

Harnessing Novel Data Sources and Technologies for the Study of Social Determinants of Health (SDOH) in Heart, Lung, Blood, and Sleep (HLBS) Disorders
September 29-30, 2020
Location: Zoom Call

Workshop Objectives:

- 1) Review the use of digital technology to enhance and create novel data sources (i.e., sensors, geospatial mapping, social media).
- 2) Determine how to leverage digital technology and novel data sources in the study of social determinants of health.
- 3) Determine the influence of the digital divide and unintended consequences of novel technologies widening health disparities by geography, race/ethnicity, etc.
- 4) Discuss implementation strategies to enhance the use of novel data sources by the research community to advance the science of social determinants of health research.

Day 1 – Tuesday, September 29, 2020	
9:00 – 9:15 AM	Welcome/ Opening Remarks – Dr. Gary Gibbons , Director, NHLBI
9:15 – 9:30 AM	Opening Remarks – Dr. Garth Graham - Vice President, Chief Community Health Officer, CVS Health <i>Title: The Opportunities Ahead Of Us In Harnessing Technology & Novel Data Sources to Tackle Social Determinants of Health</i>
9:30 - 10:00 AM	Keynote Address – Mark Savage , JD – Center for Digital Innovation at UCSF <i>Title: Integrating Social and Environmental Determinants of Health into the Nation’s Digital Health Ecosystem</i>
BREAK 10:00 – 10:15 AM	
Session 1: Leveraging current and emerging digital technology for collecting health data on persons in “the wild” or where they live, work, and play (physiological data, environmental data, behavioral data, etc.).	
10:15 –10: 35 AM	Moderator/Speaker #1 – Dr. Abhinav Sharma – McGill University <i>Title: Role of geo-technology with digital technology to optimize clinical studies</i>
10:35 – 10:55 AM	Speaker #2 – Dr. Marie Lynn Miranda - Charles and Jill Fischer Provost of the University of Notre Dame
10:55 – 11:15 AM	Speaker #3 – Dr. Peter James – Harvard Medical School Environment Exposures

	<i>Title: <u>Embedding mobile health technology and deep learning into prospective cohort studies to better estimate environmental exposures and health behaviors</u></i>
11:15 – 11:30 AM	Discussion
Session 2: Leveraging old and new data sources in identifying and tracking SDOH (electronic health data (Gravity Project), neighborhood violence/crime reports, geospatial mapping, social media, etc.).	
11:30 – 11:50 AM	Moderator/Speaker #1 – Dr. Lorna Thorpe – NYU School of Medicine <i>Title: <u>Opportunities and Challenges in Developing Time-Sensitive Population Health Monitoring Systems for Cardiometabolic Conditions and their Social and Behavioral Determinants at the Local Level</u></i>
11:50 AM – 12:10 PM	Speaker #2 – Dr. Sarah DeSilvey – Northwestern Medical Center/ Pediatric Faculty, Larner College of Medicine at the University of Vermont <i>Title: <u>The Gravity Project, Collaboratively Crafting Data Standards to Define Social Risk</u></i>
12:10 – 12:30 PM	Speaker #3 – Dr. Paula Gardiner – University of Massachusetts
12:30 – 12:50 PM	Speaker #4 – Ms. Meagan Khau -- Office of Minority Health, Center for Medicare & Medicaid Services, Director, Data and Policy Analytics Group <i>Title: <u>Analysis of Z Codes Related to Social Determinants of Health</u></i>
12:50 – 1:05 PM	Discussion
LUNCH 1:05 – 2:00 PM	
Session 3: Emerging analytics and approaches, including machine learning, to track and predict health outcomes related to SDOH (racial bias in algorithms).	
2:00 – 2:20 PM	Moderator/Speaker #1 – Dr. Jennifer Covich Bordenick – Executive Director eHealth Initiative and Foundation (eHI) <i>Title: <u>Harnessing SDOH Data to Address HLBS Disorders in an Innovative and Ethical Manner</u></i>
2:20 – 2:40 PM	Speaker #2 – Dr. Santosh Kumar – The University of Memphis

	<i>Title: Identifying Location Micro-patterns Conducive to Smoking from GPS and Activity Traces</i>
2:40 – 3:00 PM	Speaker #3 – Dr. Wendy Nilsen – National Science Foundation <i>Title: Using the Data from the Internet of Things to Understand Social Determinants of Health</i>
3:00 – 3:15 PM	Discussion
BREAK 3:15 – 3:30 PM	
Session 4: Unintended consequences in the application of digital technology and novel data sources (widening health disparities by geography, race/ethnicity, health disparities and biased coding of data in diverse populations , etc.).	
3:30 – 3:50 PM	Moderator/Speaker #1 – Dr. David Wilson – Director, Tribal Health Research Office/NIH
3:50 – 4:15PM	Discussion
4:15 – 5:00 PM	Overview of Day 1 and Adjourn
Day 2 – Wednesday, September 30, 2020	
Session 5: Advancing the science of SDOH: Engaging the research community and health care providers in promoting the use of emerging data sources and technology.	
9:00 – 9:20 AM	Moderator/Speaker #1 – Mr. Matthew Quinn – Science Director for the Army's Telehealth & Advanced Technology Research Center (TATRC) <i>Title: The Army's Digital Health Research Agenda - Leveraging SDOH to Enhance Soldier Health & Readiness</i>
9:20 – 9:40 AM	Speaker #2 – Dr. Stacy Lindau - NowPow's founder and Chief Innovation Officer, Professor, University of Chicago. <i>Title: Activating Self- and Family Management with Community</i>
9:40 – 10:00 AM	Speaker #3 – Mr. Taylor Justice – Co-Founder and President of Unite Us <i>Title: The Future of SDoH: A Proven Model to Connect Health and Social Care at Scale</i>
10:00 – 10:15 AM	Discussion
BREAK 10:15 – 10:30 AM	
Session: 6: Implementation strategies to enhance the use of novel data sources and emerging technologies by the research community to advance the science of social determinants of health research.	
10:30 – 10:50 AM	Moderator/Speaker #1 – Dr. Jennifer DeVoe – Oregon Health & Science University

	<i>Title: Using Health Information Technology to Bring Social Determinants of Health into Primary Care: A Conceptual Framework to Guide Research</i>
10:50 – 11:10AM	Speaker #2 – Dr. Charles R. Jonassaint - University of Pittsburgh <i>Title: How Can Technology Bridge the Health Care Gap?: Adapting digital interventions for Adolescents and Adults Sickle Cell Disease</i>
11:10 – 11:30 AM	Speaker #3 – Mr. Andrew Hamilton - Chief Informatics Officer and Deputy Director AllianceChicago <i>Title: Expanding our imagination: the use of social and environmental data to generate new insights into clinical care</i>
11:30 – 11:45 AM	Discussion
CLOSING	
11:45 AM – 12:25 PM	Summary and strategies to move forward – Dr. Graham
12:25 – 12:45 PM	Wrap up – Dr. Graham and NHLBI (Publication Discussion)
12:45 PM	Adjourned