JOHNS HOPKINS
BLOOMBERG SCHOOL
of PUBLIC HEALTH

CENTER FOR POPULATION HEALTH
INFORMATION TECHNOLOGY

Welcome to the CPHIT Newsletter

The Johns Hopkins Center for Population Health IT (CPHIT) focuses on applying digital data sources including, electronic health records, health insurance claims, social determinant of health data, to the measurement and improvement of the health of communities and populations.

We are pleased to welcome you to this new format for our Center newsletter. We expect to publish this at least quarterly. If you have questions about any of the stories or publications appearing herein, or would like to learn more on any of the projects or activities described please do not hesitate to contact us at: ltansky@jhu.edu

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HEALTH AFFAIRS BLOG

RELATED TOPICS:
COVID-19 | PUBLIC HEALTH | POPULATION HEALTH | TELEHEALTH | HEALTH DISPARITIES
| ELECTRONIC MEDICAL RECORDS | SYSTEMS OF CARE

A Population Health Segmentation Framework For Balancing Medical Need And COVID-19 Risk During And After The Pandemic

Hadi Kharrazi, Kimberly Gudzune, Jonathan Weiner

SEPTEMBER 4, 2020   10.1377/hblog20200902.630583

COVID-19 Work at CPHIT

CPHIT faculty recently published a *blog* on the Health Affairs website. The piece proposes a new national framework for using available electronic health care and public data to develop a "dashboard" for populations within health plans, delivery systems and communities to help manage health and health care during this COVID-19 era and beyond. Contact us for further info.

A paper from the CPHIT team: *"Assessing the Impact of Neighborhood Socioeconomic Characteristics on COVID-19 Prevalence Across Seven States in the United States"*, by Elham Hatef, MD, MPH*, Hsien-Yen Chang, Christopher Kitchen, Jonathan P. Weiner and Hadi Kharrazi will be published in Frontiers in Public Health-Inequalities in Health.

Listen Here: Dr. Weiner participated in a governmentCIO podcast about safegaurding public health and managing care during the COVID-19 pandemic

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Congratulations to Dr. Hadi Kharrazi!

Congratulations to Hadi Kharrazi, MD, PhD who has been promoted to **Associate Professor** in the Department of Health Policy and Management. Dr. Kharrazi has joined Dr. Weiner as the **Co-Director of CPHIT** as of 2020. Beyond his extraordinary accomplishments as an emerging national leader in the field of population health informatics, Hadi is a very dedicated mentor. His mentees from the undergrad to the doctorate level praise his commitment to students. Importantly, Hadi is a great Dad to his sons, Daniel and Benjamin!

See Hadi's JHSPH faculty page here.

Using Big Data to Combat the Opioid Epidemic:
Linking Criminal Justice & Health Data to Identify Overdose Risk in Maryland

A Mini-Symposium Jointly Sponsored by:
The Center for Population Health Information Technology (CPHIT) and The Bloomberg American Health Initiative

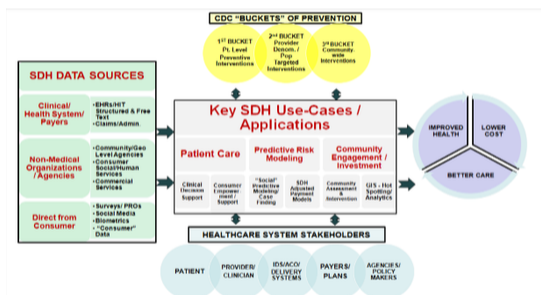### Using Big Data to Combat the Opioid Epidemic: Predictive Risk Evaluation to Combat Overdose Grant (PREOCG)

CPHIT formed a unique Partnership between the Maryland Department of Health and Maryland Health Information Exchange (CRISP). This was a three-year grant (2015-2018) funded by US Department of Justice. The aims of this project included developing a predictive risk model for overdose within the Maryland Prescription Drug Monitoring Program (PDMP) and extending the risk identification model to include information derived from the clinical and criminal justice electronic databases currently in the possession of Maryland State government. On November 20, 2019, The Johns Hopkins Center for Population Health IT & The Bloomberg American Health Initiative co-hosted a mini symposium to present research findings, along with a reactor panel of local and national experts for discussion and recommendations on practical suggestions and lessons learned from this pilot project for the public health, public policy, and informatics communities.

See a Recording of the Symposium & Papers List for this Project.

Social Determinants of Health (SDoH)

Social and behavioral factors have an increasingly recognized impact on population health outcomes. A team at CPHIT has conducted a literature review and developed a framework that is the foundation of various projects at CPHIT that focus on social and behavioral determinants of health. CPHIT is currently developing methods to link non-clinical social data to clinical data for predictive modeling, exploring data derived from free-text and structured EHRs and community-level information. To learn more about our framework, and the integration of SDOH data, click **here**.

Integrating Social and Behavioral Determinants of Health into Population Health Analytics: A conceptual framework and suggested road map (See paper on PubMed).

Recent Publications from CPHIT Faculty

See our website for a full list!

Geriatric Syndrome Risk Factors Among Hospitalized Postacute Medicare Patients. 2020. AJMC.

Integrating E-Prescribing and Pharmacy Claims Data for Predictive Modeling: Comparing Costs and Utilization of Health Plan Members Who Fill Their Initial Medications with Those Who Do Not. 2020. JPMC.

Assessing the Impact of Neighborhood Socioeconomic Characteristics on COVID-19 Prevalence Across Seven States in the United States. 2020. Frontiers.

The Impact of Various Risk Assessment Time Frames on the Performance of Opioid Overdose Forecasting Models. 2020. Medical Care.

Including Social and Behavioral Determinants in Predictive Models: Trends, Challenges, and Opportunities. 2020. JMIR.

A Revised Classification Algorithm for Assessing Emergency Department Visit Severity of Populations. 2020. AJMC.

Predictive Modeling of Opioid Overdose Using Linked Statewide Medical and Criminal Justice Data. 2020. JAMA Psychiatry.

Predictors of Overdose Death Among High-Risk Emergency Department Patients With Substance-Related Encounters: A Data Linkage Cohort Study. 2020. Annals of Emergency Medicine.

Opioid Agonist Treatment And Fatal Overdose Risk In A State-Wide US Population Receiving Opioid Use Disorder Services. 2020. Addiction.

Health Education Serious Games Targeting Health Care Providers, Patients, and Public Health Users: Scoping Review. 2020. JMIR.

A Predictive Risk Model for Nonfatal Opioid Overdose In A Statewide Population Of Buprenorphine Patients. 2019. Drug and Alcohol Dependence.

Identifying Vulnerable Older Adult Populations By Contextualizing Geriatric Syndrome Information In Clinical Notes Of Electronic Health Records. 2019. JAMIA.

Methods and Risks of Bias in Natural Experiments in Obesity: Opportunities for the Future Informed by a Systematic Review. 2019. Obesity.

Explore the CPHIT Website