

July 2023 Thematic Committee Briefing

Theme #3: Modeling Intervention Acceptance for Disease Mitigation

The goal of Theme 3 of the PIPP Phase I PILOT (Predictive Intelligence for Limiting Outbreak Threats) project is to understand how people make decisions when adopting public health interventions.

This quarter was a very important and very successful quarter for our thematic committee, as we held our interdisciplinary, cross-institutional workshop on the topic on Modeling Intervention Acceptance for Disease Mitigation in April 2023. The event featured expert panels on the four key pillars of modeling intervention acceptance in health emergencies: health information spreading, health misinformation, health communication with underserved populations, and informing the public. Key takeaways from the workshop included the necessity to foster relationships between health and science establishments with the communities they serve, and with the journalists who translate their work for the public. Our trainee, Sagar Kumar (PhD student, Northeastern University), has spent time following the workshop to synthesize the conversation and policy recommendations from each panel to create a white paper and a policy brief, which will be available to the public shortly on the PILOT website.

Inspired by workshop discussions regarding the shortcomings of existing information spreading models, Mx. Kumar is conducting a review of existing literature with the ultimate goal of proposing an agenda for future research to improve information spreading models. The thematic committee views this as a high priority research area to improve scientists' and policy makers' ability to forecast the spread of misinformation. Discussions in the workshop illuminated the need for increased emphasis on the study of the content and meaning of messages that are spreading, and the socio- cultural features of the groups in which they are spreading. Being able to develop a more robust modeling framework for this spread would be a massive step in preventing issues such as vaccine hesitancy and medical mistrust due to misinformation, and is the avenue currently being explored by the team. Initial findings from this review have been submitted to be presented by Mx. Kumar to the Contagion on Complex Social Systems workshop at the University of Vermont.

Finally, the team is hard at work planning the fourth workshop in the PILOT workshop series, which will be a synthesis of the previous three. At this stage, Mx. Kumar and Kathryn Schaber (Postdoctoral Fellow, Harvard Medical School) are working alongside all three thematic committees to find experts in the fields of outbreak science, agent-based modeling, and health communication to be invited as panelists for the workshop.

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