Spring semester 2018
PhD Research Seminar in Health Sciences

Health Sciences and Health Policy
Prof. Dr. Stefan Boes
Prof. Dr. Gisela Michel
The Role of Nurse Practitioners in Swiss Primary Care - How to Collect and Analyze Relevant Data

Stefan Gysin, University of Lucerne

Monday, 26 February 2018

Speaker
Stefan Gysin is a medical doctor and PhD student in Health Sciences at the University of Lucerne. He is currently working at the Institute of Primary and Community Care Lucerne as a research assistant. His research focus lies on interprofessional collaboration in Swiss primary care.

Date and time
Monday, 26 February 2018, 14:00 – 15:00h

Room
Room HS 11, University of Lucerne, Frohburgstrasse 3, 6002 Lucerne

Content
Swiss primary care faces several challenges: An impending shortage of general practitioners, a lack of young successors and an ageing population with a higher demand of health services due to more complex and chronic diseases. We believe that new models of health care and reinforcement of interprofessional collaboration are necessary to answer these challenges. In other countries, nurse practitioners have been established and respective studies have shown promising results. In Switzerland, the required educational program is still evolving and we are experiencing a phase of pioneering. Thus, the potential role of nurse practitioners in primary care has not been defined yet. Therefore, we aim to clarify the role of nurse practitioners in Swiss primary care. We use mixed-methods research in pioneer projects in Swiss family practices to assess various aspects (competencies, billing options, acceptance, satisfaction and clinical outcomes) of this new role.

The presentation will focus on data collection and research methods used in the pilot project in Bürglen (UR). Preliminary results will be presented.
The Role of Population Aging in Healthcare Expenditure Growth: A Nonparametric Re-weighting Approach

Boris Kaiser, B,S,S. Volkswirtschaftliche Beratung

Monday, 5 March 2018

Speaker
Boris Kaiser is a project manager at B,S,S. Economic Consultants and he holds a PhD in Economics.

Date and time
Monday, 5 March 2018, 14:00 – 15:00h

Room
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Content
This paper studies the role of demographic change in the rise of per capita healthcare expenditures over time. We apply a new nonparametric reweighting method to estimate the impact of shifts in the marginal distribution of age on the growth of healthcare expenditures. We exploit administrative data on the population of Switzerland that contains all healthcare costs incurred in the mandatory health insurance system between 1997 and 2015. The main result suggests that ageing only explains about 17% of the overall increase in real per-capita healthcare expenditures. Across different services, we find that the contribution of ageing is more pronounced in long-term care and inpatient care compared to ambulatory care and pharmaceuticals.
Do they tell the truth? Systematic bias in self-report child well-being and contextual factors

Anne-Linda Camerini, USI Lugano

Monday, 12 March 2018

**Speaker**
Dr. Anne-Linda Camerini is a scientific researcher at the Institute of Communication and Health and a lecturer at the Department of Communication Sciences at the USI.

**Date and time**
Monday, 12 March 2018, 14:00 – 15:00h

**Room**
Room HS 11, University of Lucerne, Frohburgstrasse 3, 6002 Lucerne

**Content**
Children’s health goes beyond the mere absence of disease and encompasses physical, psychological, social, cognitive, and economic well-being. The study of these well-being dimensions, their interrelations, and associations with biological and contextual factors requires valid and reliable measures. Objective measures are considered “gold standard”-measures as they are free from systematic bias introduced by self-report. Although some dimensions of child well-being can be assessed with objective measures, others such as social well-being have to rely on self-report. As social scientists interested in a holistic understanding of child well-being, it is, thus, important to be aware of systematic bias in survey data. In my talk, I will summarize different forms of systematic bias (e.g., estimation bias, recall bias, social desirability bias) and present the role of social desirability bias as one type of bias drawing on survey data from children collected as part of an ongoing longitudinal study on media and child well-being in Switzerland. Furthermore, I will discuss the benefits and challenges of objective and in-situ self-report measures to be introduced in the upcoming waves of the longitudinal study to overcome the drawbacks of survey data.
Challenges in building up a late effects clinic for adult survivors of childhood malignancies

Eva Maria Tinner, Inselspital Berne

Monday, 19 March 2018

Speaker
Eva Maria Tinner is a medical doctor and paediatric oncologist. During her training in paediatric oncology, she spent 17 months in Newcastle Upon Tyne in England, where she met Rod Skinner, a prominent late effects specialist. Since that time, late effects of the oncological treatment of children are one of her special interests. Since October 2015 she is responsible for the „Passport for Care“ project at the paediatric oncology unit of the Inselspital Berne, which aims to inform all survivors about their individual risks of late effects and the appropriate follow-up care. Since December 2016, she works also at the Kantonsspital Baselland in Liestal together with Dr. med. Anna Minder and PD Dr. med. Thomas Dieterle building up a late effects clinic for adult survivors of childhood malignancies.

Date and time
Monday, 19 March 2018, 14:00 – 15:00h

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Content
Adult survivors of malignancies of childhood or adolescence suffer from diverse late effects depending on the treatment they received and the tumor they had. Many Swiss survivors are closely followed-up in their treatment centers for five to ten years after end of treatment and are then transferred to general practitioners without detailed information and instruction about life long follow-up care. The morbidity and mortality of long-term survivors is elevated and they get chronic health problems earlier than their peers.

Dr. med. Anna Minder and Dr. med. Eva Maria Tinner wanted to offer adult survivors an interdisciplinary follow-up clinic and had the opportunity to start such a clinic at the Kantonsspital Baselland in Liestal. To keep the quality of service high they decided to plan the tests according to the Childrens Oncology Group (COG) Long-Term Follow-Up Guidelines using the „Passport for Care®“-Application and planned an accompanying research project to collect data of the patients who visited the clinic and also to evaluate their opinion about the clinic visit and the information they got. How the clinic is organised, the difficulties in starting and running such a clinic and a typical clinic day will be presented.
Title coming soon
Brigitte Dormont, Université Paris-Dauphine

Monday, 9 April 2018

**Speaker**
Brigitte Dormont is a Professor in economics at the Université Paris-Dauphine and Director of the Laboratoire d’Économie et de Gestion des Organisations de Santé.

**Date and time**
Monday, 9 April 2018, 14:00 – 15:00h

**Room**
Room HS 11, University of Lucerne, Frohburgstrasse 3, 6002 Lucerne

**Content**
Coming soon
A natural experiment using Scottish clinical data to estimate the real-world effectiveness of adjuvant chemotherapy in breast cancer patients

Joachim Marti, Université de Lausanne

Monday, 16 April 2018

**Speaker**

Joachim Marti is a Professor in health economics at the IUMSP, University of Lausanne.

**Date and time**

Monday, 16 April 2018, 14:00 – 15:00h

**Room**

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**Content**

Evidence-based guidelines recommend adjuvant chemotherapy in early stage breast cancer whenever treatment benefit is considered sufficient to outweigh the associated risks. However, many groups of patients, such as the over 70s and those with comorbidities, were excluded from the clinical trials that form the evidence base. This study seeks to address the gap in the evidence using administrative healthcare data and econometric methods for causal analysis. Specifically, we link patient-level data on all cases of breast cancer in Scotland for the 2001-2015 period to other inpatient and outpatient routine health records and explore the use of two empirical strategies (regression discontinuity and propensity score matching) to estimate real-world treatment effects, in both trial-eligible and trial-ineligible populations.
Pulmonary diseases in Swiss childhood cancer survivors: burden, risk factors and monitoring

Rahel Kasteler, Institute of Social and Preventive Medicine, University of Bern

Monday, 23 April 2018

Speaker
Rahel Kasteler is a medical doctor and PhD candidate at the Paediatric Cancer Epidemiology research group at the Institute of Social and Preventive Medicine of the University of Bern. She studies the epidemiology of pulmonary late-effects after childhood cancer and how monitoring of pulmonary diseases in childhood cancer survivors in Switzerland is managed. Additionally she coordinates an international guideline harmonisation group on surveillance of pulmonary dysfunction after childhood cancer.

Date and time
Monday, 23 April 2018, 14:00 – 15:00h

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Content
Childhood cancer survivors have an increased risk for adverse health outcomes from cancer and its treatment. The lung is a vulnerable organ for treatment-related damage and among all late-effects, pulmonary diseases are a major cause for late mortality and morbidity among childhood cancer survivors. Unhealthy behaviour such as smoking might promote pulmonary health problems. We lack knowledge on the prevalence of pulmonary diseases among Swiss childhood cancer survivors and if pulmonary diseases changed over the last decades, and additionally certain problems leading to restrictive pulmonary diseases like chest wall abnormalities are not well understood. Finally, we do not know how clinicians in Switzerland monitor pulmonary health of childhood cancer survivors, as Switzerland has no national monitoring guidelines. In my PhD studies, I addressed these open questions by using data from the nationwide and population-based Swiss Childhood Cancer Registry (SCCR) and the nested Swiss Childhood Cancer Survivor Study (SCCSS). We found that pulmonary diseases among childhood cancer survivors are more common compared to their siblings and incidence increases up to 35 years after cancer treatment and that chest wall abnormalities have great impact on the daily life of survivors. Finally, Monitoring of pulmonary health is insufficient in Switzerland and differs according to the cancer treatment centre. Childhood cancer survivors who are at risk for pulmonary diseases should receive life-long monitoring of pulmonary health in follow-up care. Healthy lifestyles, especially non-smoking, should be promoted during follow-up care, and interventions should start early. Follow-up should include pulmonary function monitoring and examinations to detect rare outcomes such as chest wall abnormalities.
The spatial epidemiology of childhood cancer in Switzerland

Ben Spycher, Institute of Social and Preventive Medicine, University of Bern

Monday, 7 May 2018

**Speaker**

Ben Spycher is Senior Research Fellow at the Institute of Social and Preventive Medicine at the University of Bern, where he heads the Research Group ‘Environmental and Spatial Epidemiology’. His main research focus is on the aetiology of childhood cancers.

**Date and time**

Monday, 7 May 2018, 14:00 – 15:00h

**Room**

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**Content**

I will present an overview of recent aetiological research at the Swiss Childhood Cancer Registry (SCCR). In contrast to adult cancers, childhood cancers are rare and their causes are still poorly understood. By linking SCCR cases into the Swiss National Cohort (SNC), we can investigate childhood cancer incidence since 1985 on a nationwide scale. Precise geocoded locations of residence are available for the entire population at censuses and at birth and diagnosis for cancer cases. This allows investigating geographically determined environmental exposures and their association with subsequent cancer development. I will present studies on the following topics: i) natural background radiation (indoor radon, terrestrial Gamma and cosmic radiation); ii) traffic-related air-pollution; iii) Leo Kinlen’s population mixing hypothesis, which posits that childhood leukaemia is a complication of an infection yet to be identified and that rapid population influxes may lead to localised epidemics and subsequent excesses of leukaemia cases; and iv) spatial and spatio-temporal clustering of cancer cases, which respectively may indicate local pollution sources or an infectious aetiology.