# A COVID-19 Social Media Monitoring and Outreach Dashboard for Community-Based Trusted Messengers

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## Abstract

The COVID-19 pandemic has disproportionately impacted marginalized communities, in part driven by racialized and community-specific misinformation often rooted in historical institutional distrust. We are collaborating with various local research and community partners to support community-based trusted messengers in addressing COVID-19 vaccine hesitancy among Black and Latinx communities in the state of Georgia. We have developed a dashboard for social media monitoring and outreach for use by our partners and trusted messengers, which allows them to browse relevant social media content and craft responses using trusted resources. For this demonstration, we will showcase our live online dashboard and prototypes for several new features, and present preliminary user evaluation findings. Our dashboard is an early exploration of social media-based tools developed specifically for community-based trusted messengers with a public health use case.
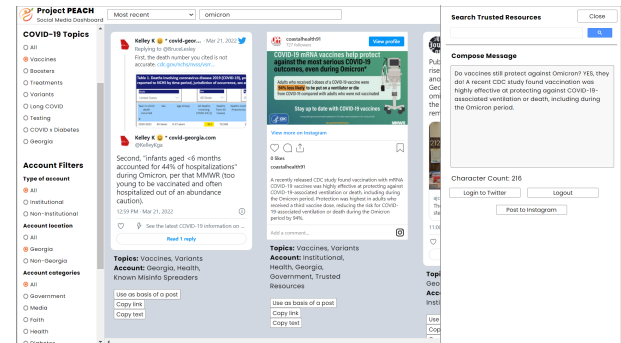
Figure 1: Screenshot of currently deployed dashboard for social media monitoring and outreach developed specifically for community partners in Georgia working to promote COVID-19 vaccination.

We are working in collaboration with researchers at Morehouse School of Medicine, Emory University, and several other research and community partners to address COVID-19 vaccine hesitancy among Black and Latinx communities in the state of Georgia.[1] The COVID-19 vaccination rate in Georgia has remained among the lowest in the U.S., with just over half the eligible population fully vaccinated as of March 2022 (CDC 2020). While the gap between the vaccination rate of Black Georgians and Hispanic Georgians with the rest of the state has narrowed over time (Trubey 2022), the impact of the COVID-19 pandemic on racial minorities has been disproportionately greater on all fronts: physical health and mortality, mental health, economic instability, and beyond (Akintobi et al. 2020).

Multiple barriers disproportionately impact minority communities' ability to and confidence in getting vaccinated, including racialized and community-specific misinformation often rooted in deeper historical distrust in government and health institutions (Collins-Dexter 2020; Longoria et al. 2021; Dodson, Mason, and Smith 2020; Kuo and Marwick 2021). Given these challenges, we are working to support community-based trusted messengers, who are knowledgeable of local and cultural contexts and have established community and interpersonal relationships, in their efforts to promote vaccination (Akintobi et al. 2020; Bibbins-Domingo, Petersen, and Havlir 2021; Longoria et al. 2021). Some of the community-based partners and trusted messengers we have been working with include faith leaders, local health practitioners and public health authorities, members of community-based organizations, and college-aged young adults passionate about tackling COVID-19 in their communities.

Over the past year and a half, we have been developing a social media dashboard for these community-based trusted messengers (Figure 1).[2] The goal of our dashboard is to allow our partnered trusted messengers, for whom COVID-19 related outreach is only one of their many roles in their work and their communities, to more readily get a sense of pressing topics and vaccine hesitancy-driving concerns, and to find resources and information to use for their own out-

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[1]Our collaborations include the GEORGIA CEAL project: for a partial list of partners, see https://www.msm.edu/news-center/coronavirusadvisory/GeorgiaCeal/georgiaceal.php.

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[2]The code and technical documentation for our dashboard can be found at https://github.com/TID-Lab/covid. While our live dashboard is available online at https://peach.ipat.gatech.edu/social-media-dashboard, it is password-protected to restrict its access to our partners. We will share a demo account and password for CySoc attendees to use for the workshop.
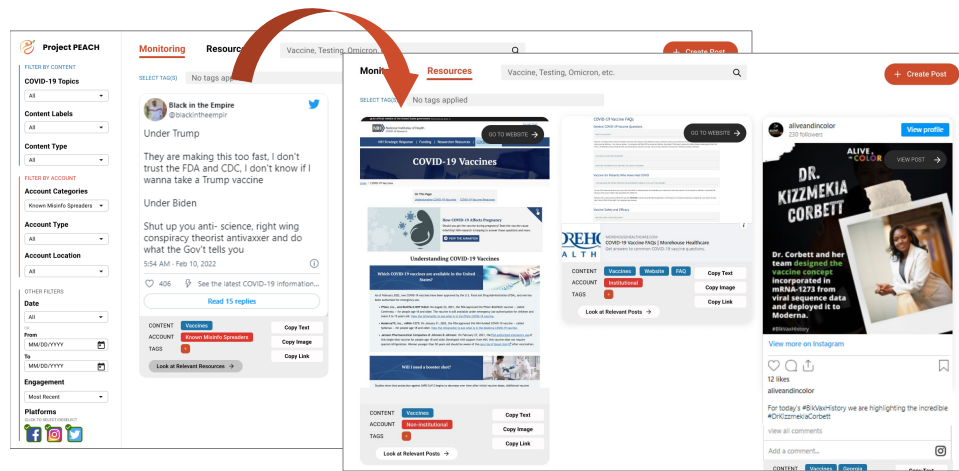
Figure 2: A prototype of an added page to our dashboard to include resources for social media-based outreach, using topics and misinformation narratives to link between monitored social media content and relevant resources.

reach efforts. The dashboard collects social media content containing COVID-related keywords from a curated set of social media accounts, using CrowdTangle (for Facebook and Instagram) and Twitter APIs. Accounts monitored include those of local and national media and journalists, with a particular focus on Black and Latinx-audience media; local and national health authorities and health experts; known COVID-19 misinformation spreaders (including but not limited to the ones identified by (Center for Countering Digital Hate 2021)); and local community-based organizations including partners of the project. Dashboard users are shown upon login the most recently collected social media content. They can then filter content by topic, identified using sets of keywords, and by account type, based on lists we have created.

We are also designing, developing, and evaluating several additional features (Figure 2). First is an additional page of curated outreach and communication resources (e.g., COVID-related social media assets and fact-checked content from trusted sources), and a semi-automated tool to suggest relevant resources based on selected social media content. Specifically, we are exploring the concept of misinformation narratives and counter-narratives as a means of linking misinformation to relevant communication resources (Lazić and Žeželj 2021; Alive & In Color 2022). For example, suspicion of how quickly the vaccines were developed may be linked to deeper distrust in the agendas of government and health institutions; one possible counter-narrative could involve sharing information about the rigorous process of developing and testing the vaccine and the inclusion of Black and other minority-identity scientists and communities in that process. Secondly, we are developing a user-created tag feature, where users can tag either monitored content or resources. In addition to giving them another means to organize the dashboard's content, tagging by our trusted messenger dashboard users can yield data for us to better understand how they make sense of social media content and resources.

We are currently conducting a qualitative evaluation of the live dashboard and design prototypes with young adult "Peer Champions" to understand how social media-based tools like our dashboard might support their work. These are students affiliated with historically Black colleges and universities (HBCUs), minority serving institutions, and community-based organizations who have been recruited to do research and outreach activities to counter vaccine hesitancy among their peers and communities, taking on the role of a community-based trusted messenger. Our evaluation involves a one-on-one interview consisting of a cognitive walkthrough of the dashboard and prototypes with some basic tasks, followed by questions about how interesting and useful they find the dashboard to be for their work as a Peer Champion. Preliminary findings show that the Peer Champions identify several varying potential uses for the dashboard and related social media-based tools. These include being able to browse COVID-related social media content collected in one place, especially content that they themselves would not normally get or want to have on their personal social media feeds; and being able to more quickly find trustworthy information and resources to educate themselves on COVID-related topics and share with others.

This work builds in part on previous (and still ongoing) work developing a web application to support trained dedicated social media trackers for detailed monitoring, labeling, and escalation of misinformation and other dangerous social media content for election monitoring efforts (e.g., Smyth et al. 2016; Smyth and Best 2013; Best and Meng 2015). Here, working with community-based trusted messengers has involved a different approach and thus design to support their ultimate goal of conducting outreach. Our dashboard is an early exploration and proof of concept of social media monitoring and outreach tools developed specifically for community-based trusted messengers with a public health use case, as we continue to understand what kind of work being a trusted messenger entails and the kinds of tools that can support them.

## Acknowledgments

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