Patient Recruitment on Social Media: A Qualitative Analysis of Strategies by Pharmaceutical Companies on Facebook, Twitter, and YouTube

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Background
Pharmaceutical and biopharmaceutical companies have quickly established a presence on social media over the last decade with the majority of companies having a presence on multiple social media platforms. Though based on self-reporting from 14 pharmaceutical and biopharmaceutical companies, only 11% of trials at these companies were using social media to recruit subjects for clinical trials. These instances primarily occurred only in North America, with Facebook, YouTube, and Twitter being the most common mediums. Social media has potential to be an attractive tool for patient recruitment. The FDA has informed that direct research recruitment platforms have opportunities using media advertising is not an objectionable practice, so long as the content is not coercive and does not imply or promise a benefit beyond what is stated in the protocol and informed consent form, as interpreted by an IRB. The existing approaches by pharmaceutical and biopharmaceutical companies to recruit trial subjects with social media have varied in their degrees of directness and aggressiveness. This analysis looks to qualitatively characterize specific examples along that spectrum of directness, with the degrees of patient engagement, and in context of Good Clinical Practice (GCP) and the US Code of Federal Regulations (CFR).

Objectives
- To analyze and highlight different strategies of clinical trial patient recruitment on social media by pharmaceutical and biopharmaceutical companies.
- To examine each strategy with consideration of uniqueness, opportunities for patient engagement, ethical and regulatory compliance, and aggressiveness.

Methods
- A retrospective, qualitative analysis was performed on posts of the social media profiles of 12 pharmaceutical and biopharmaceutical companies via Facebook and YouTube by pharmaceutical companies aimed at recruiting subjects for clinical trials.
  - The scope included posts from social media accounts which self-identified with the name of the company’s name in the account’s title.
  - The inclusion criteria for individual trials and contract research organizations (CROs) were considered out of scope.
  - Keyword searches for relevant terms including “clinical trial,” “clinical study,” “research study,” and “investigational drug” were performed on Facebook, Twitter, and YouTube.
  - Unique examples were chosen for the analysis. Descriptions and analyses of each example were prepared assessing breadth of information shared, level of directness, opportunities for patient engagement, and unique tactics. The examples were also put into context of GCP and the CFR.
  - Screenshots of posts are blinded to readers to avoid bias when considering these approaches.

Results
1. A small, Canadian-based biopharmaceutical company recruits subjects for irritative bowel disease trials using Facebook, Twitter, and YouTube.
   - YouTube videos provide a list of investigator sites, eligibility criteria, and other information including the ICF protocol and potential AEs. Facebook posts discuss the investigational treatment and prompt potential patients to take a screening questionnaire. A contact phone number is shared directly in the text of the Facebook post.
   - The Twitter account is titled “Company” Crohn’s Trial, yet does not directly recruit for the posts. However, the tweets focus on disease awareness and patient inspiration.

2. A large, EU-based pharmaceutical company recruits subjects for oncology clinical trials using Facebook and Twitter.
   - Facebook and Twitter posts directly ask viewers if they or family members might qualify for an oncology trial and provide a link to the ClinicalTrials.gov page for the study.
   - Twitter posts are very frequent (2-3 per day) and are intended for US residents only, as noted in the account name and description.
   - The Twitter account is titled “University,” the Facebook and the Approximately 45,420 “Page Likes” (users following an account). There are opportunities for direct patient engagement for both with dozens of “Likes” (showing support for a post) and a few “Shares” (sharing a post across a user’s network) on several Facebook posts.

   - The videos are 4-6 minutes in length and systematically detail the study from concept to close. Why the study is being performed, who is eligible, what the time requirements are, and what costs are involved.
   - On multiple occasions, the videos direct the viewer to speak with their physician and refer the viewer and physician to ClinicalTrials.gov for more information. There is minimal chance for patient engagement as the comment sections are disabled.

   - Paid tweets are deployed from the company’s general Twitter account. It is unclear if these are targeted at certain users or demographics.
   - From user replies to the tweets, the majority of online engagement to date have been negative or facetious in nature.
   - The Twitter account does not otherwise tweet about clinical trials recruitment aside from the promoted posts.

Discussion
Each included case is within the realm of GCP and is not only covert or premised on a cure or unreasonable benefit. Some posts were more direct and aggressive than others though. Company 1’s approach was more aggressive than the others and was very direct prompting patients to take an online eligibility questionnaire or call a telephone hotline to learn more about the trial, and detailing important aspects of a trial with YouTube videos. Company 3’s videos lack much detail and provide too much information about key inclusion criteria, necessary procedures, and consent information for the reader to adequately make an informed consent decision. Company 2 called upon emotion and a sense of obligation, using frequent patterns to research a particular health condition and calling on potential readers to “help fill openings” and “help spread awareness.” The Facebook and Twitter platforms made it very easy to share the posts with a family member.

Conclusions
- A minority of pharmaceutical and biopharmaceutical companies have used company identified accounts on the social media platforms of Facebook, Twitter, and YouTube to recruit subjects for clinical trials. While the effectiveness of these approaches was not evaluated here, the strategies employed have been unique.
- The wide variety of available social platforms allow companies to tailor their recruitment messages in different formats, lengths, and interactivity. An approach across multiple platforms might be seen as a step for synergy and patient engagement.
- As more companies are creating accounts on social media globally and as clinical trial enrollment is becoming increasingly competitive in many disease states, it will be important for companies to consider social media for trial recruitment as a valuable strategy to obtain subjects and potentially expedite enrollment timelines.

References