assistance decreasing from the mid-\$4,000 range to the mid-\$2,000 range over the study period, while the magnitude of the IQR remained relatively stable (Figure 1).

National and State Level Estimates

Nationally, a total of \$506 million was raised (\$233.7 million annually; Supplementary Table S3), accounting for 34.5% of

Table 1. Campaign-Level Financial Assistance Requested, Received, and Fulfillment for Cancer-Related GoFundMe Campaigns (Jan 2021–Feb 2023)

Amounts of Financial Assistance Requested (n=75,813/78,338 [96.8%] Campaigns Set Fundraising Goals) ^a				
Mean [SD] ^a		Median (IQR) ^a		(5th and 95th Percentiles) ^a
\$19,714 [\$22,706]		\$10,000 (\$5,000–\$25,000)		(\$2,500, \$65,000)
Amounts of Financial Assistance Received, Stratified by Time Since Campaign Initiation (N=77,989/78,338 [99.6%] Received Donations During the 3-Month Follow-Up; N=349 [0.4%] Did Not Receive Any Donation During the 3-Month Follow-Up)				
Time Since Campaign Initiation (All With ≥3-Month Follow-Up)	Amount of Money Raised per Campaign	Proportion of Money Raised to Fundraising Goal		Proportions of Campaigns Reached Fundraising Goals
	Median (IQR)	Mean [SD] ^b	Median (IQR) ^b	n (%) ^c
Entire study period	n=77,989	n=74,120 (campaigns with fundraising goals and received donations between January 1, 2021, and May 31, 2023) ^d		
	\$4,000 (\$1,835–\$8,485)	43.8% [0.32]	36.2% (16.3%–68.3%)	8,455 (11.4%)
30 days after campaign initiation	n=76,354	n=72,627 (campaigns with fundraising goals and received donations within 30 days after campaign initiation) ^d		
	\$3,175 (\$1,490–\$6,740)	37.9% [0.31]	29.1% (12.5%–57.7%)	8,400 (11.6%)
60 days after campaign initiation	n=76,964	n=73,180 (campaigns with fundraising goals and received donations within 60 days after campaign initiation) ^d		
	\$3,510 (\$1,650–\$7,370)	40.4% [0.31]	32.1% (14.1%–62.0%)	8,428 (11.5%)
90 days after campaign initiation	n=77,229	n=73,424 (campaigns with fundraising goals and received donations within 90 days after campaign initiation) ^d		
	\$3,650 (\$1,713–\$7,675)	41.5% [0.31]	33.3% (14.9%–63.9%)	8,437 (11.5%)

^aCalculations excluded missing values and campaigns with fundraising goals below the 1st percentile (\$1,000) or above the 99th percentile (\$150,000), reducing the number of campaigns with fundraising goals from 75,813 to 74,452. The extreme values were excluded to avoid outliers (eg, campaigns with goals of \$1 that received \$899 or ≥\$1 million). Campaigns with goals but no donations were included.

^bFor campaigns in which the amount raised met or exceeded the fundraising goal, percentages were capped at 100% (ie, values >100 were set to 100%). Campaigns without any donations were excluded.

^cThe number and percentage of campaigns that met or exceeded their fundraising goals. Campaigns without fundraising goals or any donations were excluded.

^dThe number of campaigns differs from the overall total or from those listed fundraising goals because campaigns without a listed goal were excluded.

total financial assistance requested (ie, sum of fundraising goals: \$1.47 billion). A total of 4.45 million donation records were retrieved (median count per campaign: n=40; 5th and 95th percentiles: 7 and 160 donations, respectively). After adjusting for population size (US census 2023 estimate),¹⁹ the annual amount raised was \$109,191 per 100,000 people nationally.

The states with the most money raised in cancer-related crowdfunding were also the most populous with the largest economies¹⁹: California (\$62.7 million received of \$172 million requested [36.4%]; n=7,766 campaigns; n=496,388 peer-to-peer donations), Texas (\$44 million received of \$145 million requested [30.5%]; n=8,030 campaigns; n=373,583 peer-to-peer donations), and Florida (\$39 million received of \$137 million requested [28.5%]; n=6,639 campaigns; n=356,791 peer-to-peer donations) (Supplementary Figure S1 and Table S3). In addition to the overall size of cancer-related crowdfunding economy, we adjusted state population size to provide the average amount of financial assistance received per capita by state (US census 2023 estimates) and found that the states with the highest annual amount raised per 100,000 people were Vermont (\$226,067), Alaska (\$201,650), and Montana (\$200,458).

Discussion

In this comprehensive analysis of the cancer-related crowdfunding economy in the United States, we identified >78,000 GoFundMe campaigns that raised >\$506 million, accounting for approximately one-third of the total financial assistance requested nationwide based on fundraising goals. Although most campaigns received at least some funds, only one-ninth reached their fundraising goals. Previous research has reported that many campaigns explicitly mention medical financial hardship and unmet health-

related social needs.⁷ Our findings, which document the extent of discrepancies between amounts requested and amounts raised, underscore the persistent financial needs of cancer survivors and the fragility of safety nets in the United States. Moreover, state-level variations in total funds raised and number of donations received reflect differences in population size and state economies. Future research may also examine whether differences in state-level health care policies, such as Medicaid expansion, could affect cancer-related crowdfunding campaigns.

The national health care spending related to cancer is projected to reach \$246 billion by 2030.²⁰ For individuals with a cancer history, OOP costs are expected to continue rising as treatment costs increase and health insurers increasingly shift costs to patients.²¹ Approximately 12% of cancer survivors in the United States live in poverty,²² and two-thirds of adult survivors and their family members with medical debt have reduced spending on food, clothing, or other living necessities.²³ Our findings indicate that cancer-related GoFundMe campaigns raised approximately \$233 million annually from 2021 to 2023, representing <5% of estimated patient OOP costs in 2018 standard (\$5.6 billion).²¹ Although these statistics do not reflect the full extent of financial shortfalls, the gap between requested and received financial assistance for medical care and other needs among cancer survivors using GoFundMe campaigns is substantial.

Moreover, our results may underestimate the overall financial shortages experienced by cancer survivors in the United States, because an estimated 18.1 million individuals with a history of cancer were alive as of January 1, 2022, and approximately 2 million new diagnoses are expected to occur in 2024.²⁴ Only a small fraction participated in crowdfunding campaigns; some of those who did not participate may have limited access to

Table 2. Bivariate Analyses of Campaign Characteristics, Funds Received, and Goal Attainment for US Cancer-Related GoFundMe Campaigns (Jan 2021–Feb 2023)

Characteristic	NLP Output % of n=74,120	Financial Assistance Received (≥90 Days Follow-Up Donations)		≥100% Fundraising Goals Raised	
		Mean (Sample Size) USD	Median (IQR) USD	Column %	P Value ^a
All campaigns with fundraising goals and received donations	NA	6,441 (n=74,120)	3,970 (1,842–8,413)	11.41	NA
Age of cancer survivor					
Mentioned					<.001
1–17 y	19.59	7,985 (n=4,704)	5,615 (2,500–10,355)	11.84	
18–64 y		7,090 (n=9,072)	4,500 (1,999–9,250)	8.59	
≥65 y		4,242 (n=741)	2,351 (1,100–5,526)	6.21	
No NLP output		6,183 (n=59,603)	3,825 (1,820–8,108)	11.87	
Sex					
Mentioned					<.001
Female	61.84	6,544 (n=26,299)	4,252 (1,985–8,700)	9.72	
Male		7,637 (n=19,539)	4,975 (2,275–10,002)	11.04	
No NLP output		5,383 (n=28,282)	3,205 (1,565–6,880)	13.23	
Marital status ^b					<.001
Mentioned	5.13	9,020 (n=3,803)	5,934 (2,550–11,865)	9.28	
No NLP output		6,247 (n=70,317)	3,900 (1,830–8,205)	11.52	
Family size					
Mentioned					<.001
≥4 people	12.94	8,474 (n=6,364)	5,490 (2,403–11,193)	9.87	
≤3 people		6,885 (n=3,226)	4,250 (1,955–8,890)	8.99	
No NLP output		6,159 (n=64,530)	3,840 (1,815–8,104)	11.68	
Insurance coverage ^b					<.001
Mentioned	18.55	7,106 (n=13,752)	4,511 (2,100–9,340)	8.57	
No NLP output		6,226 (n=60,368)	3,858 (1,815–8,181)	12.05	
Employment status					<.001
Working	20.92	7,632 (n=8,004)	5,090 (2,388–10,073)	11.54	
Not working (n=7,502)/no NLP output		6,239 (n=66,116)	3,850 (1,807–8,170)	10.31	
Living with dependent children					<.001
Yes	16.59	8,027 (n=11,571)	5,120 (2,275–10,505)	10.00	
No (n=724)/No NLP output		6,086 (n=62,549)	3,795 (1,800–8,000)	11.67	
School attendance ^b					.376
Mentioned	9.33	8,231 (n=6,914)	5,740 (2,560–10,700)	11.73	
No NLP output		6,200 (n=67,206)	3,830 (1,810–8,120)	11.37	
Cancer site ^c					<.001
Breast	16.51	5,749 (n=12,240)	3,662 (1,785–7,604)	10.36	
Blood	13.58	7,219 (n=10,069)	5,000 (2,280–9,650)	12.09	
Brain	10.05	8,165 (n=7,447)	5,360 (2,392–10,571)	12.76	
Lung	6.98	5,613 (n=5,172)	3,370 (1,650–7,133)	9.28	
Colorectal	6.94	6,578 (n=5,145)	4,139 (1,940–8,705)	10.22	
Liver	3.90	6,942 (n=2,891)	4,260 (2,020–8,761)	11.62	
Pancreas	3.53	7,387 (n=2,616)	4,760 (2,118–9,657)	11.66	
Ovary	2.27	6,186 (n=1,686)	3,998 (1,780–8,185)	9.79	
Kidney	1.98	5,354 (n=1,468)	3,283 (1,655–6,975)	10.63	
Cervix	1.49	4,623 (n=1,104)	2,676 (1,368–5,728)	8.88	
Esophagus	1.47	6,755 (n=1,090)	4,148 (1,890–8,655)	11.28	
Throat	1.38	4,896 (n=1,024)	2,783 (1,500–5,975)	8.4	
Prostate	1.37	5,941 (n=1,018)	3,410 (1,685–7,361)	9.53	
Stomach	1.37	6,405 (n=1,018)	3,720 (1,625–7,965)	9.14	
Bladder	1.21	5,876 (n=899)	3,302 (1,550–7,370)	10.68	
Thyroid	1.16	4,764 (n=860)	2,949 (1,525–6,287)	13.14	
Others	9.12	6,739 (n=6,759)	4,185 (1,925–8,795)	11.3	
No NLP output	20.74	5,790 (n=15,375)	3,460 (1,657–7,565)	12.54	
Stage of diagnosis					<.001
Stage IV	34.17	7,309 (n=16,872)	4,717 (2,160–9,585)	10.23	
Stages I–III (n=8,457)/no NLP output		6,118 (n=57,248)	3,775 (1,790–8,025)	11.75	
New or recurrent cancer diagnosis					<.001
Mentioned (new, n=23,526; recurrent, n=9143) ^d	44.08	7,221 (n=32,669)	4,760 (2,195–9,490)	10.50	
No NLP output		5,734 (n=41,451)	3,425 (1,655–7,410)	12.13	

(continued on next page)

Table 2 (cont.). Bivariate Analyses of Campaign Characteristics, Funds Received, and Goal Attainment for US Cancer-Related GoFundMe Campaigns (Jan 2021–Feb 2023)

Characteristic	NLP Output % of n=74,120	Financial Assistance Received (≥90 Days Follow-Up Donations)		≥100% Fundraising Goals Raised	
		Mean (Sample Size) USD	Median (IQR) USD	Column %	P Value ^a
Receiving cancer-related treatment ^d					<.001
Mentioned	52.97	6,765 (n=39,258)	4,345 (2,005–8,900)	10.85	
No NLP output		5,966 (n=34,862)	3,595 (1,715–7,760)	12.03	
Time since diagnosis ^d					<.001
Mentioned (<1 y, n=16,252; ≥1 y, n=7,013) ^d	31.39	7,279 (n=23,265)	4,790 (2,210–9,540)	10.49	
No NLP output		5,982 (n=50,855)	3,640 (1,735–7,826)	11.83	
Year of campaign initiation ^e					<.001
2023 (Jan to Feb)	NA	5,481 (n=7,782)	3,160 (1,278–7,246)	10.04	
2022		5,660 (n=38,394)	3,195 (1,295–7,446)	9.47	
2021		7,644 (n=27,944)	5,130 (2,760–9,740)	14.46	
Campaign organizer ^e					<.001
Patients themselves	NA	5,424 (n=14,963)	3,150 (1,520–6,875)	9.34	
Family members/friends/others		6,633 (n=59,157)	4,225 (1,975–8,743)	11.93	
Fundraiser story word count ^e					<.001
≥330 words (fourth quartile)	NA	8,176 (n=18,297)	5,499 (2,530–10,589)	9.32	
211–329 words (third quartile)		6,813 (n=18,520)	4,496 (2,100–8,965)	11.43	
≤210 words (first 2 quartiles)		5,303 (n=37,303)	3,190 (1,570–6,838)	12.42	

All statistics were limited to campaigns with fundraising goals and received donations; those with fundraising goals below the 1st percentile (\$1,000) or above the 99th percentile (\$150,000) were excluded.

Abbreviations: NA, not available; NLP, natural language processing.

^aChi-square test statistics were calculated.

^bFor marital status, insurance coverage, and school attendance, “mentioned” indicates that the NLP outputs included both positive and negative responses (ie, married or not married, insured or uninsured, attending school or not attending school).

^cCancer site included 18 categories, listed in descending order by number of campaigns. “Other” and “No NLP output” were listed at the end. A total of 2,764 cancer survivors had multiple cancer sites identified by NLP outputs; as a result, the sum of all cancer sites exceeds the total number of cancer-related crowdfunding campaigns.

^dFor cancer diagnosis (new or recurrent), receipt of cancer-related treatment, and time since diagnosis, all NLP outputs were positive only (ie, new or recurrent cancer, actively receiving treatment, and recently or previously diagnosed). Time since diagnosis was calculated from diagnosis date and campaign initiation, with a 96% accuracy rate (50 stories randomly selected, 2,600 data points manually checked).

^eNo NLP outputs were needed because these campaign-level characteristics were available for 100% of campaigns.

internet and online banking services. Recent research showed that cancer survivors have lower credit scores and are 5 times more likely to file personal bankruptcy than individuals without a history of cancer.²⁵ Severe financial distress, including medical debt, personal bankruptcy, and high-intensity medical financial hardship, has been linked to increased mortality risk among cancer survivors in the United States.^{26–28} Our study provides complementary evidence regarding patients with cancer who initiated crowdfunding campaigns to raise funds from the private market. Most campaigns fell short of their fundraising goals. Although unpaid medical bills and medical debt may not be mentioned in GoFundMe fundraising stories, medical reasons are the top category among all GoFundMe crowdfunding campaigns.¹³

Our findings have clinical implications. Discussions of expected cancer treatment costs with the oncology care team have long been recommended as part of high-quality care.²⁹ The widespread use of crowdfunding and the gaps between requested and received amounts further underscore the importance of these conversations. Our findings suggest that discussions about the economic implications of cancer treatment, including effects on employment, schooling, and the living standard of other family members, are also important.^{30,31} Efforts to increase discussions about the implications of cancer care and to connect patients and families with relevant services are warranted.⁸ Recent changes in public policies by the Consumer Financial Protection Bureau (CFPB) targeting medical

debt may remove \$49 billion in medical bills from the credit reports of approximately 15 million consumers.³² Even so, medical expenses charged to regular credit cards may still appear in credit reports, and recent turbulence in government agencies, including the suspension of the CFPB, may undermine these ongoing efforts.³³

The COVID-19 pandemic may have boosted online donations due to the cancellation of many in-person charity events and activities.^{34,35} As a result, medical crowdfunding campaigns likely received increased attention, which may have contributed to higher donations per campaign in 2021 compared with those initiated later in the study.

A few previous studies examined specific text or keywords in a small number of fundraiser stories for successful crowdfunding campaigns, defined as achieving fundraising goals.^{15,36} In contrast, our study analyzed associations between campaign-level characteristics, extracted from fundraiser stories using NLP, and the amounts of financial assistance requested and received across >74,000 campaigns. We found that among cancer-related GoFundMe crowdfunding campaigns, those describing beneficiaries who were younger, male, married, living with dependent children, working or attending school, or diagnosed with metastatic disease were likely to receive greater financial assistance and achieve fundraising goals. Fundraiser stories that provide detailed patient sociodemographic information, along with cancer diagnosis and treatment details, may better connect with potential donors, attracting more attention and, as our results suggest, higher donations.

Table 3. Multivariate Regression of Campaign Characteristics, Funds Received, and Goal of Attainment for US Cancer-Related GoFundMe Campaigns (Jan 2021–Feb 2023) (N=74,120)

Characteristic	Financial Assistance Received		≥100% Fundraising Goals Raised	
	Excess Financial Assistance Received (95% CI) ^a	P Value ^a	OR (95% CI) ^b	P Value ^b
Age of cancer survivor				
1–17 y	673 (353 to 993)	<.001	1.16 (1 to 1.33)	.046
≥65 y	–2,145 (–2,700 to –1,591)	<.001	0.69 (0.51 to 0.95)	.021
No NLP output	235 (57 to 412)	.009	1.24 (1.14 to 1.35)	<.001
18–64 y	Ref		Ref	
Sex				
Male	939 (801 to 1,077)	<.001	1.13 (1.07 to 1.21)	<.001
No NLP output	366 (217 to 515)	<.001	1.31 (1.23 to 1.40)	<.001
Female	Ref		Ref	
Marital status		<.001		.75
Mentioned	1,366 (1,097 to 1,634)		1.02 (0.90 to 1.16)	
No NLP output	Ref		Ref	
Insurance coverage		.284		<.001
Mentioned	–79 (–224 to 66)		0.75 (0.70 to 0.80)	
No NLP output	Ref		Ref	
Employment status		.260		.002
Working	109 (–80 to 298)		1.15 (1.05 to 1.25)	
Not working/no NLP output	Ref		Ref	
Living with dependent children		<.001		.032
Yes	866 (701 to 1,031)		0.92 (0.86 to 0.99)	
No/No NLP output	Ref		Ref	
School attendance		<.001		.036
Mentioned	845 (602 to 1,088)		1.12 (1.01 to 1.24)	
No NLP output	Ref		Ref	
Stage of diagnosis		<.001		<.001
Stage IV	877 (748 to 1,006)		0.90 (0.85 to 0.95)	
Stages I–III/no NLP output	Ref		Ref	
New or recurrent cancer diagnosis		<.001		.45
Mentioned	376 (240 to 512)		1.02 (0.96 to 1.09)	
No NLP output	Ref		Ref	
Receiving cancer-related treatment		.935		.428
Mentioned	1 (–112 to 114)		0.98 (0.93 to 1.03)	
No NLP output	Ref		Ref	
Time since diagnosis		<.001		.389
Mentioned	464 (337 to 590)		0.98 (0.92 to 1.03)	
No NLP output	Ref		Ref	
Year of campaign initiation				
2023 (Jan to Feb)	–1,927 (–2,112 to –1,742)	<.001	0.65 (0.60 to 0.70)	<.001
2022	–1,781 (–1,894 to –1,667)	<.001	0.61 (0.58 to 0.64)	<.001
2021	Ref		Ref	
Campaign organizer		<.001		<.001
Family members/friends/others	1,182 (1,049 to 1,316)		1.27 (1.20 to 1.35)	
Patients themselves	Ref		Ref	
Fundraiser story word count				
≥330 words (fourth quartile)	2,270 (2,120 to 2,420)	<.001	0.86 (0.80 to 0.92)	<.001
211–329 words (third quartile)	1,081 (943 to 1,219)	<.001	1.00 (0.94 to 1.06)	.946
≤210 words (first 2 quartiles)	Ref		Ref	

For total financial assistance received, ordinary least squares regressions were conducted. Logistic regressions were used for money raised ≥\$10,000, fundraising goal ≥\$10,000, and money raised ≥100% of fundraising goals. All statistics were limited to campaigns with fundraising goals that received donations, excluding campaigns with goals below the 1st percentile (\$1,000) or above the 99th percentile (\$150,000).

Abbreviations: NLP, natural language processing; OR, odds ratio.

^aAll statistics were obtained from adjusted ordinary least squares linear regressions, controlling for all campaign-level characteristics included in this table.

^bAll statistics were obtained from adjusted logistic regressions, controlling for all campaign-level characteristics included in this table.

However, previous research also showed that campaign organizers with greater financial literacy are better able to craft “worthy” narratives that convey illness severity, financial need, and fundraising goals, which may, in turn, exacerbate health inequalities.³⁷

Even so, achieving fundraising goals may provide only temporary relief, as cancer survivors often remain at elevated risk for severe financial hardship, including personal bankruptcy, even years after diagnosis.³⁸

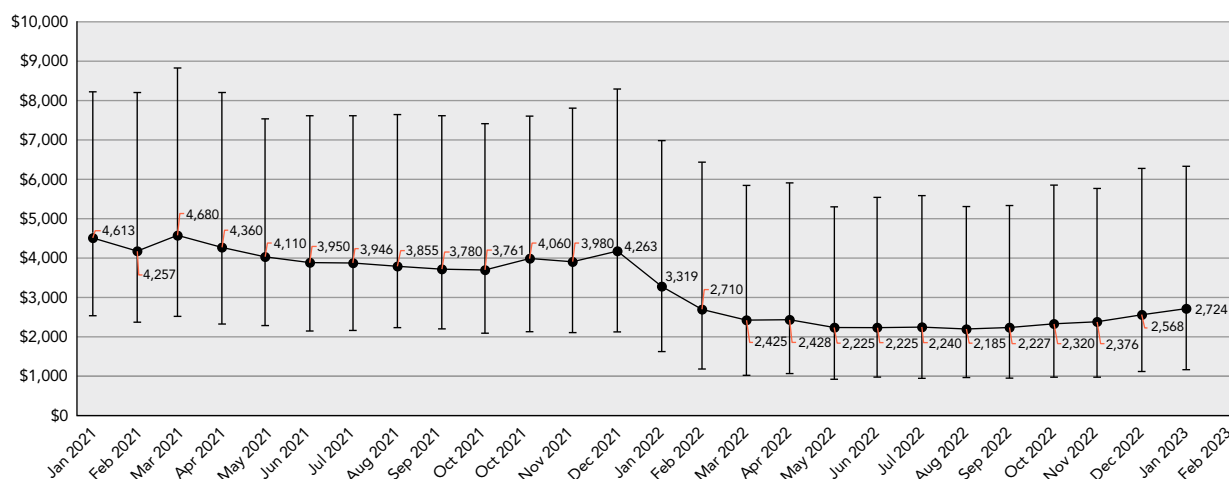


Figure 1. Monthly financial assistance received per campaign within 30 days of initiation. Black dots represent the monthly median, and error bars indicate IQR.

Cancers receiving the greatest financial assistance through crowdfunding were pancreatic, blood, and brain cancers, which are not among the most commonly diagnosed cancers in the United States.³⁹ However, these cancers are among the most expensive to treat and often require intensive therapy,^{20,40} potentially limiting patients' ability to resume usual activities, including work and school, during and after treatment.^{41–43} In contrast, cancers associated with tobacco use or alcohol intake may receive less attention. Our findings suggest that campaigns for lung, kidney, and liver cancers fall in the middle to lower range of total donations by cancer type. Another study reported disproportionately fewer social media posts about lung and colon cancers compared with other cancers, despite their being among the leading causes of cancer death in the United States.⁴⁴ Future research could further examine crowdfunding economy by cancer site, especially for sex-specific cancers such as prostate, female breast, and ovarian cancers.

Cancer survivors and their families may have concerns about initiating crowdfunding campaigns. Although cancer is a leading category in medical crowdfunding campaigns,¹³ only a small proportion of cancer survivors utilize for financial assistance.²⁴ This could be due to privacy concerns,⁴⁵ because medical crowdfunding campaigns may reveal personal identifiable information, such as pictures, names, diagnosis, and city of residence. Additionally, it is possible that patients may worry about being perceived as needy.⁴⁶

This study has limitations. All donation records were retrieved from the GoFundMe website, and less commonly used crowdfunding platforms were not included, likely leading to an underestimation of the total crowdfunding economy in the United States. No information was available about donors. Some NLP-generated variables had low output rates, possibly because patients may omit identifiable information due to privacy concerns, resulting in incomplete capture of certain campaign-level characteristics. Low NLP output for some variables could bias the associated results. Future advances in artificial intelligence may improve NLP output rates.

Conclusions

Cancer-related GoFundMe crowdfunding campaigns raised \$506 million in the United States from January 2021 to May 2023, representing roughly one-third of the total financial assistance requested and only a fraction of patients' total OOP costs. The widespread use of crowdfunding for medical care and basic needs, along with the high prevalence of unmet fundraising goals, underscores the financial precarity of cancer survivors and the fragility of safety nets in the United States.

Submitted September 24, 2024; final revision received March 13, 2025; accepted for publication May 14, 2025.

Author contributions: Study concept & design: Zheng, Chino, Islami, Yabroff. Acquisition, analysis, or interpretation of data: Zheng, Yu, Zhao, Banegas, An, Zhang. Statistical analysis: Zheng, Yu, An. Supervision: Zheng, Chino, Yabroff. Writing—original draft: Zheng. Writing—review & editing: All authors. Drs. Zheng and Yu had full access to all of the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis.

Data availability statement: The data analyzed in this manuscript are publicly available from the GoFundMe website.

Disclosures: Dr. Chino has disclosed receiving grant/research support from Merck. Dr. Yabroff has disclosed serving as a member of the NCCN Work Group, with all honoraria donated to the American Cancer Society. Drs. Zheng, Islami, Zhao, and Yabroff have disclosed being employed by the American Cancer Society, Inc., a not-for-profit public health organization that receives a small portion of support from corporations and industry to support mission programs and services. The remaining authors have disclosed that they have not received any financial consideration from any person or organization to support the preparation, analysis, results, or discussion of this article.

Disclaimer: The content is solely the responsibility of the authors and does not necessarily represent the official views of the American Cancer Society and the National Institutes of Health.

Supplementary material: Supplementary material associated with this article is available online at <https://doi.org/10.6004/jnccn.2025.7069>. The supplementary material has been supplied by the author(s) and appears in its originally submitted form. It has not been edited or vetted by JNCCN. All contents and opinions are solely those of the author. Any comments or questions related to the supplementary materials should be directed to the corresponding author.

Correspondence: Zhiyuan Zheng, PhD, American Cancer Society, Surveillance and Health Equity Science, 270 Peachtree Street NW, Suite 1300, Atlanta, GA 30303. Email: jason.zheng@cancer.org

References

- Yabroff KR, Dowling EC, Guy GP, et al. Financial hardship associated with cancer in the United States: findings from a population-based sample of adult cancer survivors. *J Clin Oncol* 2016;34:259–267.
- Weaver KE, Rowland JH, Bellizzi KM, Aziz NM. Forgoing medical care because of cost: assessing disparities in healthcare access among cancer survivors living in the United States. *Cancer* 2010;116:3493–3504.
- Altice CK, Banegas MP, Tucker-Seeley RD, Yabroff KR. Financial hardships experienced by cancer survivors: a systematic review. *J Natl Cancer Inst* 2017;109:djw205.
- Zheng Z, Jemal A, Tucker-Seeley R, et al. Worry about daily financial needs and food insecurity among cancer survivors in the United States. *J Natl Compr Canc Netw* 2020;18:315–327.
- Cohen AJ, Brody H, Patino G, et al. Use of an online crowdfunding platform for unmet financial obligations in cancer care. *JAMA Intern Med* 2019;179:1717–1720.
- Zafar SY. Crowdfunded cancer care—a reflection on health care delivery in the US. *JAMA Netw Open* 2020;3:e2027191.
- Zheng Z, Yu S, Islami F, et al. Natural language processing—assessed unmet medical and social needs in cancer crowdfunding stories. *JAMA Oncol* 2024;10:1726–1728.
- Triage Cancer. Quick guide to crowdfunding. Accessed May 22, 2025. Available at: <https://triagecancer.org/quick-guides/crowdfunding>
- Centers for Medicare & Medicaid Services. National health expenditure data – historical. Accessed March 19, 2024. Available at: <https://www.cms.gov/data-research/statistics-trends-and-reports/national-health-expenditure-data/historical>
- Duggan W. 7 Best crowdfunding platforms. Accessed March 5, 2024. Available at: <https://money.usnews.com/investing/articles/best-crowdfunding-platforms>
- Davis AR, Elbers SK, Kenworthy N. Racial and gender disparities among highly successful medical crowdfunding campaigns. *Soc Sci Med* 2023;324:115852.
- Jellyvision. GoFundMe examples medical expenses role in the U.S. Accessed September 10, 2024. Available at: <https://www.jellyvision.com/resources/blog/healthcare-consumerism/crowdfunding-medical-bills/>
- Yu S, Zhao J, Zhang J, et al. Crowdfunding campaigns and cancer survivorship: a comprehensive overview of GoFundMe in the US in the last decade. *JCO Oncol Pract* 2023;19(Suppl 11):Abstract 541.
- Zheng Z, Jemal A, Han X, et al. Medical financial hardship among cancer survivors in the United States. *Cancer* 2019;125:1737–1747.
- Zhang X, Tao X, Ji B, et al. The success of cancer crowdfunding campaigns: project and text analysis. *J Med Internet Res* 2023;25:e44197.
- Vox F, Folkers KM, Turi A, Caplan AL. Medical crowdfunding for scientifically unsupported or potentially dangerous treatments. *JAMA* 2018;320:1705–1706.
- Peterson J, Wilson TF, Watt MH, et al. International medical tourism of US cancer patients for alternative cancer treatments: financial, demographic, and clinical profiles of online crowdfunding campaigns. *Cancer Med* 2023;12:8871–8879.
- Prabhu AV, Bimali M, Miljanic M, et al. The use of crowdfunding to support radiation therapy cancer treatments. *Anticancer Res* 2021;41:3759–3767.
- U.S. Census Bureau. State population totals and components of change: 2020–2023. Accessed August 23, 2024. Available at: <https://www.census.gov/data/tables/time-series/demo/popest/2020s-state-total.html>
- Mariotto AB, Enewold L, Zhao J, et al. Medical care costs associated with cancer survivorship in the United States. *Cancer Epidemiol Biomarkers Prev* 2020;29:1304–1312.
- American Cancer Society Cancer Action Network. The Costs of Cancer, 2020 Edition. Accessed May 22, 2025. Available at: <https://www.fightcancer.org/sites/default/files/National%20Documents/Costs-of-Cancer-2020-10222020.pdf>
- Coughlin SS, Datta B, Williams LB, et al. Characteristics of cancer survivors living in poverty in the United States: results from the 2020 Behavioral Risk Factor Surveillance System survey. *JCO Oncol Pract* 2022;18:e1831–1838.
- Levey NN. In America, cancer patients endure debt on top of disease. Accessed May 22, 2025. Available at: <https://kffhealthnews.org/news/article/in-america-cancer-patients-endure-debt-on-top-of-disease/>
- American Cancer Society. Cancer Treatment & Survivorship Facts & Figures 2022–2024. Accessed May 22, 2025. Available at: <https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/cancer-treatment-and-survivorship-facts-and-figures/2022-cancer-treatment-and-survivorship-fandf-acsc.pdf>
- Gomez-Mayorga JL, Uppal N, Bogdanovski A, et al. Dollars and diagnoses: mapping the financial landscape among patients with cancer in Massachusetts (2010–2019). *J Am Coll Surg* 2024;239:S437–472.
- Ramsey SD, Bansal A, Fedorenko CR, et al. Financial insolvency as a risk factor for early mortality among patients with cancer. *J Clin Oncol* 2016;34:980–986.
- Yabroff KR, Han X, Song W, et al. Association of medical financial hardship and mortality among cancer survivors in the United States. *J Natl Cancer Inst* 2022;114:863–870.
- Han X, Hu X, Zheng Z, et al. Associations of medical debt with health status, premature death, and mortality in the US. *JAMA Netw Open* 2024;7:e2354766.
- Meropol NJ, Schrag D, Smith TJ, et al. American Society of Clinical Oncology guidance statement: the cost of cancer care. *J Clin Oncol* 2009;27:3868–3874.
- Snyder J, Chow-White P, Crooks VA, Mathers A. Widening the gap: additional concerns with crowdfunding in health care. *Lancet Oncol* 2017;18:e240.
- de Moor JS, Kent EE, McNeel TS, et al. Employment outcomes among cancer survivors in the United States: implications for cancer care delivery. *J Natl Cancer Inst* 2021;113:641–644.
- Consumer Financial Protection Bureau. CFPB finalizes rule to remove medical bills from credit reports. Accessed February 11, 2025. Available at: <https://www.consumerfinance.gov/about-us/newsroom/cfpb-finalizes-rule-to-remove-medical-bills-from-credit-reports/>
- Hines C. Shutting down CFPB could reopen wounds of the financial crisis. Accessed February 11, 2025. Available at: <https://www.consumeradvocates.org/news/shutting-down-cfpb-could-reopen-wounds-of-the-financial-crisis/>
- Fidelity Charitable. What comes next: how COVID-19 will influence giving in 2021 and beyond. Accessed March 5, 2024. Available at: <https://www.fidelitycharitable.org/insights/how-covid-19-will-influence-giving-in-2021-and-beyond.html>
- Streiff J. How to recover revenue from canceled fundraising events. Accessed March 5, 2024. Available at: <https://philanthropydaily.com/how-to-recover-revenue-from-canceled-fundraising-events/>
- Hou X, Wu T, Chen Z, Zhou L. Success factors of medical crowdfunding campaigns: systematic review. *J Med Internet Res* 2022;24:e30189.
- Berliner LS, Kenworthy NJ. Producing a worthy illness: personal crowdfunding amidst financial crisis. *Soc Sci Med* 2017;187:233–242.
- Yabroff KR, Lawrence WF, Clauser S, et al. Burden of illness in cancer survivors: findings from a population-based national sample. *J Natl Cancer Inst* 2004;96:1322–1330.
- Siegel RL, Miller KD, Wagle NS, Jemal A. Cancer statistics, 2023. *CA Cancer J Clin* 2023;73:17–48.
- Miller KD, Nogueira L, Devasa T, et al. Cancer treatment and survivorship statistics, 2022. *CA Cancer J Clin* 2022;72:409–436.
- Bradley CJ, Yabroff KR, Dahman B, et al. Productivity costs of cancer mortality in the United States: 2000–2020. *J Natl Cancer Inst* 2008;100:1763–1770.
- Blinder VS, Gany FM. Impact of cancer on employment. *J Clin Oncol* 2020;38:302–309.
- French AE, Tsangaris E, Barrera M, et al. School attendance in childhood cancer survivors and their siblings. *J Pediatr* 2013;162:160–165.
- Plackett R, Kaushal A, Kassianos AP, et al. Use of social media to promote cancer screening and early diagnosis: scoping review. *J Med Internet Res* 2020;22:e21582.
- Ghazal LV, Watson SE, Gentry B, Santacroce SJ. “Both a life saver and totally shameful”: young adult cancer survivors’ perceptions of medical crowdfunding. *J Cancer Surviv* 2023;17:332–341.
- Levey NN. “We’re not doing that”: why a black couple wouldn’t crowdfund to pay off medical debts. Accessed May 22, 2025. Available at: <https://kffhealthnews.org/news/article/were-not-doing-that-why-a-black-couple-wouldnt-crowdfund-to-pay-off-medical-debts/>