A cordial invitation to the opening talk of the
Brown Bag Seminar
Recent Developments in Data Science:

Covid-19 risk factors: Statistical learning from German healthcare claims data

by
Dr. Roland Jucknewitz

Date:	07.06.2021 (Monday) at 11:00
Location:	Zoom
Link and further information:	Course 39740 Seminar: Doctoral Seminar "Recent Developments in Data Science" in Stud.IP

Abstract:

We analyse prior risk factors for severe, critical or fatal courses of Covid-19 based on a retrospective cohort using claims data of the AOK Bayern. As our main methodological contribution, we avoid prior grouping and pre-selection of candidate risk factors. Instead, fine-grained hierarchical information from medical classification systems for diagnoses, pharmaceuticals and procedures are used, resulting in more than 33,000 covariates. Our approach has better predictive ability than well-specified morbidity groups and does not need prior subject-matter knowledge. The methodology and estimated coefficients are made available to decision makers to prioritize protective measures towards vulnerable subpopulations and to researchers who like to adjust for a large set of confounders in studies of individual risk factors. The approach is put in context of the ongoing vaccination campaign, where also simpler, practically more feasible, priorization rules have been proposed.

Speakers:

Dr. Roland Jucknewitz (né Weigand) is a data analyst at AOK Bayern since 10/2016. Until then, he was a researcher at the chair of Econometrics of the University of Regensburg (11/2008-12/2012), and at the Institute of Employment Research (IAB, 1/2013-9/2016).