



Ringseminar

„Methoden der Epidemiologie, Biometrie und Versorgungsforschung“

Einladung

Sehr geehrte Kolleginnen und Kollegen,

hiermit möchten wir Sie ganz herzlich einladen zu unserem Web-basierten Ringseminar, das sich der Vorstellung und Diskussion statistischer Methoden und Prinzipien in verschiedenen Bereichen der medizinischen Forschung widmet.

Am **10. Mai 2021** wird **Prof. Dr. Michael Höhle** (Institut für Qualitätssicherung und Transparenz im Gesundheitswesen, Berlin) sprechen über

Statistical challenges in the quality assurance of healthcare

Das Ringseminar findet online statt von 16.00 – 17.00 Uhr und kann über die folgenden Zugangsdaten erreicht werden:

<https://uni-ulm.zoom.us/j/69777416918?pwd=M3drTWRHMFdlRVQrY3VrcVpjQTdFUT09>

Meeting-ID: 697 7741 6918

Kenncode: 83321443

Alle Interessierten sind herzlich willkommen, wir freuen uns über zahlreiche virtuelle Teilnehmer.

Abstract:

The Federal Institute for Quality Assurance and Transparency in Healthcare (IQTIG) is the central institution in Germany for the statutory quality assurance in health care. In accordance with its statutes, it is scientifically independent and works for, in particular, The Federal Joint Committee as well as the Federal Ministry of Health providing its expertise in various tasks of quality assurance of medical care. This talk will give a short introduction to the IQTIG and how quality assurance is performed through the definition of quality indicators and their corresponding data collection and analysis. The focus of the talk will then be on one particular statistical methodological aspect of the work: Given a binomial time series representing a provider's annual results in a given indicator, how can we identify providers, which do not meet requirements? The challenge can - from a statistical viewpoint - be seen as a binary classification problem, where each year the observed result of the provider is compared with a pre-defined reference value. One non-trivial question is how to take possible uncertainty in the observed result into account as part of the classification, and, what consequences this has for the subsequent expert validation of the quantitative results. In its simplest form the statistical problem can be stated as a one-sided binomial hypothesis testing problem. This view is then extended using a Bayesian decision theoretic approach based on loss functions in the Beta-Binomial model. If time permits, various extensions of this setup are then discussed, e.g., taking into account the sequential nature of the above decision problem.

Mit freundlichen Grüßen

Prof. Dr. med. Dietrich Rothenbacher & Prof. Dr. Benjamin Mayer
Institut für Epidemiologie und Medizinische Biometrie

Prof. Dr. Jan Beyersmann
Institut für Statistik