Data-enabled information support for different chronic patient communities.
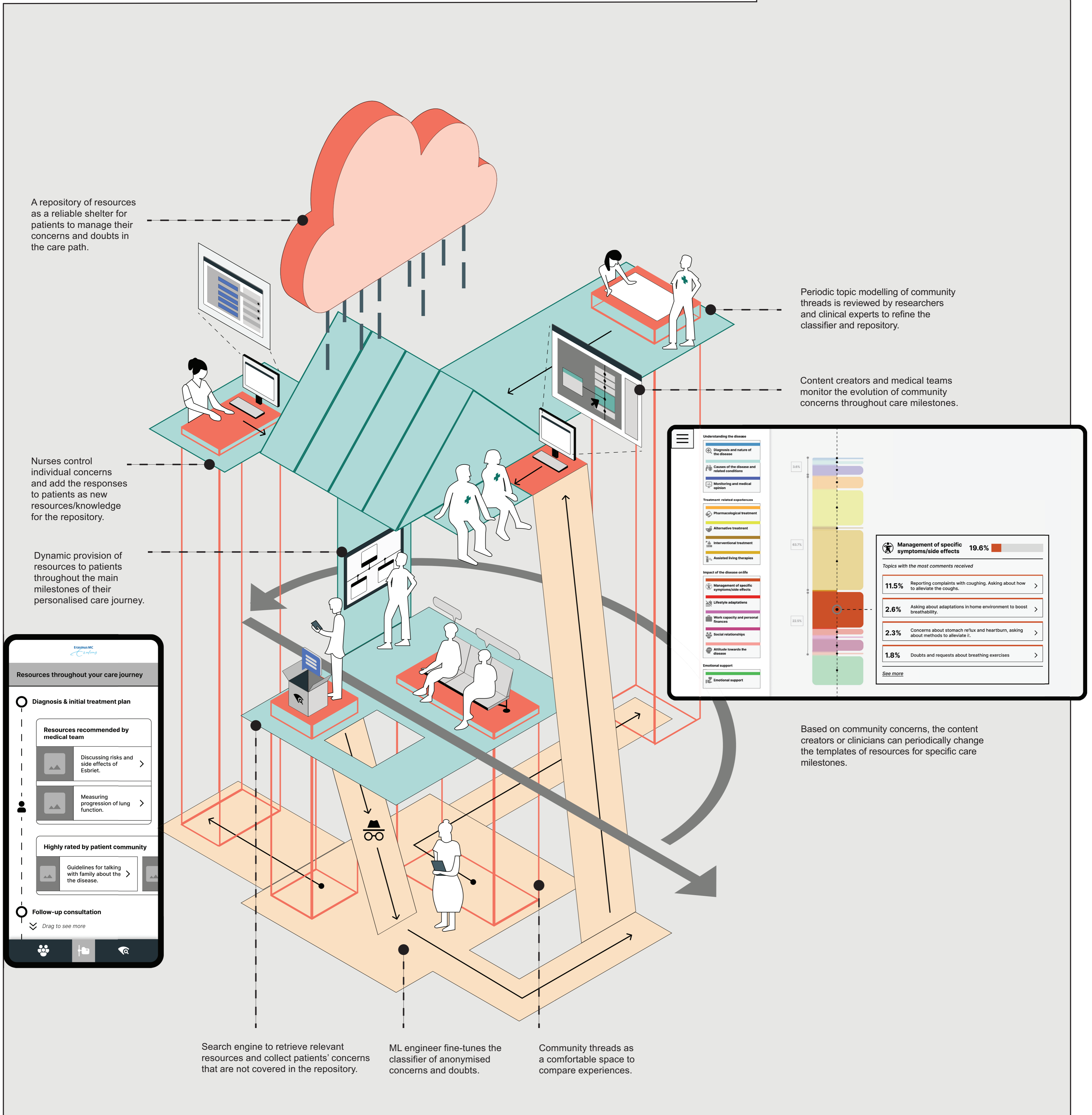
Problem context

Remote patient monitoring (RPM) systems and data technologies have the potential to contribute to efficient and meaningful caregiving. Nevertheless, due to the need to involve many stakeholders and parties to fund the development and implementation of RPM, it is necessary to think of service modules that can be incrementally adapted to the specific context of different diseases. For this project, I focused on the clinicians' role as communicators and coaches throughout the care path.

Design process

Topics that group thousands of online patient stories from three different online patient communities were analysed through a combination of human interpretation and computational analysis to achieve themes of patients' doubts and concerns The topics and categories were visualized through an interactive prototype to engage clinical experts in co-creation sessions.

Opportunity

The co-creation sessions with clinical experts inspired a service system vision for information support. The service system aims to use self-reported concerns and doubts to incrementally curate knowledge resources for different patient communities. Through this service system, information support muddles through the context of RPM in different departments at ErasmusMC.

A repository of resources as a reliable shelter for patients to manage their concerns and doubts in the care path.

Nurses control individual concerns and add the responses to patients as new resources/knowledge for the repository.

Dynamic provision of resources to patients throughout the main milestones of their personalised care journey.

Periodic topic modelling of community threads is reviewed by researchers and clinical experts to refine the classifier and repository.

Content creators and medical teams monitor the evolution of community concerns throughout care milestones.

Based on community concerns, the content creators or clinicians can periodically change the templates of resources for specific care milestones.

Search engine to retrieve relevant resources and collect patients' concerns that are not covered in the repository.

ML engineer fine-tunes the classifier of anonymised concerns and doubts.

Community threads as a comfortable space to compare experiences.

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