

Title: A FHIR based questionnaire tool for patient reported outcome

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Elevating quality of life is the most important output of patient reported outcome (PRO). Standardized questionnaires, like QLQ-C30, allow a good data acquisition and help physicians to get comparable data. But the continuous collection as well as the longitudinal interpretation of that collected data is challenging. MOLIT developed a questionnaire-tool that tries to help with that challenge in daily practice. It is based on FHIR, what guaranties a platform- and hardware-independent communication and the integrity of the collected data. Patients may fill out their questionnaire location-independently on their mobile devices daily and thereby allow the physician a monitoring of their therapy. The questionnaire-tool is based on FHIR so it may represent any questionnaire that is built in that standard. With that it gives health professionals the possibility to transmit additional questionnaires, if they detect an abnormal answer of one of their patients. The tool also gives the opportunity to include a logic that does this process automatically.
With the aim to use questionnaires not only in studies, but also in daily practice, the need of a flexible and universal useable communication standard is essential. With this advanced level of interoperability we can profit from the digitalization to practice personalized medicine.
We'd like to demonstrate our approach and first results in that use case and show the opportunities of our tool based on a meta-analysis. Using digital health, we can solve the challenge to build a bridge between patients, physicians and also scientists to benefit them all within the same system.

Biography
Chantal Beutter, aged 23, is a Master Student in medical informatics at the Karl-Ruprecht university of Heidelberg and the university of applied science in Heilbronn. She finished her Bachelor degree in 2018 at the same universities. She´s going to complete her Master of Sciene in 2020. She´s working part-time at the MOLIT Institute for personalized medicine in the development-team of the questionnaire-tool.

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