Valorisation

Relevance
Neck pain is a musculoskeletal condition that affects many people. Current treatment options are targeted at pain and disability, and most available questionnaires are in English. One aspect that can be considered missing is the patient’s perspective of cervical range of motion. A patient-centered treatment approach should be the highest goal of any healthcare practitioner. This avoids “seeing” something with regard to the patient’s problem and making the patient’s problem more severe than it actually is. Additionally, this approach could help with a more targeted treatment and therefore may reduce the cost by focusing on the patient’s goals. Additionally, this might support the patient’s motivation for, and adherence to, the treatment, as the patient will feel accepted and integrated into the treatment.

Target groups
The target groups are patients, healthcare practitioners (physical therapists, medical doctors, and chiropractors), and healthcare insurance providers. The findings of this thesis can support healthcare practitioners in their assessments of patients with neck pain, as the thesis provides well-known and globally used questionnaires in German, which may be used in Austria, Germany, and Switzerland. In total, around 160,000 physical therapists in these three countries can use the platform. This approach can make the treatment outcome more comparable to outcomes of international standard. Insurance providers could benefit, as the treatment might be more specific to the patient’s needs and therefore may reduce the cost.

Activities/products
Based on the findings of my thesis, either an application or internet platform (Neck Pain Network®), which provides all relevant questionnaires for the assessment, evaluation, and follow-up of patients with neck pain, is required. For patients, a cut-off value should be provided to suggest a visit to a clinician. For clinicians, the platform could be used to allow the patient to fill out the required questionnaires before the first appointment by embedding it into the home page on the clinician’s website. This will provide an impression of the main problems before assessment for the first time. This approach will save the clinician’s time and the costs for the patient.
and insurance company. Furthermore, clinicians can use the questionnaires for follow-up to reassess their patients on a scientific basis. Therefore, the approach will help transfer research into practice by providing reliable and valid tools in a single database. From the data, it would be possible to evaluate the clinician’s performance with regard to the treatment of neck pain. Additionally, the clinician could use the data to prove that he/she is the most appropriate person to visit for neck pain. Based on this platform, a network of neck-pain specialists could be developed, and this network could provide information to the patient and, if needed, refer the patient directly to a physical therapist, medical doctor, or chiropractor. This network and the data may furthermore support healthcare practitioners in their negotiations with insurance companies, as the findings can be used to show the progress of patients under their care. Finally, the data could be used for further research in the field of neck pain.

**Innovation**

The assessments used in this thesis were not available in German previously. However, they are now available. Furthermore, a completely new tool was developed. It provides a new perspective of neck pain and might change the treatment approach by focusing more
on the patient’s needs and by incorporating the patient’s perspective with regard to the complaint.

**Schedule**
The first step is to obtain funding for building a minimum viable product. The product should then be evaluated and tested for its functionality, and assessments should be performed to determine whether the target group would accept it. Possible funding sources are the Swiss National Fund (SNF), Pain Research Fund (PRF), and other societies focusing on neck pain research. After funding for the minimum viable product is received, IT specialists need to be hired to program the product (IT Master’s/PhD students). Subsequently, the platform needs to be presented and promoted at congresses, which are attended by clinicians working with neck pain patients. The possible risks that should be dealt with include the inaccessibility of some questionnaires in German. Furthermore, clinicians may not accept the tool because they might be afraid of being controlled via the platform or challenged with regard to medical knowledge. Therefore, it is important to mention that every group participating in the platform assessment will be anonymized and that informed consent will be required. The goal is to present the product in the clinician community as a new platform that could help with their clients and support their field of practice. Another goal is to use the platform in all German-speaking countries, and thus, collaboration of the German, Austrian, and Swiss Organizations of Physical Therapists could be useful. Later, extension to other countries is possible after making the questionnaires available in the appropriate languages.