<u>Assignment Part #3 – Due 10/17/2021</u>

What was the mission of your community partner and how did COVID impact execution of that work? How did COVID impact your service-learning experience as a student?

Covid-19 upended the usual structure of many institutions throughout the world, impacting each significantly. Given that our community partner was the Hamilton County Public Health Department (HCPH), it was abundantly clear that Covid-19 would be central. Due to the pandemic, we were unable to conduct much of our project in person, neither with our partners at the health department, nor with community members or each other. The emphasis was on conducting this study, collaborating, and presenting via a novel virtual environment.

Our project sought to investigate best practices for providing basic education and awareness to children and teenagers, a population group noted as difficult to reach by the health department. Topics included the need for mask wearing, social distancing, and addressing vaccine hesitancy.

With the ascent and seemingly recalcitrant Covid-19 delta variant, an emphasis on behaviors to ameliorate the situation and take the burden off our over-encumbered health systems are imperative and grow more so each day.

In collaboration with HCPH, we determined that a social media-based public health campaign would be the best way to reach our target population of high school students. HCPH already had a presence on some social media platforms, but was not currently present on TikTok, which is a platform popular with our target audience. We worked with HCPH and community leaders to determine how we could effectively answer health-related questions with our campaign. We then created educational material for the HCPH Instagram page as well as a short TikTok video with the same information. Both the Instagram post and TikTok video were shown to a cohort of high school students. They were then surveyed to compare efficacy and preference between the two platforms. The survey results showed that most students either preferred the TikTok video or did not have a preference between platforms. Both platforms were shown to be effective in addressing the importance of mask-wearing, social distancing, and vaccine compliance.

In a normal year, we would have had ample opportunities to collaborate with our partner and each other in person. However, given the nature of the COVID-19 pandemic, our work shifted entirely to a virtual format. As a result, it was more difficult to build the same amount of rapport that would have been achieved in a more traditional year. In addition, it was often difficult to coordinate meetings and share ideas entirely through email, which likely slowed our progress compared to previous years. Finally, as our community partner was a local health department working to coordinate contact tracing and other vital public health measures during a worldwide pandemic, they were undoubtedly much busier than they would have been in past years. As such, they had less time and fewer resources to devote to this effort.

The Hamilton County Public Health offers a variety of services including community health, environmental health, disease prevention, and vaccination. While they maintained these services throughout the COVID-19 pandemic, their operations drastically shifted towards providing more acute epidemiological resources and support for the community. HCPH began contact tracing infected individuals within Hamilton County, which required recruiting many new staff and volunteers to support this effort. As medical students, some of us volunteered as contact tracers to directly engage with our community. HCPH also developed educational material on strategies to prevent the spread of COVID-19 and share information with the community about quarantine and isolation regulations. This information was distributed on the HCPH website and social media accounts including Facebook and Instagram. These platforms were continuously updated with the most up-to-date information. When the Covid vaccines became available, HCPH again shifted their attention towards educating the public about the safety and efficacy of the vaccines. They provided numerous vaccination sites across the county to encourage residents to get vaccinated, especially those who were most vulnerable to Covid-19. Similarly, their social media content shifted to providing the most recent information about the vaccines.

The Hamilton County Public Health Department was at the forefront of the Covid-19 response. As mentioned, their daily programming shifted majorly to the pandemic efforts. This impacted the community as resources spent elsewhere were sequestered to the pandemic. As an example, educational smoking cessation programming was halted. Another example includes free pop-up HIV testing, which was also rolled back while resources were spent on COVID-related efforts. Though their work was vital in controlling the spread of the virus in our community, there were other programs that received less attention resulting in fewer resources for a community that may have come to rely upon them.

Another important consideration is how the social determinants of health (SDOH) had a direct impact on community members' abilities to follow the CDC guidelines for quarantining and isolation. Financial hardships made it difficult for individuals to stay home from work for a week or more. The Health Department was unable to offer any financial assistance to those people and there were limited resources in the community to address that need. Homelessness prevented individuals who tested positive from isolating themselves from others. Finally, lack of transportation precluded travel to testing sites.

Another hardship impacting the community was the rapid pace at which the breadth and content of information surrounding COVID-19 was changing. It was exceedingly difficult for people to receive and interpret information as knowledge acquisition progressed with and as rapidly as the pandemic itself. There were an innumerable number of sources sharing conflicting data that put a lot of pressure on the reader to filter and assess the accuracy of the source and its contents. It was a challenge for organizations like Hamilton County Public Health to ensure

the dissemination of accurate information to their community, especially with an overwhelming number of resources about ever-changing guidelines.

Our target population of high school-aged students in Hamilton County was especially at-risk of receiving misinformation. One of the greatest ways that this population was impacted by the COVID-19 pandemic was the shift from in-person learning to online school. The paradigm of their education shifted in days along with their social support networks, and as Covid-19 restrictions increased, it became more difficult for students to succeed academically and personally. Many students and families became isolated from their friends, loved ones, and community support systems. Students were left to navigate a new online approach to education during an already difficult period in their lives without the relief offered by their beloved sporting events and extracurricular activities. Seniors lost the opportunity to share their final goodbyes to classmates and teachers, and many students struggled with the negative impacts on mental health that this isolating environment caused. Furthermore, the shift to online school exacerbated existing pre-pandemic barriers to education as reliable internet and access to reliable technology became essential. We considered these elements carefully when crafting our project, and as such, we determined that an online social media-based public health campaign would be the best way to reach and impact high schoolers in our area.

How might students and physicians advocate for the needs of your partners and their community? What are needs that are particularly in need of support at this time?

The ability of the Hamilton County Health Department to reach its constituents can be further augmented by forming partnerships between physicians and medical students in Cincinnati. These partnerships can bolster the department's reach in a few key ways.

One of the health department's major goals currently is to share reliable, evidence-based information with the community in a way that is digestible. Given the concerns and hesitation surrounding the COVID-19 vaccine, the health department hopes to utilize social media to address the community's concerns and increase awareness about the importance of being vaccinated. Social media can also be used as a tool to spread information about availability and help those who do wish to be vaccinated find a vaccination site. Our work showed that medical students can contribute directly to these efforts through contribution to social media campaigns and the creation of education materials.

A notable issue HCPH faced was the constantly changing nature of the COVID-19 pandemic. With frequently updated guidelines and new variants, there is a lot of false or misleading information on the internet. Physicians and student doctors can help by conveying evidence-based information regarding the importance of masking and social distancing, the decreased risk of morbidity and mortality with vaccination, and providing resources for the general

population to learn more about the pandemic and how to protect themselves. Additionally, we can prevent vaccine hesitancy and misinformation by addressing misinformation that is spread through the internet or in person.

Creating infographics and summarizing key points in the literature in easy to understand and implementable formats is critical to the distribution of information to local representatives so that they can use this to influence policy decisions and general opinions. Especially with so many different outlets covering the ongoing pandemic as well as the vaccine/treatment changes, it is important to have easily accessible, reliable information which leaders can use to drive change in their communities in realistic, impactful ways. As medical students, physicians, and the scientific community at large, we can package this information in ways that will reach both the policy makers as well as their constituents.

It is important to note that COVID-19 education must come hand in hand with action – namely, expanding testing and vaccination sites as well as remaining proactive regarding the most upto-date information. Physician partnerships would be hugely beneficial, as they would allow for an expansion of testing sites, as well as a direct referral to current HCPH testing sites from primary care physicians.

As medical students from varied backgrounds, we can connect with our neighbors and explore their feelings about COVID-19 policies, vaccine knowledge, and general concerns about the pandemic. A lot of the media-driven information campaigns are led by subject matter experts and panelists who tend to be less connected to the youth. Using medical students as a bridge between these populations helps to build rapport with community members while sharing the same important messages delivered in the public health campaigns by health agencies like the Hamilton County Public Health Department.