Biomedical Informatics Grand Rounds

Wednesday, November 06, 2024
3:00 pm – 4:00 pm

Expanding the Universe of EHR Data to Build Better Cohorts

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Join Zoom Meeting https://stonybrook.zoom.us/j/95617197636?pwd=KytzZ2pVRG9SZGpKZUtpNXJISjNjZz09
Meeting ID: 956 1719 7636 Passcode: 924293

Bio:
Matvey is the Chief Medical Informatics Officer at TriNetX where he is responsible for semantic interoperability and data quality. Matvey is a physician and an expert in clinical informatics with strong experience in applied informatics and informatics research. He received an MD from the University of Pittsburgh School of Medicine and completed an Internal Medicine residency program at MCP Hahnemann University in Philadelphia. Matvey finished a Medical Informatics fellowship funded by the National Library of Medicine at the Children's Hospital Informatics Program in Boston. He earned a Master's degree in Medical Informatics through the Health Sciences and Technology Division of Harvard and MIT.
Prior to joining TriNetX, Matvey was a CMIO at ConvergeHEALTH by Deloitte (formerly Recombinant Data) where he lead a team of informatics specialists focusing on enabling syntactic and semantic interoperability of data for the purposes of integration, sharing and secondary use. He held a position of an Interlingua Architect at the Clinical and Translational Science Center at Harvard University where he was responsible for creating an infrastructure to support collaborative environments among Harvard-affiliated hospitals and research institutions. Matvey has also worked as a Senior Medical Informatics Specialist in the Clinical Informatics Research & Development group at Partners HealthCare System where he was a lead designer for an internally-developed ambulatory electronic medical record system.
Matvey has a strong expertise in healthcare information management, strong grounding in areas of data acquisition and interoperability, extensive experience in designing user interfaces for point-of-care applications, experience in information modeling, knowledge management, and quality measure reporting. Matvey also holds an academic appointment as an Instructor at Harvard Medical School.

Abstract:
The ever-changing nature of real-world data will be the focus of this presentation. Using TriNetX Global Research Platform as the setting, we will consider the informatics aspects of secondary use of patient clinical for cohort identification and research. Expanding from the traditional line-up of structured data to new sources such as cancer registry and molecular genomics data, and new methods such as unstructured text search and natural language processing, as well as probabilistic patient record linking to enrich the available for analysis will be discussed. We will also touch upon semantic harmonization and data quality assessment efforts that are essential for enabling the function of a federated network of clinical data.

Educational Objectives:
1. Learn about the evolution of real-world data from mainly financial information to EHR-based clinical data
2. Understand the modalities of discovering and extraction information from unstructured text in clinical notes
3. Appreciate the complexities of molecular genomics data and considerations for integrating it with phenotypic data
4. Understand the need for semantic harmonization in the function of federated data networks
5. Learn about assessing data quality in the setting of federated clinical data networks

Disclosure Statement:
The faculty and planners have no relevant financial relationship with ineligible companies, whose primary business is producing, marketing, selling, reselling, or distributing health care products used by or on patients.

Continuing Medical Education Credits:
The School of Medicine, State University of New York at Stony Brook, is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. The School of Medicine, State University of New York at Stony Brook designates this live activity for a maximum of **1** ***AMA PRA Category 1 Credits™.*** Physicians should only claim credit commensurate with the extent of their participation in the activity.