



Università di Pavia
Dipartimento di Ingegneria Industriale e dell'Informazione
Laboratorio di Informatica Biomedica Mario Stefanelli

SEMINARIO

Informative Missingness: What can we learn from missing data patterns in the electronic health record?

John H. Holmes, University of Pennsylvania, USA

Mercoledì 25 Maggio 2022, 16.00-18.00
Aula Verde e ONLINE: <https://us02web.zoom.us/j/6807412420>

In electronic health records, patterns of missing laboratory test results could capture patients' course of disease as well as reflect clinician's concerns or worries for possible conditions. These patterns are often understudied and overlooked. This seminar aims at illustrating how to characterize the patterns of missingness among laboratory data through an application within the 4CE Consortium (Consortium for Clinical Characterization of COVID-19 by EHR), involving data collected across 15 healthcare system sites in three countries for COVID-19 inpatients. This seminar will elucidate how missing data patterns in EHRs can be leveraged to identify quality control issues and relationships between laboratory measurements. Missing data patterns will allow sites to attain better quality data for subsequent analyses and help researchers identify which sites are better poised to study particular questions. The seminar will also provide insight into some of the biological relationships between labs in EHR data for COVID-19 patients.

John H. Holmes is Professor of Medical Informatics in Epidemiology at the Perlmutter School of Medicine, University of Pennsylvania.

In addition to his professorship in the DBEI, Prof. Holmes is the Associate Director of the Institute for Biomedical Informatics, Director of the Master's Program in Biomedical Informatics, and Chair of the Doctoral Program in Epidemiology, all at Penn. Prof. Holmes leads studies of novel analytic methods informed by statistics and artificial intelligence as they apply to interactions between people and environments in space and time. Prof. Holmes is or has been a principal or co-investigator on projects funded by the National Cancer Institute, the National Library of Medicine, the Patient-Centered Outcomes Research Institute (PCORI) and the Agency for Healthcare Research and Quality. Prof. Holmes is engaged with the Botswana-UPenn Partnership, assisting in building informatics education and clinical research capacity in Botswana. Prof. Holmes teaches courses in quantitative epidemiology, biomedical informatics, databases for clinical research, and machine learning and intelligent agents. Prof. Holmes is an elected Fellow of the American College of Medical Informatics (ACMI), the American College of Epidemiology (ACE), and the International Academy of Health Sciences Informatics (IAHSI).

Organizer

Riccardo Bellazzi and Arianna Dagliati

For more information: arianna.dagliati@unipv.it