

### **Job opportunity: Postdoctoral position, SNF senior researcher**

Project “ME@home,” NRP 74 Smarter Health Care; School of Health Sciences, HES-SO Valais Wallis

#### **Project ME@home: Optimising medication management for polymedicated home-dwelling older adults with multiple chronic conditions**

**Main applicant:** Prof. Henk Verloo, School of Health Sciences, HES-SO Valais Wallis; Scientific collaborator CHUV

**Co-applicants:** Prof. Marie Santiago-Delefosse, Unil; Prof. Armin von Gunten, CHUV; Prof. Boris Wernli, FORS, Unil

The project ME@home investigates how medication management can be optimised for polymedicated home-dwelling older adults with multiple chronic conditions. This study will be based on a mixed methods design.

**A first quantitative phase, in which the post-doc will be specifically involved,** will consist of retrospectively exploiting the last three years of electronic patient records from the Valais Hospital in order to identify the different profiles—made up of medication and environment-related factors—of the polymedicated, home-dwelling older adults with multiple chronic conditions at risk of hospitalisation, emergency department visits, hospital readmission (notably for medication-related problems), institutionalisation or early death.

This retrospective analysis will serve to guide a qualitative phase and lead to a purposive sampling of polymedicated home-dwelling older adults with multiple chronic conditions presenting with more risk factors.

#### **Data**

All home-dwelling older adults with multiple chronic conditions with somatic and/or mental health disorders who were hospitalised, rehospitalised or consulted the Valais Hospital’s emergency department between 2015 and 2017 (estimated N = 50,000) will be included.

Sociodemographic data will include age, sex, marital status, and environmental data such as a rural or urban domicile, living conditions at home and the presence of formal and/or informal caregivers. Clinical and health data will integrate primary ICD-10 diagnosis completed with the reason for hospitalisation or rehospitalisation due to medication-related problems. Supplementary filters will be added to discriminate poly medication, multi-morbidity (secondary ICD-10 diagnosis), physical and cognitive impairment documented in the clinical data (Function Independence Measure, Mini-Mental State Examination, and Activities of Daily Living). In addition, data on length of stay, readmissions (number of admissions in the previous year, 30-day readmission and unplanned readmission), death during hospitalisation and medication data (number and types of medication treatments during hospitalisation, discharge, and post-discharge medication changes) will be collected. A unique patient identification number will allow us to identify and analyse re-hospitalisation via the emergency department during the period from 2015 to 2017.

The final outcome of the quantitative phase will be the identification of polymedicated home-dwelling older adults with multiple chronic conditions hospitalised or visiting the emergency department due to medication-related problems. To enable us to discriminate between the non-frail, frail and dependent older adults among the polymedicated older inpatients or those visiting the emergency department, we will use a multidimensional tool—the interRAI assessment system for Acute Care—on the final data extraction file.

#### **Expected outputs**

- Contribution to the elaboration of the analysis plan
- Realisation of the analyses
- Contribution to collective publication

#### **Qualifications**

- Doctoral degree (Ph.D.) in social sciences, statistics, demography, epidemiology or a related discipline with a quantitative orientation
- Experience in empirical research (quantitative data processing, statistical analysis), with very good knowledge of statistical software packages (such as R, SPSS, Stata)
- Have experience in working with complex longitudinal data, preferably with censored data
- Ability to publish in scientific journals
- Fluency in written English

#### **Job information**

Expected start date in position: 01.02.2019, to discuss.

Contract length: 1-year maximum

Employment rate: to be defined according to the candidate's availability

Workplace: School of Health Sciences, HES-SO Valais Wallis, Sion; a possibility of telework

**Contact for further information:**

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Please, send your full application in Word or PDF as soon as possible