

Data-driven shared decision-making on cancer treatment



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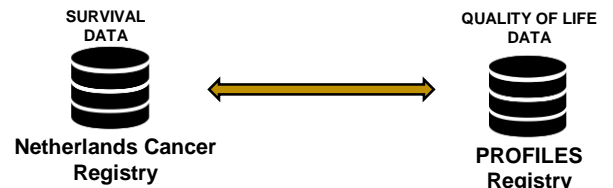
1. PROJECT AIM



VIEW NOW

AIM

- To facilitate shared decision-making, patients need to make sense of **health data**
- These data are communicated in decision aids, but these tools are **generic**



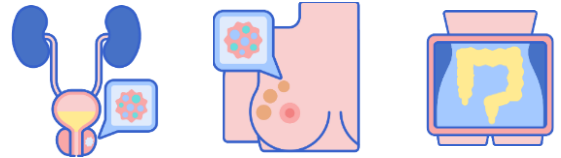
To develop a data-driven personalized patient decision aid

2. APPROACH

1

Systematic Reviews

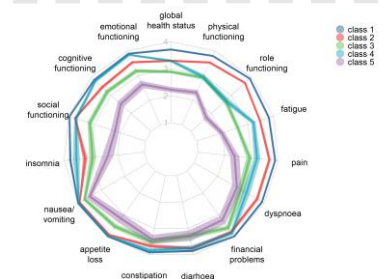
- Three systematic reviews were carried out on **prostate, breast and colorectal** cancer decision aids (DA's)
- Main results: communicative quality of decision aids is low and they lack **personalization**



2

Statistical model

- Patients can be **classified** into subgroups based on their **quality of life (QOL)** after receiving cancer treatment
- Latent Class Analysis helps us to **understand and predict** QOL for new patients



3

Personalized DA

- A **data-to-text system** was developed to automatically generate personalized QOL-probabilities for patients



4

Patient preferences

- To know the **statistical preferences** of patients, a questionnaire study is designed
- Outcomes will reveal how patients want to receive **personalized information** on the internet



EXPECTATION

When patients and doctors can rely on personalized data, the shared decision-making process will be more effective and efficient



SCAN ME



We would like to acknowledge the Netherlands Organisation for Scientific Research (NWO) for grant 628.001.030, "Helping cancer patients to choose the best treatment: Data-driven shared decision-making on cancer treatment for individual patients", and the Data Science Center Tilburg (DSC/t) at Tilburg University.

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