## Evaluation of a patient-oriented online decision aid in non-metastatic prostate cancer (EvEnt-PCA): Chances & perspectives of an online tool for shared decision-making in health care research

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## Abstract

Responding to the growing need for patient involvement in decision-making, online-information tools are becoming increasingly important. Therefore, guideline-based decision aids can strengthen dialogic-communicative dimensions of the doctor-patient relationship. Elements of shared decision-making additionally promote the self-determination rights of patients. The medical advisory competence is thus supported and relieved, but by no means replaced. Non-metastatic prostate cancer presents a perfect example for a difficult treatment decision-making situation that greatly relies on the patient's views. With 60,000 new diagnoses per year in Germany, prostate cancer is the most common malignant disease among men. There are different methods of treating non-metastatic prostate cancer, with surgery or radiation therapy being the most important options. In patients with low oncological risk, active treatment can be safely delayed and possibly avoided to a relevant share. However, active surveillance is still insufficiently implemented in these cases. Personal preferences and expectations also play an important role in the choice of the suitable treatment strategy.

In 2016, we started the online decision aid "Entscheidungshilfe Prostatakrebs" as an initiative of the German urologic professional societies and with support from Takeda pharmaceuticals. The decision aid offers guideline-based content in 17 educational videos with a total duration of more than one hour. To provide personalized information the tool collects the International Consortium for Health Outcomes Measurement standard set, personal preferences, psychological features and also a validated rating of the decision aid. All relevant data are summarized on one page for the following consultation. Since its initial launch, more than 10.000 newly diagnosed prostate cancer patients have used the tool.

Starting in July 2018, a randomized evaluation trial (EvEnt-PCA) compares this online-based decision aid with a printed brochure as the current standard. Throughout Germany, 1.200 patients shall be included and randomly assigned to use the decision aid or to receive the printed brochure. Primary outcome is the final treatment decision one year after the diagnosis. As secondary outcome measures fear and depressiveness, decisional conflict and regret of the treatment decision are taken into account. We hypothesised a stronger guideline conform use of deferred treatment strategies in the intervention group, meaning more deferred treatments in patients with low oncologic risk and less in higher risk. Additionally, the medical care situation might benefit, because dimensions of person- and patient-centred medicine are

strengthened in clinical routine. Furthermore, the project can open new perspectives for medical-ethical controversies that lie outside established research priorities. In this way, a contribution can be made to focus on the patient's role, reducing overuse of active treatment and at the same time strengthening the doctor-patient relationship.

We plan to perform a complete upgrade of the tool to a new version in 2021. This upgrade will also address the physician directly by fundamentally extending the range of functions. The collected medical data will then also support the physician's extended diagnostics. Accordingly, this upgrade will be classified and registered as a Class 1 medical device. The next goal is to gain eligibility for reimbursement within the framework of standard care by the statutory health insurance. Furthermore, an English-language version and a digital teaching module for academic teaching based on the decision aid will be developed.

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