St. Jude Children's Research Hospital Report

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AdPR 5750/7750: Social Media Analytics





TABLE OF CONTENTS

Executive Summary

Q4 Recommendations

Owned Data

Earned Data

Earned Organization Data

Earned Comparable Organization Data

Earned Topic Conversation Data

Twitter Network analysis

Appendix

Executive Summary

Date range: March 27 - August 29

To analyze St. Jude's social media engagement, we looked at their owned data (n=300), earned organization data (n=26,127), earned comparable organization data (n=27,670), and earned topic conversation data (n=5,050,000). To gather information about each of these datasets, we used **Brandwatch** - a social media suite company.

St. Jude has been dragged into the United States' polarized political environment; Eric Trump was accused of funneling St. Jude donation money into his personal foundation. This has resulted in arguments between both sides of the political spectrum, dragging St. Jude's name into the mix. Additionally, live gaming fundraisers (on platforms such as Twitch) have proven to be one of St. Jude's largest fundraising events, however they have done very little to no promotion about it on their website or Twitter page.

We were unable to access data from Instagram, Facebook, and Tumblr due to lack of data.

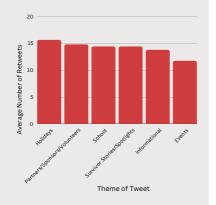
Owned Data

Calculating average engagement by analyzing number of retweets

Volume: 300 tweets

Analyzed:

- Theme
- Image Content
- Hashtags
- Mentions
- URLs

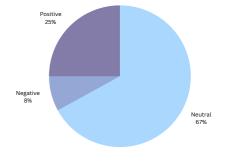


Organization Earned Data

Volume: 26.1K tweets

Themes:

- Raising Money
- St. Jude Research
- Cancer Treatment



Comparable Earned Data

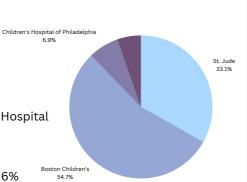
Volume: 83K tweets

Competitors:

- Boston Children's
- Children's Hospital of Philadelphia
- Nationwide Children's Hospital

Competitor Volume

- St. Jude 27.6K
- Boston Children's 45.6%



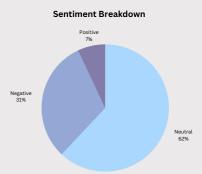
Topic Earned Data

Topic: Survivor Stories

Volume: 4.5 million tweets

Themes:

- Fundraising
- Breast Cancer
- Stem Cell Treatment



Conversation (neutral): celebrating being cancer free

Recommendations



OWNED DATA

1.

What to Do:

How to Do It:

Why:

Informational posts don't garner as much engagement as survivor stories. They should still include informational content, but connect them back to survivor/success stories.

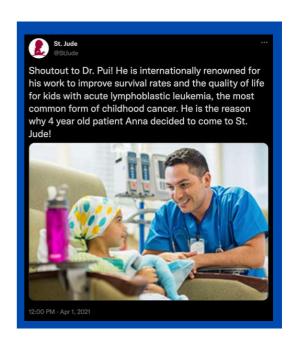
Include info about a survivor who received a specific treatment that they're making these informational posts about. For example, a kid who received specific treatment that a St. Jude doctor directly researched and/or worked on. Also post before and after treatment pictures.

Survivor stories tend to do better engagement wise (n= 14.36) than informational ones (n= 13.73). By including St. Jude patients in each post, it humanizes them and shows St. Jude's direct impact on their patients.

1.

2.





2.

What to Do:

How to Do It:

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OWNED DATA

3.

What to Do:

How to Do It:

Why:

St. Jude should partner up with popular influencers from another social media app for a Twitter takeover. TikTok is extremely popular amongst younger demographics and can help drive traffic to their page and/or website.

TikTok can invite popular creators to their events (such as the PGA tournament) and have them do a Twitter page takeover from St. Jude's account and have them retweet everything they post on their personal page. They can also include a link in their bio that will take them to the St. Jude website. Include the influencers mentioned in each of their posts.

Posts that include mentions of public figures/celebrities or partners/sponsors receive the most engagement (n= 16.86) and those without them have the lowest engagement (n=14.28). Including more public figures and sponsors will increase awareness and engagement for St. Jude

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FARNED DATA

4.

What to Do:

How to Do It:

Why:

Reach out to those who are upset about St. Jude only treating vaccinated patients on social media.

- Inform them on the reasoning for why St. Jude isn't treating those who are unvaccinated
- Discuss the benefits of being vaccinated and how getting treated for cancer will increase their survival rate more than if they weren't unvaccinated
- Use hashtags like #covidprotection #getvaccinated #beatcovid

• Within the conversation of Cancer Treatment, 13.1% (n=4,437), the discussion about having cancer and being unvaccinated takes up 4% of that conversation. Hashtags, URL, etc.

EARNED DATA

What to Do:

How to Do It:

Why:

Reach out to those on social media who are upset about Eric Trump having to resign from his cancer foundation.

- Inform them that the decision was based on ethics
- Assure them that St. Jude does not. participate in politics
- Encourage followers to ignore any controversies related to politics by using hashtags such as #noplaceforpolitics or #helpthechildren
- They can also use hashtags like #charity and #cancerfoundation
- Politics are a polarizing issue that have no place when it comes to treating childhood cancer
- This is the top shared URL (n= 727) in St. Jude's dataset, and it doesn't even have to do with any information pertaining to St. Jude's philanthropic work whatsoever.





What to Do:

How to Do It:

Why:

- St. Jude should promote their twitch livestream gaming events on their main Twitter account, not just @stjudeplaylive
- Retweet and quote tweet each post from @stjudeplaylive that involves any sort of fundraising gaming event in order to encourage followers to participate
- Post stats about how much money has been raised from livestreams in the past
- Use hashtags such as #gamingdoesgood, #stjudelivestream or #twitchfundraiser and tag @stjudeplaylive
- Twitch is the top shared website and URL in the dataset (n=2,363) and is an extremely popular gaming platform that raises money
- Dr. Lupo (a gaming streamer) is one of the top mentioned users (n= 1,072) and raised over \$2.8M (their URL was shared over 400 times); if more of @Stjude's followers can get involved in an event like this, they can raise even more money towards cancer research.

TOPIC CONVERSATION DATA

What to Do:

How to Do It:

Why:

St. Jude should reach out to veterans on social media who need cancer treatments.

- Set up a fundraiser to raise money for cancer healthcare for U.S. veterans.
- Promote the fundraiser on Twitter and other social media platforms. This post can include details on how their donations specifically help U.S. veterans
- For example, this money will be used to pay for their treatments and surgeries
- Get politicians, celebrities, and other public figures to endorse or promote it on Twitter.
- Use hasthags like #veteranshealthcare #supportveterans #veteranswithcancer

- Within the conversation of fundraising (n= 3,510,000) there was talk about how veterans do not have good access to healthcare
- People were tweeting (n = 37,145) about how it makes them upset how veterans aren't receiving the cancer healthcare they need, so St. Jude should show their support for this issue.

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What to Do:

How to Do It:

Why:

St. Jude should encourage people online to get screened for cancer regularly

- Post information about research showing the survival rates of different cancers when you catch it early enough compared to when it's found after major symptoms show/later screenings.
- For example, "Cancer that's diagnosed at an early stage, when it isn't too large and hasn't spread, is more likely to be treated successfully" (<u>cancerresearchuk.org</u>). "Around 70% of cancer deaths are caused by cancers not commonly screened for"
- Inform people on Twitter on how to get screened and what kinds of screenings they should be getting.

(gallery.com).

 Use hashtags like #cancerscreening #preventcancer or #cancerawareness

- Within the conversation of survival stories (n= 246,580) there was a lot of talk (n= n=45,318) about how people wished their loved ones or themselves had gotten screened sooner/more regularly.
- This information is critical and can be lifesaving for those who are reading it.

TOPIC CONVERSATION DATA

9 What to Do:

How to Do It:

Why:

St. Jude should raise awareness on social media about the lifelong affects after surviving breast cancer and how to support the survivors.

- Highlight public figures who have survived breast cancer to tell their story and empower others (ex: Christina Appelgate, a famous actress).
- Post encouraging tweets that make breast cancer survivors feel empowered and strong.
- Use hashtags like #bcsm #breastcancerawareness #breastcancersurvivor
- A top hashtag was #bcsm which is a social media volunteer organization dedicated to empowering those affected by breast cancer (n= 572)
- In the conversation of breast cancer (n=341,900), there were a lot of tweets (n= 39, 818) saying that there are a lot of hardships following the trauma of having breast cancer like dealing with mastectomies and reproduction.

9.



10.



10 What to Do:

How to Do It:

Why:

St. Jude should increase social media presence by including stem cell treatment success stories. Then, link their website to provide further information about research and outcomes

- Discuss the research that has been done in cases that have had successful outcomes using stem cell treatments.
- Provide survival rates of patients who received stem cell treatments (up to 80% of survival rates, priorityyoumd.com).
- Inform users on the process of starting a stem cell treatment and provide contact information for people with further questions
- Use hashtags such as #oncology and #cancer

- Within the conversation of stem cell treatment in the U.S. (n=67,870), there have been discussions about successful stem cell treatments with cancer patients
- Our top hashtags, #oncology and #cancer, included informational posts and positive outcomes of cancer treatments
- Our top URL was an article from ABC News which gave insight on a man who survived cancer after getting stem cell treatment

NODE XL DATA

11.

What to Do:

How to Do It:

Why:

- St. Jude should create more game live-streaming events on Twitch.
- St. Jude should reach out to popular Twitch livestream gamers to participate in fundraising events with @stjudeplaylive
- Tell participators that their Twitch account will be linked on the main St. Jude website to increase their engagement & shout them out on the St. Jude twitter account
- Use hashtags such like #twitchlivestream, #game4stjude or #stjudeplaylive
- One of the biggest clusters in our Network Analysis was focused on gaming livestream events. Twitch has been a large topic of conversation throughout all of our research. We believe that St. Jude should create more game live-streaming events to raise money.
- The group 2 cluster was about gaming livestreams that raised money for St. Jude, and it raised over \$2 million.
 This is clearly a successful fundraiser that St. Jude should take advantage of more.

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12.



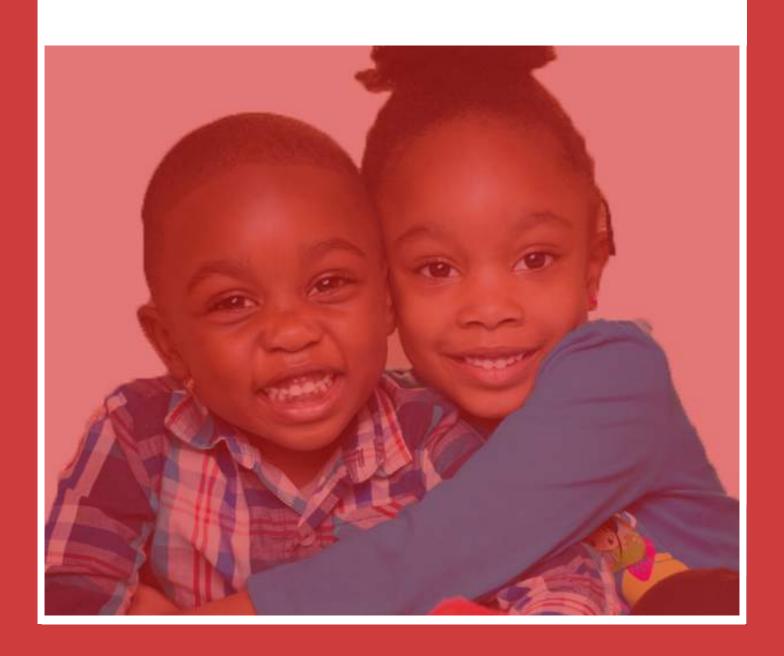
12 What to Do:

nat to Do: How to Do It:

Why:

- St. Jude should participate in more sports fundraising events life the FedEx golf invitationals at the yearly PGA Tour. They can partner up with sporting events like Wimbledon and The Tour.
- Post how much money they raised the year before and their goal for the next tournament.
- Provide information on how they can be involved in the event and how followers can donate money.
- Promote the event on their Twitter account to get their followers to watch the tournament and raise more money for the event.
- Use hashtags like #StJudeFedEx and #StJudeGolf
- One of the largest clusters was about the St. Jude/Fedex Golf Invitational. St. Jude raised over \$8.6 million last year through FedEx's golf tournament. This event sparked a large conversation and was extremely successful. It's beneficial to St. Jude, FedEx, and the PGA. We believe that St. Jude should keep participating in this event and other events like it.

Owned Data



Owned Data Actionable Insights

Date Range: March 27 - August 29

Volume: 300 tweets **Platform:** Twitter

Gathering data from St. Jude's Twitter account to measure their average engagement. We measured this data by looking at the tweets' themes, image content, hashtags, mentions, and URLs.



Average Retweets by Theme 20 15 15.58 14.74 14.36 14.36 13.73 11.69 10 Return of Tweet Theme of Tweet

Category	Total Number of Posts
Events	35
Informational	55
Survivor Stories/Spotlight Posts	98
School	28
Partners/Sponsors/ Volunteers	43
Holidays	19
Posts in Spanish*	2
Call to Action*	6
Other*	14

average of retweets (15.58), but there are only 19 posts relating to it.

• Average retweets is the same

• "Holidays" has the highest

 Average retweets is the same between "Survivor Stories/Spotlight Posts" and "School," but "Survivor Stories/Spotlight Posts" has 70 more posts.

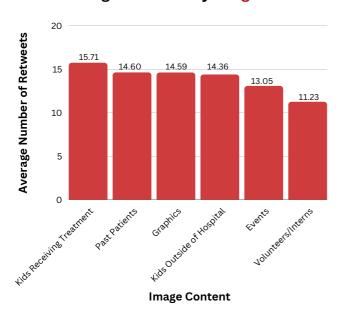
*unreliable data

Holiday Post:



Owned Data Actionable Insights

Average Retweets by Image Content

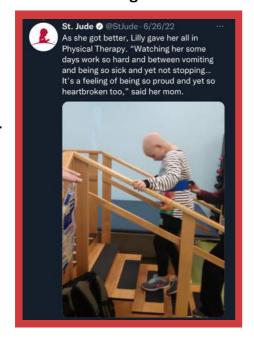


Category	Total Number of Posts
Kids Receiving Treatment	14
Past Patients	52
Graphics	49
Kids Outside the Hospital	83
Events	22
Volunteers/Interns	26
Other*	54

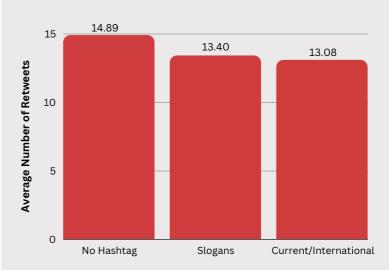
- Fairly similar averages ranging from 11.23 to 15.71, but total count has a large variety.
- "Kids Outside of the Hospital" has the highest count of posts (83), it has one of the lower averages (14.36).
- "Kids Receiving Treatment" has the highest average (15.71), but only 14 posts relating to it.

*unreliable data

Kids Receiving Treatment:



Average Retweets by Hashtag



Hashtag Type

Category	Total Number of Posts
No Hashtag	220
Slogans	30
Current/National	40
Events*	3
Celebrations*	3
Other*	3
Back to School*	1

*unreliable data

- Four categories were not included in the graph because total counts were very low.
- "No Hashtag" has significantly more posts than the other two, but the averages between the three remain fairly similar.
- Most of their posts do not include hashtags, but posts with hashtags garner slightly more engagement.

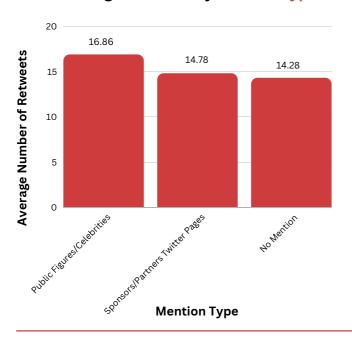
Holiday Post:



Example

Owned Data Actionable Insights

Average Retweets by Mention Type



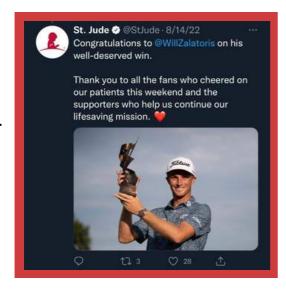
Category	Total Number of Posts
Public Figures/Celebrities	7
Sponsors/Partners Twitter Pages	46
No Mention	220
New Outlet*	2
Other*	5

- "No Mention" has the lowest average of retweets (14.28), but it has the highest number of tweets with an overall of 220 posts.

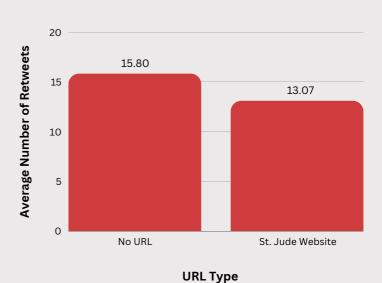
Highest average of retweets by mention is "Public Figures/Celebrities".

*unreliable data

Public Figures/Celebrities Post:



Average Retweets by URL



Category	Total Number of Posts
No URL	153
St. Jude Website	142
News Website*	1
Other*	4

*unreliable data

- "St. Jude Website" is the dominant URL across all of St. Jude's posts.
- · Tweets either mention the St. Jude Website or there is no mention at all.
- Tweets without a URL have the most retweets compared to the St. Jude Website with a difference in average of 2.73 retweets.

St. Jude Website:

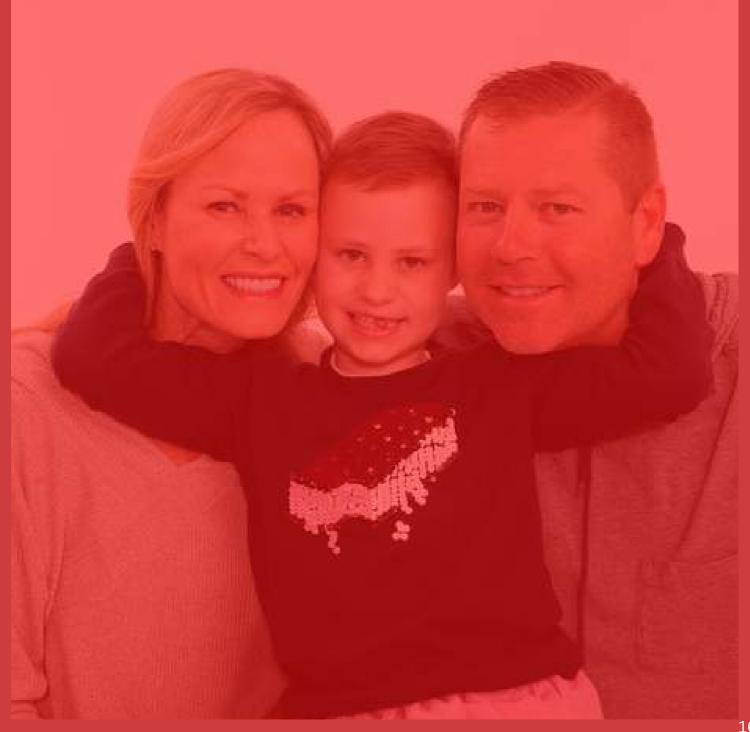


Earned Data



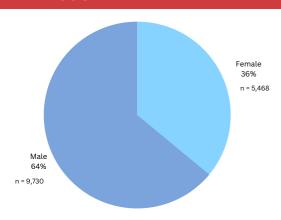
ST. JUDE'S

Earned Organization Data



Earned Organization Data Insights

Twitter



Top items:

Hashtags:

#StJude (N=7.765)

This is the top hashtag with 156,342,770 impressions. Posts including #StJude discuss a wide variety of conversations. Some are about people sharing stories about their treatment at St. Jude, others are about donating and participating in charity events, and there are some posts that are informational.

#killcancerfortechno (N=2,544)

This hashtag is correlated with the Twitch gaming livestream where all profits generated were donated to St. Jude.

#charity (N=1,461)

The posts with this hashtag are users asking people to donate to charities for cancer or they're talking about donating themselves.

Retweets:

The top retweeted item is @StJude (N=20,680) which is St. Jude's Twitter account.

Most Mentions:

@StJude (N=35,160):

This is the organization's main Twitter account

@stjudeplaylive (N=2,522):

This account is for the video game charity platform supporting

St. Jude Children's Research Hospital

@drlupo (N=1,516):

A YouTube streamer who participated in the #killcancerfortechno St. Jude game streaming event

Influential User:



@ninja: this verified user is a massive Twitch livestreamer with 6.7M followers on Twitter; he posted several different tweets about the St. Jude Play Live fundraising livesream event

Sentiment: Negative 8% Positive 25% Neutral 67%

The 25% (N=268) of tweets that have a positive sentiment are users praising St. Jude for the incredible work they do and sharing how much money they have raised for the organization.

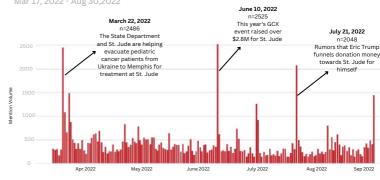
The **8%** (N=86) of tweets that have a **negative sentiment** are mostly about Eric Trump's scandal where he was believed to be putting St. Jude donation money directly into his own foundation

Spike Analysis:

Mentions: 62.48K

Volume Over Time

Mar 17, 2022 - Aug 30,2022



Blogs & Forums

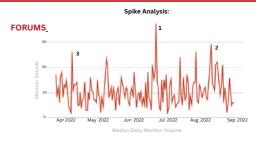
Positive 1% Negative 1% Negative 1% Negative 1%

Positive Conversations:

(N=108) The one positive post was in appraisal of St. Jude for treating a young boy's lung cancer free of charge.

Negative Conversations:

(N=9) Insufficient data - only 9 conversations total, and none were specific enough to St. Jude or a topic.

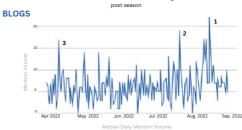


(n = 38) These conversations are about the Twitch livestream event where the proceeds went to St. Jude

the de

(n= 29) These conversations are about a PGA judge denying three Saudi Arabian golfers to play in the St. 3

(n = 24) This conversation was started by a user asking if St. Jude donations are a



(n = 23) This spike is from users talking about Will Zalatoris', an American professional golfer, win in the St. Jude PGA

(n = 18) This conversation is from a conservative blog talking about how St. Jude is located in Memphis Tennessee 3 (n= 16) a user Jude is Blue Wa

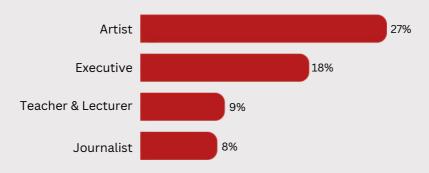
(n= 16) This blog post is from a user talking about how St. Jude is in a partnership with

Earned Organization Data Insights

St. Jude Tweets by Region:

80% of users tweeting about St. Jude are from the United States. We do not have enough information to do a state-by-state breakdown.

St. Jude Tweets by User's Profession:



Most users tweeting about St. Jude are artists (27%) followed by executives, teachers and journalists.

Top shared websites:





Video live streaming service that focuses on video game live streaming, including broadcasts of esports competitions, in addition to offering music broadcasts, creative content, and "in real life" streams. It has a total of 2363 impressions.





St. Jude's main website includes information about their care and treatment, where to donate, their research, training, ways to get involved and their mission statement. It has 1318 impressions.



Free video sharing social media platform that makes it easy to watch online videos and create/upload your own videos. It has 1281 impressions.



Earned Organization Data: Theme Analysis

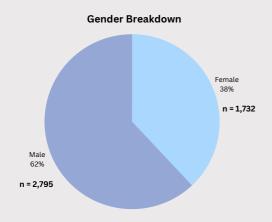
Theme: Raising Money

N = 15,430 (24.6%)

Conversation:

The theme's conversations are about charity events and fundraising campaigns. A lot of these fundraisers are organized online. One of the most popular fundraisers is a livestream on Twitch, a streaming platform mostly used for live streaming video games. During these streams, people would set a fundraising goal for St. Jude that they want to hit.

Most of the users tweeting about this theme are people who participated in St. Jude walks/runs and/or red carpet events. Tri Delta's philanthropy: to raise money for St. Jude. The sorority has raised over \$60M for St. Jude which attracted attention on Twitter.



Females:

Tweets about charity streaming events. Many of the livestreams took place over the platform, Twitch, and were run by individuals online.

Males:

Tweets on what individuals have been donating to St. Jude. Some of these are small charity events run by individuals or ways they have raised money for St. Jude. Also, tweets related to Trump Jr. swindling money from St. Jude that he said would be donated to St. Jude.

Negative 2%

Overall Narrative:

(N=12,961); most of the neutral sentiment in this theme is from users talking about their own personal St. Jude fundraisers and/or charity events; one of the top tweets in this set is from the NFL, who held a 40 meter running contest where the profits went towards St. Jude.

Positive Conversations:

(N=2,160); Conversations about this topic surround the St. Jude charity livestream that took place on Twitch. The fundraiser goal was \$30,000 and over \$32,000 was raised.

Negative Conversations:

(N=309); Conversations about this topic are about how Eric Trump funneled donation money for St. Jude into his own foundation's account. Additionally, some people were talking about how upset they were about losing loved one to cancer and urged their followers to donate to St. Jude.

Top Influencer:



@NFLnetwork

- The NFL's primary network twitter account with 4.8M followers
- They had 20+ different posts about their Run Rich Run fundraising event for St. Jude with Michael Vick, Robert Griffin III, Rod Woodson, Cris Carter & Eric Metcalf

Top URL:



(N=345) This link is for the GCX gaming event which is The Southeast's premier community gaming event and fundraising partner for St. Jude.

Top Hashtags:

#stjudeplaylive

(N=434) This hashtag is correlated with the global video game charity event fundraising campaign to end childhood cancer

#twitch

(N=661) This hashtag is associated with the twitch streaming charity event held for St. Jude. Twitch is a streaming platform mostly used for live streaming video games.

Top Mentions:

@marilyndiary

This account tweeted a picture of Marilyn Monroe at a St. Jude charity event in 1953; it has 3,998 impressions.



@firstcutpod

This golf podcast by CBS Sports Digital is mentioned for their affiliation with the PGA Fedex St. Jude championship; it has 2,317 impressions.



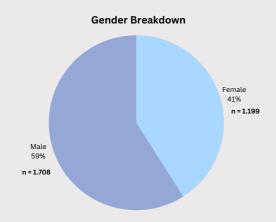
Earned Organization Data: Theme Analysis

Theme: **St. Jude Research N = 10,260 (16.4%)**

Conversation:

The theme's conversations are about users encouraging their followers to donate money to St. Jude for their cancer research. Many common tweets surround Childhood Cancer Awareness month (September).

A lot of users tweet about St. Jude fundraising events they have participated in or about how much money they have raised for cancer research on their own. Companies and businesses would also tweet encouraging their customers to donate to St. Jude.

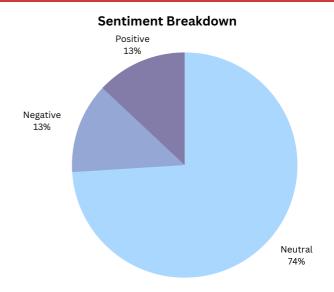


Females:

Consist of individuals tweeting to donate to St. Jude for pediatric cancer care and research. To donate to St. Jude for cancer research, people are hosting online streaming events and creating their own fundraiser .

Males:

Like the positive female conversations, positive male conversations are also talking about donating to St. Jude to help with cancer research for children. There are also tweets discussing Eric Trump Jr. pulling his funds from St. Jude. The tweets also brought up the Biden and Trump "double standard" which was also the negative conversations for women.



Overall Narrative:

(N=7,596); most of the neutral conversations are about St. Jude's groundbreaking research; additionally, many people were talking about how their research is possible through people's kind donations to the organization .

Positive Conversations:

(N=1,334); Conversations about this topic surrounding how much money has been raised for St. Jude's research through fundraisers and events.

Negative Conversations:

(N=1,331); Conversations about this topic are from Trump supports in regards to Biden wearing a Beau Biden foundation hat, but Eric Trump had to resign from his own foundation. They refer to it as a "double standard."

Top Influencer:

@ProPublica



- This is an independent, non-profit newsroom that produces investigative journalism in the public interest with 916.3K followers
- They posted several things about St.
 Jude's fundraising success and national
 cancer survivor month

Top URL:

The top URL for this theme is a link to twitch user @MicNic1291 page. This streamer held a successful fundraising event for St. Jude's research over Twitch and raised thousands of dollars. It has 292 impressions.

Top Hashtags:

#MWN & #Stocks

(N=8) These two hashtags are related to the market wire news article about St. Jude's licensing agreement with Blue Water Vaccines. Through research funded by Blue Water Vaccines, St. Jude designed genetic constructs to express bacterial proteins on the surface of Streptococcus pneumoniae.



Top Mentions:

@marketw

(N=72) This is the news outlet that shared the info about St. Jude's licensing agreement. They write about stock market news and updates for the public.

@inspiration4

(N=54) This is a civilian mission to orbit page that donates funds to St. Jude hospital.



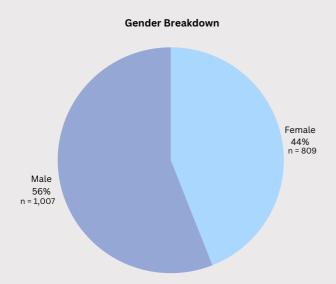


Earned Organization Data: Theme Analysis

Theme: Cancer Treatment N = 4,437 (13.1%)

Conversation:

This theme's conversation focused on the groundbreaking cancer treatments that take place at St. Jude Children's Research Hospital. Users' tweet about how St. Jude helps save the lives of many children with their care. There are also tweets from verified users urging their followers to donate money to help support children who are in need of cancer treatment.



Females:

Tweets telling people to raise money to help treat cancer for St. Jude children. Also, users are discussing the upsetting events of the war in Ukraine and how St. Jude is helping to bring safety to Ukrainian children.

Males:

Tweets telling people to help St. Jude children by donating or getting involved. Some people were participating in different events and announced their donations would be going to St. Jude. They are also having conversations about heartbreaking stories about the loss of St. Jude patients who were battling cancer.

Positive 13% Negative 4%

Sentiment Breakdown

Overall Narrative:

(N= 3,361); Most of the neutral conversations are people asking others to help the mission of finding better treatments and cures by donating money to St. Jude.

Neutral 83%

Positive Conversations:

(N=577); Conversations about this theme are users' praise for St. Jude and all of the helpful work they do in cancer research and developments.

Negative Conversations:

(N=177) Conversations are from angry users that believe it is wrong that St. Jude does not treat unvaccinated children

Top Influencer:



@RichEisenShow

- This is a twitter account for the TV show about sports news with host Rich Eisman that has 114.6K followers.
- They posted several things about raising money for St. Jude's through the #RunRichRun event.

Top URL:

The top URL for this theme is to the St. Jude website's "Music Gives" tab. The VMA's tweeted about Becky G being a St. Jude ambassador and included this link in it. It has a total of 40 impressions.



Hashtag:

#VMAs

(N = 87) This hashtag is for the St. Jude ambassadors at the Video Music Awards



Mentions:

@iambeeckyg (N=202)

Becky G is an American singer and actress. She was the primary St. Jude ambassador at the VMAs

@joeymooose (N=93)

A NFT account tagged this user as the inspiration for donating money to St. Jude based on how many likes, retweets and follows they get.

ST. JUDE'S

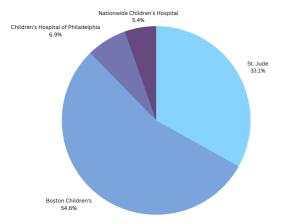
Earned Comparable Organization Data



Earned Comparable Data Summary

Volume: 83,000 tweets

Competition Breakdown



TOP MENTIONS

@libsoftiktok - A conservative Twitter account that spread misinformation in regards to Boston Children's transgender pediatric program - most tweets are of anti - transgender sentiment



@politifact - A news fact-checking page that @libsoftiktok claimed was working alongside Boston Children's Hospital to cover up that "they were giving hysterectomies to patients that are minors"



TOP HASHTAGS

#mothersday2022 (n = 4,036)

#dobiegrey (n = 1,278) - a digital release by late singer Dobie Gray was created to benefit St.

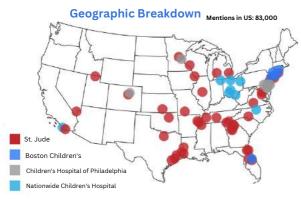
TOP URLs

<u>Vice:</u> (n = 2,567)

The viral Twitter account LibsofTikTok promoted a lie about genderaffirming care at the hospital—and now doctors are getting death threats.

ABC News: (n = 1,785)

Eric Trump funneled cancer charity money to his businesses, associates: Report



Boston Children's

Highest Concentration: Boston, Massachusettes

Theme: Different companies representing Boston Children's

Children's Hospital of Philadelphia

 $\textbf{Highest Concentration:} \ \textbf{Philadelphia}, \textbf{Pennsylvania}$

 $\textbf{Theme:} \ \textbf{Supporting children at the Children's Hospital of Philadelphia}$

Nationwide Children's Hospital

Highest Concentration: Columbus, Ohio

Theme: Supporting children at Nationwide Children's Hospital and raising money through events

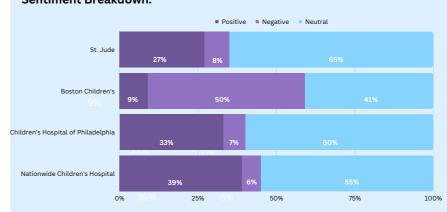
Volume:

St. Jude: N=27,670

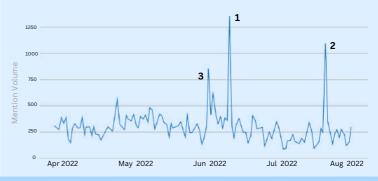
Boston Children's: N=45,630

Children's Hospital of Philadelphia: N=5,747 Nationwide Children's Hospital: N=4,465

Sentiment Breakdown:



Spike Analysis: Mar 27 - Aug 1

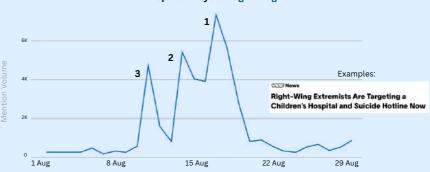


(n=1,343) **St.**Jude's twitch
livestream
fundraising event
that raised over
\$2M in donations

T(n= 1,084) Eric denies a report his charity funnels donations from donors who believe the money is going to St. Jude Children's Hospital to his Organization.

(n= 851) FBI director Christopher Wray blames Iran for 'despicable' attempted cyberattack on Boston Children's Hospital.

Spike Analysis: Aug 2 - Aug 29



(n=7,319) Far right extremists threatened to kill staff at Boston Children's Hospital for opening the country's first pediatric and adolescent transgender health program

(n=599) Tucker Carlson calls gender-affirming health care "sexual mutilation of children" on Fox news which prompted people's opinions on social media (n=5,394) Right-wing users were angry about Boston Children's Hospital deleting information about their pediatric transgender program's treatments

23

ST. JUDE'S

Earned Topic Conversation Data



Earned Topic Conversation Data Summary

TOPIC: SURVIVOR STORIES

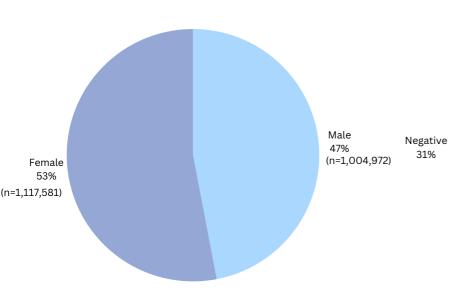
We are going to further analyze our topic conversation, survivor stories, to gain more insight on the data surrounding this conversation on social media. Survivor stories will include posts from or about people who have battled and survived cancer.

We will collect data including the breakdown of social media sites', the volume, and the demographics. After gathering this data, will will further explore the different themes within this conversation.

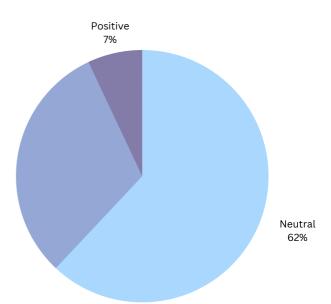
Date Range: March 27 - August 29

Volume: 5,050,000 tweets





Sentiment Breakdown



Breakdown by Sentiment:

Overall Narrative:

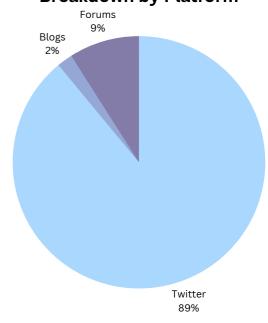
Neutral conversations on social media include online fundraisers and studies on different types of cancer treatment (preventive cancer vaccines). Many of these posts are specific to either children or women fighting cancer.

> **Neutral:** 62% (N=3,151,590) **Negative:** 31% (N=1,552,036) **Positive:** 7% (N=343,699).

Platform Volume:

Twitter: N=4,499,945 Forums: N=452,636 Blogs: N=94,745

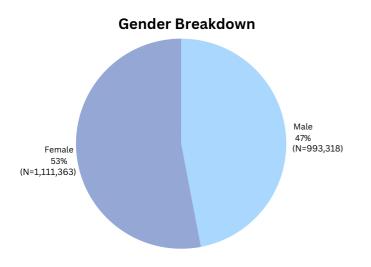
Breakdown by Platform



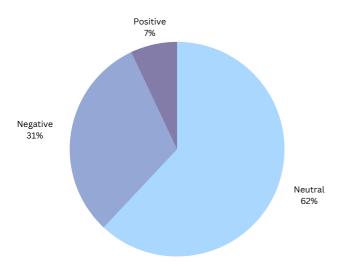
Earned Topic Conversation Data

Twitter Mentions: 4,499,945

Overall Narrative: Conversations surrounding informational posts about treatment successes, the development of cancer in women, and general statistics. General statistics include users discussing survival rates (1 out of 3 Americans will develop some form of cancer during their lifetime, @UHhospitals), the likelihood of getting cancer, and information on symptoms about different cancers (lung, breast, and colon). Also, users are sharing their personal stories of living with cancer or becoming cancer free.



Sentiment Breakdown



Narrative by Sentiment:

Overall Narrative:

(N = 2,817,381) Neutral-like conversations address different causes of cancer and give supporting evidence on what could've caused getting cancer. Within these tweets, users share their personal experience with having cancer.

Negative Conversations:

(N = 1,136,845) Tweets about patients dying from cancer or announcing they have just been diagnosed with cancer.

Top Influencers:

@UHhospitals



- University Hospitals 28.4K followers, Reach 37,294, 2 posts
- Offers primary care and a full range of specialty health services for adults and children across northern Ohio.
- Informational posts about cancer: "About 1 out of 3
 Americans will develop some form of cancer during their lifetime."

@Cancer_Cell



- Cancer Cell 51.2K followers, Reach 23,759, 72 posts
- Provides a high-profile forum for showcasing advances in cancer research
- Informational posts about cancer and diagrams showing the development of cancer

@JExpMed



- JExpMed 27.3K followers, Reach 37,294, 21 posts
- The journal of experimental medicine publishes immunology, cancer, stem cells, microbial pathogenesis, vascular biology, neurobiology
- Informational posts about research that has been done for cancer

Top Hashtag:

#breastcancer: this hashtag has the highest number of tweets (n = 9,118) of those relevant to this topic

Top Shared URLs:

GoFundMe: (n = 9,036) A husband setting up a fund for his wife living with cancer

GoFundMe: (n = 4,236) A male living with cancer set up a fund asking for donations

Top Users:

@NoLieWithBC: this user is a verified podcaster and news anchor who posts about politics and bills being signed into law (avg reach = 7, 013,195)

@CaitJGibson: she is a feature writer for the Washington Posts who tweets about important news stories on her account (avg reach = 5,416,664)

Positive Conversations:

(N = 251,681) Tweets from users sharing their story about surviving cancer or users sharing one of their loved one's story about surviving cancer. Many of the tweets included "beat cancer" in the text.

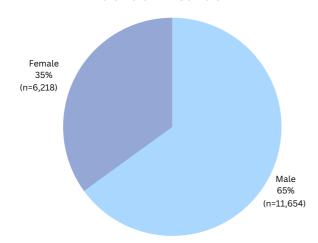
Earned Topic Conversation Data

Blogs & Forums

Mentions: 547,420 posts

Overall Narrative: Similar to tweets, most of the conversations include facts about cancer. Personal stories remain present in our analyses. With blogs and forums, users are specifically talking about breast cancer and how it has affected their lives.

Gender Breakdown

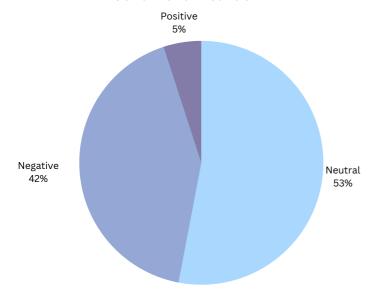


Gender Breakdown:

Females: (N=6,327); Women talking about having breast cancer or knowing another female with breast cancer.

Males: (N=11,763); Spreading stories about people in their lives who are battling cancer Also discussions about cancer in general. Some of those posts give users more information about different types of cancer.

Sentiment Breakdown



Narrative by Sentiment:

Positive Conversations:

(N=19,081); Many of these conversations are telling the stories of those who have survived cancer.

Negative Conversations:

(N=179,109); Like Twitter, Blogs and Forums discuss people from dying from cancer. There are also some informational posts about cancer symptoms, which generate negative sentiment due to their sad connotations.

Top Mentions

change.org: (n = 7,099) Parents sharing stories about

their children with cancer.

gofundme: (n = 4,356) People sharing pages to raise money for

their loved ones with cancer.

Top Shared URLs

4channel.org: (n = 141,881) Conversations about different foods

and products that can cause cancer.

<u>acertableforum.com:</u> (n = 17,254) Information about

paradigms for bacterial cancer that are frightening for children with cancer.

Top Users

unreliable data

Theme Analysis:

After creating our custom qualifiers, we used *Brand Watch* to customize our own themes based on the tweets that were relevant to our topic conversation.

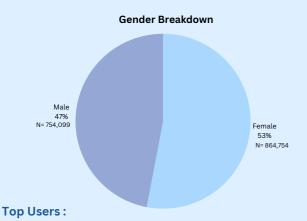
Theme: Fundraising

N = 3,510,000; 69% of tweets

Conversation:

Topics in this category surround different fundraising events and opportunities. They are also Informing people that they can donate to the National Breast Cancer Foundation. Other organizations have raised money for breast cancer awareness, for example, Dabo Swine's Ladies Clinic.

Tweets consist of people posting about different funds for cancer patients, treatment, and research. Also, users are asking for support to help cancer patients in Ukraine.



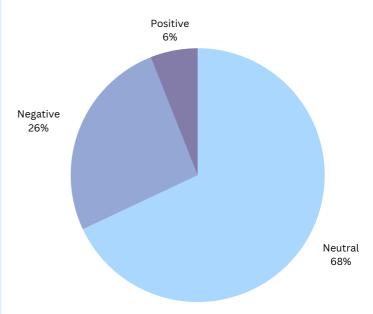
@omaze: this user is a fundraising company that helps to raise money for nonprofits. They supported a fundraiser to offering housing for pediatric cancer patients & their families (avg reach = 1,261,939) **@nytimes:** this renowned publication posted various tweets about cancer warning signs in addition to different fundraisers their followers can donate to (avg reach = 255,591)

Negative 26% Negative 26% Negative 26%

Negative (26%): (n= 204,654) These conversations are about Trump "stealing" money from the cancer foundation.

Positive (6%): (n= 55,454) Women encourage people to donate to their fundraisers for cancer research and treatments for loved ones.





Overall Narrative:

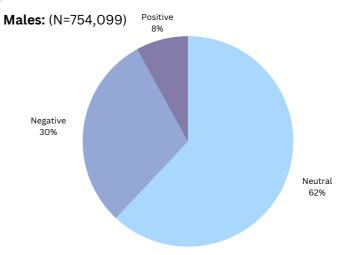
(n=2,387,081); Users asking for help to increase cancer screenings. Donation opportunities posted by users online, for example, the American Cancer Society.

Positive Conversations:

(n=249,645); These conversations are centered around congratulating those who have hit their fundraising goals for cancer research.

Negative Conversations:

(n= 972,963); Most of these conversations are about people's disdain towards a republican bill under the title X program that could take away basic healthcare funding such as cancer screening.



Negative (30%): (n= 224, 863) Men also have really political conversations healthcare and tax dollars that relate to cancer research money.

Positive (8%): (n= 58,654) Many of these conversations talk about sports related cancer fundraising events.

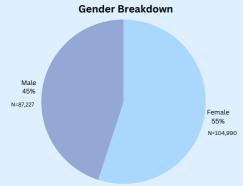
Theme: Breast Cancer

N = 341,900; 6.8% of tweets

Conversation:

Many of these conversations discuss different aspects of breast cancer. Past patients are announcing they beat breast cancer and some are announcing they've been diagnosed with breast cancer.

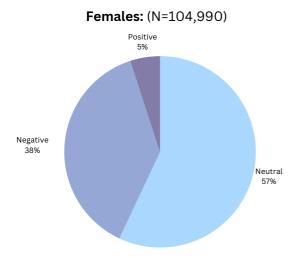
There are also posts that talk about breast cancer in general. Some of the informational posts are about different breast cancer symptoms and treatments, and others are about different donation opportunities. Some of the negative conversations surrounding this category are about patients dying from breast cancer.



Top Users:

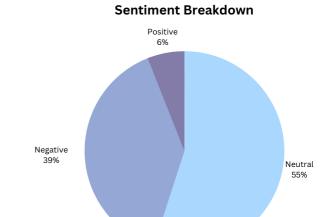
@marystanford3: this user's tweets are about her beating cancer; her followers are other survivors who celebrate her success (avg reach = 917,563)

@dailyloud: this viral hiphop news source tweeted about how there have been studies linking certain tattoo inks to cancer (avg reach = 328,724)



Negative (38%): (n= 39,818) These conversations are about women who have survived breast cancer, but are still suffering from the trauma and symptoms from all the chemotherapy.

Positive (5%): (n=5,945) this mostly consists of women asking their followers for prayers and donations.



Overall Narrative:

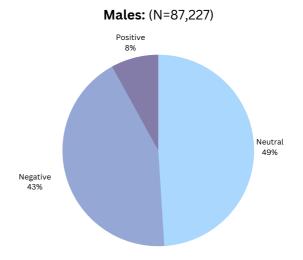
(n=223,390); Spreading information about breast cancer symptoms, causes, and treatments. Some personal stories on women who have been diagnosed or women who have beat cancer.

Positive Conversations:

(n= 30, 827); Most of these conversations are about women who have overcome breast cancer and are celebrating national cancer survivors day.

Negative Conversations:

(n= 21,027); Most of these conversations are about those who have sadly passed away from breast cancer.



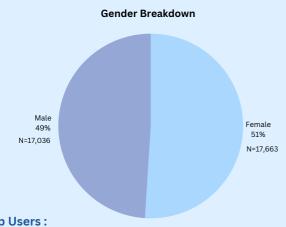
Negative (49%): (n=38,118) Men talk about the women in their lives who have suffered from breast cancer.

Positive (55%): (n=7,199) Many of these conversations talk about national cancer survivors day and saying prayers for their loved ones who are affected by breast cancer.

Theme: Stem Cell **Treatment Conversation:**

N =85,089; 1.6% of posts

In this category, users have conversations about the benefits of using stem cell treatments to help fight cancer There are discussions about T cells and how they fight cancerous cells. T cells can't get rid of the cancerous cells by themselves, but they play a role. People are also talking about recent breakthroughs in stem cells treatments.

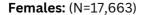


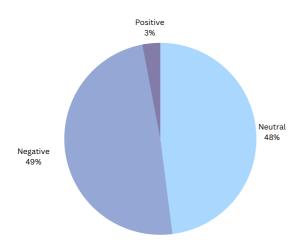
Top Users:

@kuiyopi: this user was in remission for bone cancer, however he was rediagnosed and started on stem cell treatment. Most of his engagement is from followers wishing him good luck (avg reach = 638,352)

@emmyloumack: this user is a mother who tweets about the success of her son's stem cell treatments for his cancer (avg reach = 567.497)

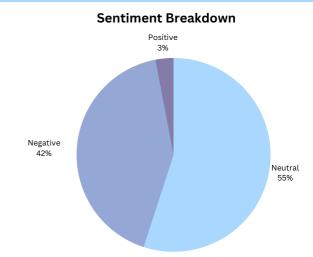
@hubermanlab: this user is a doctor who talks about the dangers of alcohol abuse, mentioning that it can cause cancer (avg reach = 376,686)





Negative (49%): (n=8,845) These conversations are about how jealous they are of current cancer patients who have access to better treatments like stem cell treatment.

Positive (3%): (n=427) Women talk about the success of stem cell treatment on their loved ones.



Overall Narrative:

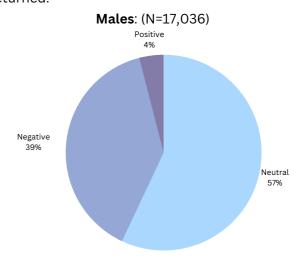
(n= 2,387,081); A lot of discussions online are specifically about lymphoma. Stem cell treatment is used for patients with leukemia and lymphoma, so there are conversations about new research on stem cell treatment and results of survivors.

Positive Conversations:

(n= 2,445); these conversations are about how far stem cell treatment research has come over the years and praising its success.

Negative Conversations:

(n= 32,381); most of the negative conversations are about those who have undergone stem cell treatment successfully, however their cancer has returned.



Negative (39%): (n=6,790) Men talk about how stem cell treatments have saved many patients, but so many people don't have access to it.

Positive (60%): (n = 654) Many of these conversations are thanking doctors and researchers for their developments in stem cell treatments that have saved themselves and their loved ones.

Top Items:

Theme: Fundraising

Hashtags:

#cancer (n=156,190)- cancer cures, informational posts, cancer survivors, living with cancer

Top URLs:

Dayton Daily News - article about abortion laws and what that means for a woman with cancer

Go Fund Me - fundraiser started by a user raising money for his step mom who has stage 4 breast cancer

Top Shared Sites:

<u>nbcnews.com</u> - Firefighter Gear May Increase Cancer Risk

<u>nytimes.com</u> - Breast Cancer Drug Results in "Unheard-of" Survival Rates

Top Influencer



@nytimes

- New York Times 54.7M followers, Reach -255,591, 4 posts
- Information posts about cancer (chemotherapy, chemicals causing cancer) and a personal story about the loss of a loved one from cancer

Theme: Breast Cancer

Hashtags:

#breastcancer - conversations about breast cancer survivors, informational breast cancer posts, patients' breast cancer stories (n = 636)
#bcsm - this is a social media volunteer organization dedicated to empowering those affected by breast cancer (n= 572)
#covid19 - this hashtag was used by a verified doctor; she said that it's a shame to witness cancer survivors die from COVID-19 and urged everyone to wear masks (n=481)

Top URLs & Sites:

<u>The Washington Post</u> - man accused of killing his breast cancer-stricken wife (797 mentions)

<u>GoFundMe</u> - This is a website that was set up by a woman's husband to raise money for her breast cancer treatments (441 mentions)

Top Influencer



@AACR

- American Association for Cancer Research -104K followers, Reach - 34,455, 1,231 posts
- Their mission is to prevent and cure cancer through research, education, communication, and collaboration

Theme: Stem Cell Treatment

Top URLs:

<u>ABC News</u> - 66 year old man free of cancer after getting stem cell treatment

NBC News - also about the man from the ABC News article

Top Topics

cancer cells - most conversations revolve around destroying cancer cells

cell proliferation - strategies to inhibit cell proliferation

Top Shared Sites:

<u>Cell.com</u> - informational site about cancer cells, mentions the positive effects of T cells

<u>Science.com</u> - treatments that seem to positively affect cancer cells

Hashtags

#oncology (n=272) - cancer treatments to repair cancer cells

#cancer (n=1,854) - informational posts, positive outcomes of cancer treatment

Top Influencer



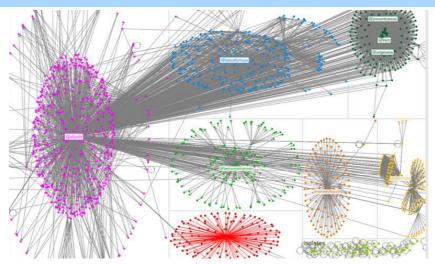
@ISSCR

- International society of stem cell research -17.7K followers, Reach - 648,344, 1,537 posts
- nonprofit organization that promotes excellence in stem cell science and applications to human health

Twitter Network analysis

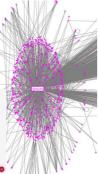
Nodexl Data

This data below is from NodeXL. We put in our specific St. Jude query and analyzed the large clusters of conversations regarding our organization. This data visualizes how conversations within St. Jude are happening. Our biggest influential user is @falloutforhope. This user is a gamer charity initiative team that helped to raise money for St. Jude. They are currently in a paid partnership with St. Jude.



G1: St. Jude Top URL:





Summary:

The first cluster here is about the PGA tour coverage of the Fedex St. Jude Championship. Patients got to play with pro golfers. The conversations about a brain cancer patient survivor who played in the game.

G4: **Fundraising Streams**





Summary:

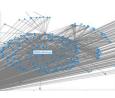
This cluster is mainly about an NFT collection, where people can buy "pixel tickets". A portion of the profit went to buying toys and games for the children of St. Jude.

G2: Gaming Live stream



Oncology

G3:



Summary:

This cluster is made up of conversations about the gaming live stream events held to raise money for St. Jude. It was one of St. Jude's largest fundraising events in 2022 raising over \$2 million.

G5: **Fundraising**



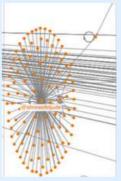
Summary:

This cluster of conversations are about various fundraising events and efforts to raise money for St. Jude including races and

Summary:

This cluster of tweets are mostly talking about the ASCO (American Society of Clinical Oncology) giving out a Pediatric Oncology Award. The award was given to St. Jude researcher, Leslie Robison, Ph.D..

G6: **Unrelated**



Summary:

This cluster is about an account called @shrineofstjude, which is about the Catholic St. Jude saint . The conversation is unrelated to our organization.



32

Appendix

ORGANIZATION QUERIES

Organization Query:

"St. Jude Children" OR @Stjude OR #stjude

Comparative Organization Query:

("St. Jude Children" OR @Stjude OR #stjude) OR ("Boston Children's" OR @bostonchildrens OR #Bostonchildrens) OR ("Children's Hospital of Philadelphia" OR @childrensphila) OR ("Nationwide Children's Hospital" OR @nationwidekids)

EARNED ORGANIZATION THEMES

Raising Money:

charity OR #charity OR fundraising OR #fundraising OR donate OR #donate

St. Jude Research:

research OR #research

Cancer Treatment:

treat OR #treat OR help OR #help

EARNED TOPIC CONVERSATIONS

Topic Conversation: Survivor Stories

"Cancer survivor" OR #cancersurvivor OR "beat cancer" OR "cancer free" OR #beatcancer OR @beatccorg OR @Cancer_Buzz OR @SurvivorsDay OR (#cancer OR cancer OR "leukemia survivor" OR #leukemiasurvivor OR "lymphoma survivor" OR #lymphomasurvivor OR "melanoma survivor" OR #melanomasurvivor)



