STRAIN Study* - assessing and reducing work-related stress among health professionals in Switzerland – a study protocol

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**BACKGROUND**
- The shortage of health professionals is becoming an increasingly relevant issue (WHO, 2016).
- In Switzerland, the healthcare system struggles with recruiting qualified healthcare professionals. The present healthcare workforce requirements will not ensure adequate staffing for the future (Hahn, Richter, Beck, & Thilo, 2013; Jaccard, Hahn, & van der Hulst, 2014).
- Work-related stress in health professions plays an important role. Recent study results indicate that high workload, work-family conflicts, long working hours, shiftwork as well as feelings of exhaustion, can lead to an earlier career exit among health professionals (Adler et al., 2016; Kraft, L., & van der Hulst, 2016).

**AIM**
The aim of this study is to: (1) identify work-related risks, stress reactions and long-term consequences among nursing staff, physicians, medical-technical and medical-therapeutical professions in Swiss hospitals (general hospitals, rehabilitation hospitals, psychiatric wards), and to (2) reduce these factors with an educational intervention for supervisors.

**METHOD**
A longitudinal cluster randomized controlled trial is being conducted from 2017 until 2020 in all language regions of Switzerland in the following health care settings: acute-care, rehabilitation, psychiatry, long-term care and home care (see figure: DESIGN). Data will be collected three times, using a self-report questionnaire for the employees, and a questionnaire to assess institutional key figures. Further, data from focus group interviews and a systematic literature research will serve in developing the study intervention (training and coaching for supervisors in middle and upper management levels).

**INTERVENTION**
The intervention development is based on the results of the STRAIN baseline-measurement, qualitative results from focus group interviews and study results from a systematic literature research. The intervention development process follows the steps of the Intervention Mapping method of Bartholomew et al. (2016). The intervention includes training and coaching for supervisors, including the topic — how to deal with work-related stress. Furthermore, national recommendations to reduce work-related stress in the health care system will be developed according to the results of the STRAIN study.

**EXPECTED RESULTS**
- To identify work-related stress factors, stress reactions and related long-term consequences for Swiss healthcare professionals
- To develop and test an intervention evidence-based programme for healthcare professionals
- National recommendations for each participating health profession and setting will be available in three national languages (CZE, HR, IT)

**CONCLUSION**
- In order to address the shortage of healthcare professionals, it is important to not only collect frequencies about work-related stress, but to also develop an effective intervention to reduce work-related stress.
- The results will be transferred directly into education and practice and will change staff and managers perspectives on work-related stress. Consequently, this project will make an important contribution to counter the shortage of health care professionals.