



HELPSHEET

Workshop 1: Using Social Media Data to Gain Insights into Community Trends

ANALYSIS PROJECT #3

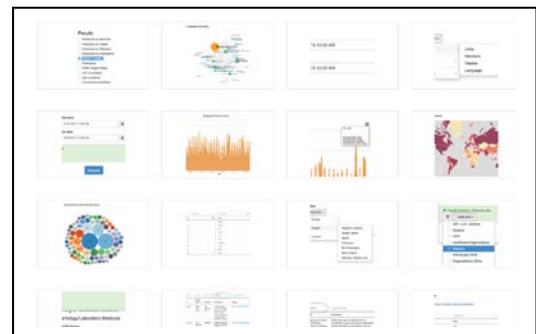
You are a student in a research lab. You have been thinking about proposing a new research idea to your supervisor. You want to find out more about how patients living with chronic pain may or may not openly express their condition and how providers, caretakers, family and friends can deepen their understanding, thereby better supporting those patients. To strengthen your case, you have decided to conduct a preliminary analysis using social media data. By providing preliminary insight into the following questions, you want to persuade your supervisor to apply for funding in support of a broader study. You focus your analysis on the following aspects/questions:

- What communities on social media exist that chronic pain patients are part of?
- Find out why chronic pain patients choose to join these communities.
- How has the activity level of these online communities changed over time?
- Are all stakeholders (patients, providers, caretakers, family and friends) present in these communities? How do they communicate differently from each other?
- Can you detect different languages?
- Where are people who participate in these online conversations located?
- Describe the interactions between the participants.
- What topics do they discuss? Are the discussions professional or personal in nature, involving how we may change and improve healthcare?
- What unique insight can you glean that a typical healthcare provider visit may not pick up on?
- What value may these communities bring to the patients? To the providers? To family and friends? Should you consider them in your research plan?

FAMILIARIZE YOURSELF WITH THE FILTER FUNCTIONALITY:

Go to this web page <http://www.symplur.com/signals/research/>.

Further information is available with every image caption.





HOW-TO GUIDE

1. **Learn more about the chronic pain, treatment, management, etc. in the U.S.**
 - [Chronic pain](#), by Medline Plus, U.S. National Library of Medicine, National Institutes of Health National Institutes of Health
 - [Chronic, Undertreated Pain Affects 116 Million Americans](#) based on Institute of Medicine report, by Time
 - [Chronic Pain Management](#), by WebMD
2. **What communities on social media exist that chronic pain patients are part of?**
 - Define the communities. Who are the people talking about this health topic? (Tip: See Hashtags Usage and People reports)
 - Can you identify key opinion leaders and influencers? (See the Influencer and Network Centrality reports; Note: Influencers are defined by multiple factors: number of messages sent, mentions by others, impressions, followers, and retweets. In addition to that, they also use network centrality algorithms such as betweenness, centrality, etc. These will rank people on “who” is the most referenced person, or “who” is the most central person in the network).
 - What’s the reach of these conversations? (See the Overview report)
3. **Find out why chronic pain patients choose to join these communities.**
 - See Content reports
4. **How has the activity level of these online communities changed over time?**
 - How many people participate in the conversations? How is the activity trending over time? Tip: See Tweet reports
5. **Are all stakeholders (patients, providers, caretakers, family and friends) present in these communities? How do they communicate differently from each other?**
 - See People reports including Participant report. Tip: Then use People->Patients, Doctors. etc. filter in order the filter the tweets by specific categories
6. **Can you detect different languages?**
 - See User Language report
7. **Where are people who participate in these online conversations located?**
 - See User Locations report
8. **What topics do they discuss? Are the discussions professional or personal in nature, involving how we may change and improve healthcare?**
 - What are the main conversational topics in the community? How do these change over time? What hashtags are being used? (See the Word Bubble, Keyword Frequency and Hashtag Usage reports)
 - Consider using the following filters:



- To explore people from specific locations use the People->Bio Location filter
 - To explore certain categories of people use People->Patients, Doctors, etc. filter
9. **What unique insight can you glean that a typical healthcare provider visit may not pick up on?**
- Tip: The Sentiment report may identify some pain points. The Transcript report in conjunction with Word filter may help you identify specific conversations of interest.
10. **What value may these communities bring to the patients? To the providers? To family and friends? Should you consider them in your research plan?**