

Institute of General Practice

Chair of General Practice

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Research focus

- ACE – Adverse Cascade Effects
- ICF – International Classification of Functioning, Disability, and Health
- ICE – Ideas, Concerns, Expectations
- GAP – Good doctor – patient communication
- WirtMed
- Model Practice MVZ Eckental
- Medical decision-making in general practice
- Development of classifications to describe the content of primary care
- BeLa (Beste Landpartie) for general practice
- Competence center vocational training for general practice Bavaria (KWAB)

Structure of the Institute

Institute of General Practice:

Professorship: 1

Personnel: 20

- Doctors (of Medicine): 8
- Scientists: 8
- (thereof funded externally): 6)
- Graduate students: 15

MVZ Eckental:

Personnel: 10

- Physicians (general practitioners): 4

Clinical focus area

General practice in the medical care center (MVZ) Eckental

Research

The Institute of General Practice focuses on health services research. All scientific activities come together in the research network PRO PRICARE (compare own report). Against the background of limited financial resources in an aging society and the lack of general practitioners (GP) trainees especially in the country side, the focus lies on how to detect medical under- and overuse and

how to subsequently reduce it. Together with other chairs and institutes of FAU and UK Erlangen, we have established a long-term cooperation network for health services research. Also part of the network are several practice networks of Northern Bavaria, the Association of Statutory Health Insurance Physicians Bavaria (KVB) and the GWQ ServicePlus AG (representing health insurance funds).

ACE – Adverse Cascade Effects

Clinical pathways of patients with thyroid disorders are analyzed in order to describe possible cascade effects leading from overdiagnosis to overtreatment. Therefore, three studies are conducted:

- 1) Routine data analysis: Comparison of different patient groups with regard to morbidity, use of medical services and costs.
- 2) Analysis of medical records and qualitative interviews: Tracing of individual clinical pathways.
- 3) Multi Criteria Decision Analysis: Exploration of underlying motives and attitudes that influence the decision-making process of patients and doctors.

ICF – International Classification of Functioning, Disability, and Health

Development of an ICF core set to identify the functional health of elderly patients. A systematic review, an expert survey, and qualitative interviews with elderly patients are conducted as well as an assessment of functional health of the patients. The intention is that by focusing on functional health of whole persons instead of pathologies of single organ systems, a meaningful framework to discriminate between necessary and unnecessary medical procedures can be provided.

ICE – Ideas, Concerns, Expectations

Actively asking for ICE includes the patients otherwise mostly hidden agenda into the consultation. The aim of this project is to examine whether an improved patient-centered communication according to the ICE technique can reduce unnecessary diagnostic and therapeutic procedures for patients with acute uncomplicated back pain. Qualitative and quantitative studies are conducted alongside a cluster-randomized controlled trial in order to examine the effect of patient centeredness in general practice on medical overuse in consultations.

GAP – Good Doctor – Patient Communication

The GAP study provides doctors and patients with acute back pain alike with the online portal

“tala-med”, an electronic information system providing the latest scientific evidence that is simple to navigate and easily understood. The information given can support joint decision-making in diagnostics and therapy. The quality of the consultation when using the online portal – in comparison to routine consultations – is examined in a prospective, multicenter, cluster-randomized parallel group design.

Funding: Federal Ministry of Health

WirtMed

WirtMed aims at developing and testing new procedures intended to support the Association of Statutory Health Insurance Physicians and the statutory health insurances to analyze and control future quality and cost-effectiveness of drug prescribing in ambulatory care. Five sub-studies are conducted in order to examine and control different aspects of prescribing quality. Two sub-studies are carried out by the Institute of General Practice in cooperation with the consortium leader Department for General Practice of the Philipps University Marburg (Prof. Dr. N. Donner-Banzhoff).

Funding: Federal Ministry of Health

Model Practice MVZ Eckental

The shortage of general practitioners especially in rural areas combined with an aging population calls for solution approaches to ensure long-term high-level primary care. This project aims at clinical governance as a within practice bottom-up approach to harmonize work processes. The focus lies in the exploration of the capacities of a given electronic health record (MediStar) to extend its use as the central tool for reflective practice and clinical governance. The aim is to develop and use meaningful checklist to be used as clinical guidelines, documentation, and data capture at the same time. Furthermore, multiprofessional case reviews for geriatric patients with special need for intensified care including non-medical care aspects are tested.

Funding: Bavarian State Ministry for Health and Care

Medical decision-making in general practice

The family doctor is frequently confronted with unspecific symptoms, illness patterns in early stages and consequential diagnostic uncertainty. Taking these particularities into account, we examine influential factors of medical decision-making. Our qualitative and quantitative studies focus on the influence of ambiguity tol-

erance on the part of the doctors, the assessment of clinical symptoms among selected diagnosis as well as the consideration of scientific evidence in the decision-making process. Furthermore, treatment data are analyzed in cooperation with the KVB.

Development of classifications to describe the content of primary care

Since 2006, Prof. Dr. T. Kühlein is a member of the WONCA International Classification Committee (WICC). Furthermore, he has been a member of the Executive Committee since 2012 and is head of the latter since 2016. The WICC is occupied, among other things, with the actualization and further development of the International Classification of Primary Care (ICPC). WONCA is the international organization for general practitioners. Since October 2014, Prof. Dr. T. Kühlein is the delegate of WONCA to the "Family of International Classifications Council" of WHO. Joint research and development projects are conducted in cooperation with the universities of Gent (Belgium) and Nijmegen (The Netherlands) on the coding of ICE and concerning the use of the ICF in primary care.

BeLa (Beste Landpartie) for general practice

Due to a lack of young GPs, primary care especially in rural areas is in jeopardy. BeLa is a strategy to secure the recruitment of GP trainees by teaching students the advantages of a rural career track. The BeLa program examines whether financial and contentual support of students during the clinical part of the studies combined with a practical training in rural areas enhances the willingness to a subsequent vocational training and settlement these regions. Individual and motivational factors for a settlement in rural areas are identified in a qualitative process evaluation.

Competence center vocational training for general practice Bavaria (KWAB)

The offers issued by the competence center aim at improving the contentual and didactical quality of vocational training in general practice to secure high quality primary care in Bavaria. Additionally, the undertaken measures will be reviewed and evaluated with regard to their effect. Under the umbrella of the competence center, seminars that accompany vocational training are offered regularly for future general practitioners. Furthermore, an experienced GP mentor is assigned to every young colleague in training. The competence center additionally

offers Train-the-Trainer seminars for doctors that are licensed for vocational training in order to strengthen their didactic competence and hence optimize the quality of vocational training in practices. The Institute of General Practice has taken on the lead and coordination of the KWAB.

Teaching

The Institute of General Practice engages in curricular teaching in the studies of medicine. Next to the GP-specific elective courses "Anamnesis training", "Smart decision-making in clinical everyday life" and "Problem-oriented learning from clinical cases", two interprofessional teaching projects deserve to be highlighted specifically: the elective course "Doctor and entrepreneur" and the "Anamnesis groups of the Faculty of Medicine of the FAU".

The elective "Doctor and entrepreneur" offers a simulation game for the settlement as a self-employed physician. This offer aims directly at preventing the fears of medical trainees regarding the non-medical responsibilities of a settled doctor. The Institute, as patron, supports the student initiative "Anamnesis groups of the Faculty of Medicine of the FAU" (contents: training of anamnesis according to the bio-psycho-social model; improvement of patient-oriented consultation skills; handling of topics like subjective illness theories; experience of transference and countertransference; development of external and internal reflection; promotion of team communicative skills in interprofessional small groups). In 2016, the project was awarded the Deutsche Balintpreis of the Deutsche Balint-Gesellschaft e.V (DBG).

Bachelor's and Master's theses as well as medical doctorates are supervised.

Selected publications

Alber K, Kuehlein T, Schedlbauer A, Schaffer S. Medical overuse and quaternary prevention in primary care - A qualitative study with general practitioners. *BMC Fam Pract* 2017; 18(1): 99

Hueber S, Kuehlein T, Gerlach R, Tauscher M, Schedlbauer A. „What they see is what you get“: Prescribing antibiotics for respiratory tract infections in primary care: Do high prescribers diagnose differently? An analysis of German routine data. *PLoS ONE* 2017; 12(12): e0188521

Schrans D, Boeckxstaens P, De Sutter A, Willems S, Avonts D, Christiaens T, Matthys J, Kühlein T. Is it possible to register the ideas, concerns and expectations behind the reason for encounter as a means of classifying patient preferences with ICPC-2? *Prim Health Care Res Dev* 2018; 19(1): 1-6

Frank L, Hueber S, Kühlein T, Schedlbauer A, Roos M. Evidence and practice: How do primary care physicians evaluate screening interventions? A questionnaire study. *Z Evid Fortbild Qual Gesundheitswes* 2018 Sep;135-136:1-9

Ludwig K, Machnitzke C, Kühlein T, Roos M. Barriers to practicing General Practice in rural areas - Results of a qualitative pre-post-survey about medical students during their final clinical year. *GMS J Med Educ* 2018; 35(4): Doc50

Muche-Borowski C, Abiry D, Wagner HO, Barzel A, Lühmann D, Egidi G, Kühlein T, Scherer M. Protection against the overuse and underuse of health care - methodological considerations for establishing prioritization criteria and recommendations in general practice. *BMC Health Serv Res* 2018; 18(1): 768

International cooperations

Prof. Dr. J. de Maeseneer, Department of Family Medicine and Primary Health Care, Ghent University, Ghent: Belgium
Dr. I. Heath, London: UK

Prof. Dr. G. Stucki, Department of Health Sciences and Health Policy, University of Lucerne, Luzern: Switzerland

Prof. Dr. J. Brodersen, Centre of Research & Education in General Practice, Department of Public Health, University of Copenhagen: Denmark