

Andreas' PhD research focused on the quality of care in the prevention and treatment of communicable diseases, with particular emphasis on the role of primary care. Antimicrobial resistance is a growing global health threat, making the optimization of preventive measures and treatment approaches increasingly important. Within this context, the research addressed key aspects such as vaccination practices, antibiotic prescribing, and the management of acute infections in outpatient settings.

The thesis comprised several studies that analyzed patterns of preventive and therapeutic care, as well as the role of different prescriber groups in outpatient medicine. By using health insurance data in addition to traditional surveillance systems, the research offered new insights into health service delivery and highlighted the value of complementary data sources for monitoring quality of care.

Furthermore, the work emphasized the pivotal role of primary care providers in offering health advice, preventive interventions, and treatment for acute conditions. It demonstrated that future strategies aimed at improving the quality of care for infectious diseases are most effective when tailored to specific prescriber groups, patient populations, and healthcare settings rather than applying broad, undifferentiated interventions.

Overall, this PhD contributed to a deeper understanding of how quality of care in infectious disease prevention and treatment could be improved in the primary care setting. It underscored the need for targeted and sustainable interventions that align with the characteristics of healthcare providers and patients, thereby supporting more effective public health strategies.

Publications:

- Graber SM, Stollberg SM, Plüss-Suard C, Huber CA, Kronenberg A, Senn O, Neuner-Jehle S, Plate A. Prescriber-level surveillance of outpatient antimicrobial consumption to enable targeted antimicrobial stewardship: a nationwide observational study, Switzerland, 2015 to 2022. *Euro Surveill.* 2024 Sep;29(37):2300734. doi: 10.2807/1560-7917.ES.2024.29.37.2300734.
- Plate A, Di Gangi S, Garzoni C, Selby K, Pichierri G, Senn O, Neuner-Jehle S. Patient leaflets on respiratory tract infections did not improve shared decision making and antibiotic prescriptions in a low-prescriber setting. *Sci Rep.* 2024 Feb 29;14(1):4978. doi: 10.1038/s41598-024-55166-7.
- Plate A, Bagnoud C, Rosemann T, Senn O, Di Gangi S. Influenza vaccination patterns among at-risk patients during the Covid-19 pandemic-a retrospective cross-sectional study based on claims data. *Infection.* 2024 Aug;52(4):1287-1295. doi: 10.1007/s15010-024-02175-3.
- Plate A, Bagnoud C, Rosemann T, Senn O, Di Gangi S. Influenza vaccination uptake among at-risk patients in Switzerland-The potential of national claims data for surveillance. *Influenza Other Respir Viruses.* 2023 Oct 13;17(10):e13206. doi: 10.1111/irv.13206.