TITLE: Visualizing and mapping place-based social determinants of health

AUTHOR(S): Peter Banwarth

PRESENTER(S): Peter Banwarth

STUDENT SUBMISSION: No

TOPIC/TARGET AUDIENCE: Public health and policy professionals who work on social determinants of health. Audiences who are interested in visualization of data. OPHA attendees who want to generate ideas and techniques to advance their use of data for engaging the community and informing planning processes.

ABSTRACT: As public health professionals, we know that place matters. Proximity to transportation, natural areas, and healthy food all have impacts on individuals' and communities' health. The aim of this study was to determine if we could provide detailed data to the public and policy makers on access to different social determinants of health in a way that was visually responsive, geographically precise, and focused on equity. In this study we merged U.S. Census, American Community Survey, and local data together to understand how access to health-supporting locations differs within and across communities, down to the block level. Using data visualization software, we constructed interactive dashboards that are available to the public and to policy makers. We conclude that combining geographic data from local governments with demographic data from the U.S. Census is an effective way of achieving our study's goals. As public health practice increases its emphasis on data-informed, equity-focused work, these synthesized data becomes increasingly useful.

OBJECTIVE(S): Demonstrate how to merge geographic data with demographic data to produce detailed estimates of social determinants of health for equity populations.Design a visually engaging, technically accessible interactive dashboard to support the intelligent consumption of complicated data.Analyze the challenges in using proximity data as one component of understanding complicated public health issues.