Disseminating resources to support representative patient enrollment into cancer clinical trials: sequential adaptive testing of social media campaigns

Sukh Makhnoon, Muzeeb Shaik, Arthi Sridhar, Lisa Starkey-Wood, Leslie Pomeroy, Christine Duria, Jessica Lee, Sandi L. Pruitt, David Gerber.

[1]University of Texas Southwestern O'Donnell School of Public Health, [2]Harold C. Simmons Comprehensive Cancer Center; 2.Kelly School of Business, Indiana University; 3. Stamats – Cedar Rapis, Iowa, USA

Introduction

Participation in cancer clinical trials remains a challenge. While programs exist to reduce barriers, these resources often fail to reach the patients who need them the most.

A major gap is effective marketing and dissemination strategies. Social media offers a scalable channel for outreach, yet evidence-based guidance on how to leverage these platforms is scarce.

To address this, we developed a marketing campaign to test public service announcements regarding programs that support diverse enrollment into cancer clinical trials.

Methods

Eight social media campaigns were developed to engage: (1) Adults aged 18 or older who were either present within a one-mile radius of the Simmons Comprehensive Cancer Center (SCCC) in Dallas, Texas or have been during the prior 24-hour period; and (2) Community members who reside within a 200-mile radius of SCCC.

We tested the ads through a rapid experimentation process, often termed "A/B trials," to efficiently evaluate multiple design choices using live environments and users. A team of social media advertisement experts, in collaboration with clinical researchers, designed a marketing campaign for implementation across Meta platforms.

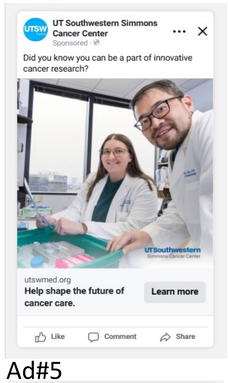
The campaign occurred in three A/B stages and lasted between May and September 2025.

Eight ads were developed that varied in message and visuals including individualistic vs altruistic headlines, individual images vs group images and image vs text-based ads; four were geared toward patients defined as one-mile radius of one of the cancer center locations and four were for the community audience defined as a 200-mile radius of our cancer center.

Results

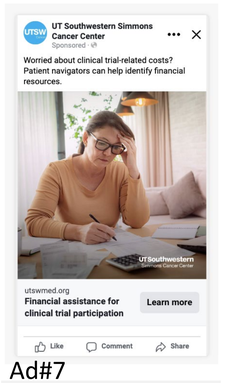
Over five-months, the eight ads had a total of 1,063,505 impressions, reached 318,587 individuals, generated 12,018 outbound clicks for over an overall click rate of 1.13% for a cost of $0.41 per click.

Ad#1

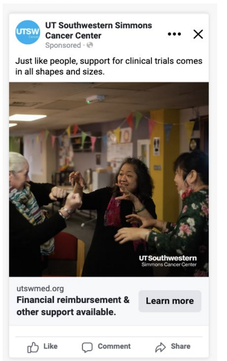


Ad#2

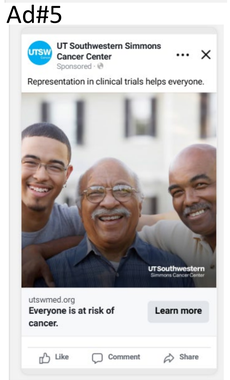
Ad#3



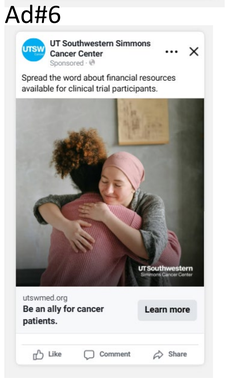
Ad#4



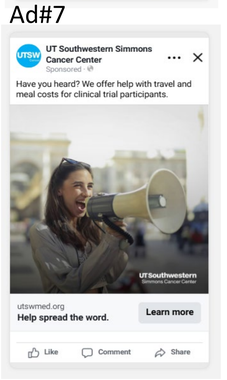
Ad#5



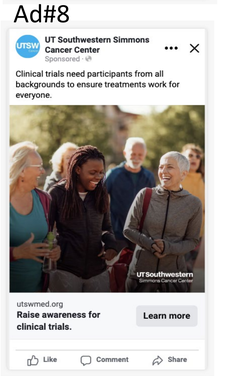
Ad#6



Ad#7



Ad#8



Among the four patient-facing ads, the **group image** had the highest click rate compared to ones depicting single person, image, or text only (1.48% vs <0.7%).

Among the four community facing ads, the **altruistic call** to disseminate information about clinical trial resources outperformed the other three (2.3% vs <0.5%).

The engagement resulted in **9,820 views** to the cancer center's webpage containing program information about cancer clinical trials and 116 unique clicks to search for cancer clinical trials.

Outcomes of Ad Performance

Patients (1-mile radius around UTSW)

Campaign duration: May 19, 2025- June 18, 2025		
Outcomes	**Ad#1**	**Ad#2**
Impressions	54,505	25,837
Reach	19,614	10,229
Clicks to Landing Page	335	116
Click Through Rate	0.61%	0.45%
Campaign duration: July 7, 2025 – August 10, 2025		
	Ad#3	**Ad#4**
Impressions	20,248	17,420
Reach	8,860	8,296
Clicks to Landing Page	126	134
Landing Page CTR	0.62%	0.77%
Clickthrough Rate	0.77%	1.48%

Community audience (200-mile radius around UTSW).

Campaign duration: May 19, 2025- June 18, 2025		
Outcomes	**Ad#5**	**Ad#6**
Impressions	110,025	103,459
Reach	45,019	42,663
Clicks to Landing Page	348	391
Click Through Rate	0.32%	0.38%
Campaign duration: July 7, 2025 – August 10, 2025		
	Ad#7	**Ad#8**
Impressions	36,566	19,258
Reach	22,385	15,504
Clicks to Landing Page	232	143
Landing Page CTR	0.63%	0.74%
Clickthrough Rate	2.28%	0.95%

Discussion

With a modest $6,000 social media investment, we drove significant engagement with cancer clinical trial resources, showing that digital campaigns can effectively raise awareness among patients and communities.

For most cancer centers, marketing and dissemination related to clinical trial resources are unassigned or shared responsibilities. Future efforts should embed marketing expertise and infrastructure into trial support operations to ensure equitable participation.

Contact Information

Sukh Makhnoon, PhD
Sukh.Makhnoon@UTSouthwestern.edu

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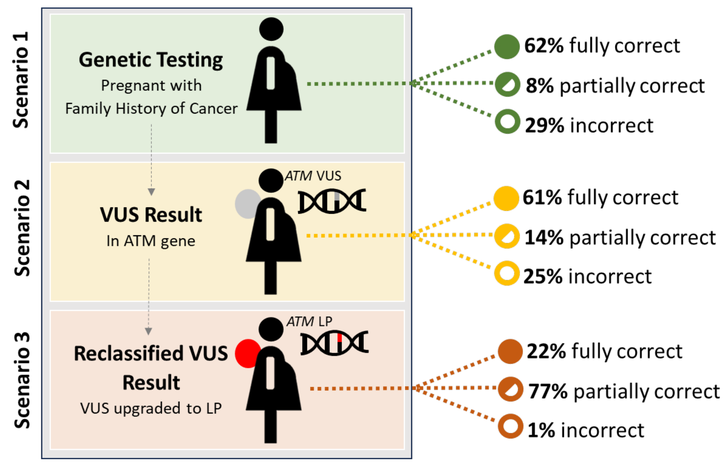
UT Southwestern Harold C. Simmons Comprehensive Cancer Center

NCI Designated Comprehensive Cancer Center

	Community Medical Setting, n (%)		Community Setting with Academic Appt., n (%)		Tertiary/Academic Medical Setting, n (%)	
	Yes	No	Yes	No	Yes	No
Do you discuss the potential for reclassified results when disclosing results to patients?	147 (65%)	78 (35%)	69 (62%)	43 (38%)	102 (54%)	86 (46%)
Have you ever received an updated genetic test report with reclassified variant?	81 (36%)	144 (64%)	27 (24%)	84 (76%)	42 (23%)	144 (77%)



- 64% worked at a community medical setting
- 55% saw roughly equal number of obstetrics and gynecology patients
- 36% had been in practice >20 years
- 73% had no training in genetics
- 66% but had genetic services available at their practice

Potential Conclusion Statement:

Other common concerns about genetic testing included patient anxiety about results, belief that patients should receive genetic counseling prior to testing and potential unintended harm from unnecessary treatments.