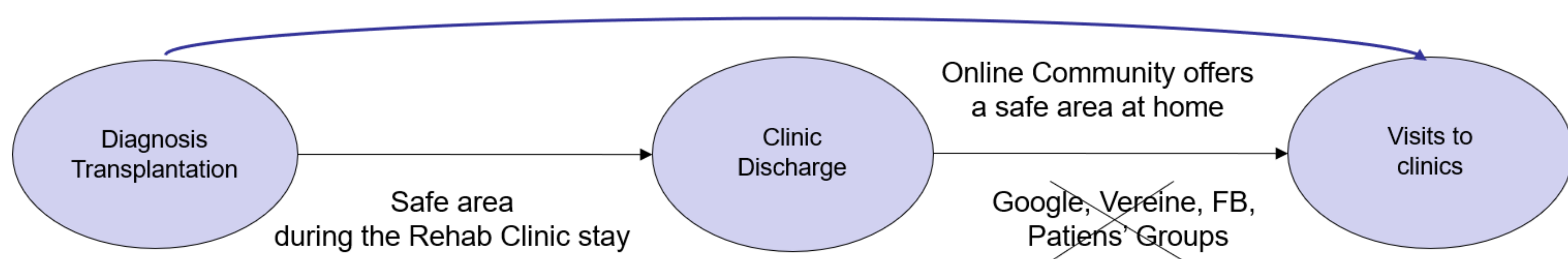# Value-Based Patients' Online Community
Your trusted support network for every step of the journey

SCAN ME

A pioneering online patient community – as a transformative platform designed to empower patients through peer-to-peer support, cutting-edge AI tools, integrated PROMs and PREMs, and a treasure trove of health information. Join us on a journey towards patient-centered, data-driven healthcare, revolutionizing rehabilitation and fostering a compassionate community like never before.

Patients' online community offers a safe area over the patient's journey

Diagnosis Transplantation → Safe area during the Rehab Clinic stay → Clinic Discharge → Online Community offers a safe area at home / Google, Vereine, FB, Patiens` Groups → Visits to clinics

Source: own visualization based on a feasibility study 2022-2023

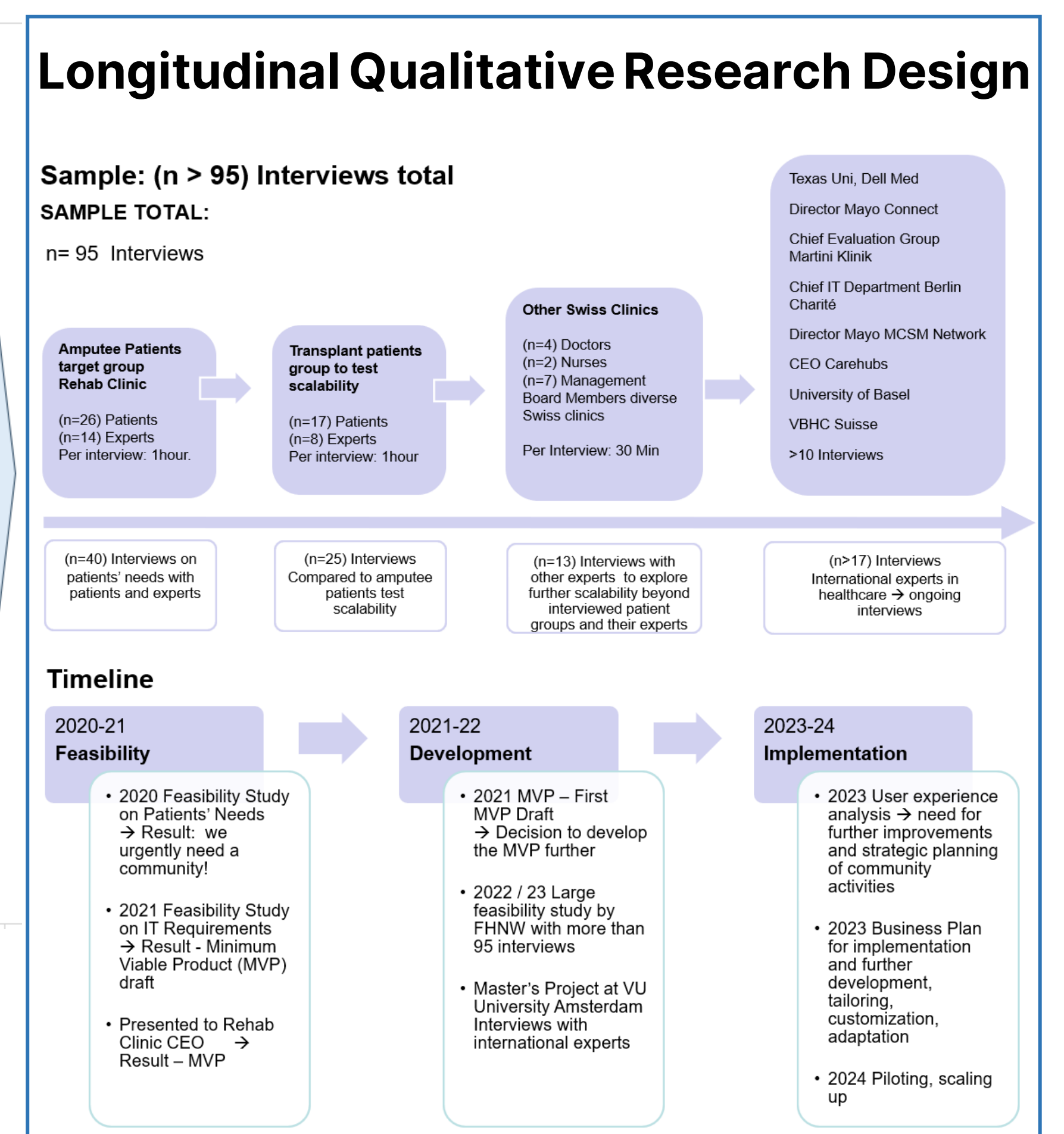**USP - Quality measurement and improvement by or within a patient community is an innovative topic for healthcare in Switzerland and worldwide** Our community is the bridge to ongoing care from Rehaklinik Bellikon, providing patients with trusted information, continuous support, and measuring impact, fostering a holistic journey to recovery.

Patients' online community urge – a patient-centric online community should replace traditional search engines, fostering connections among patients and enabling them to interact with one another.
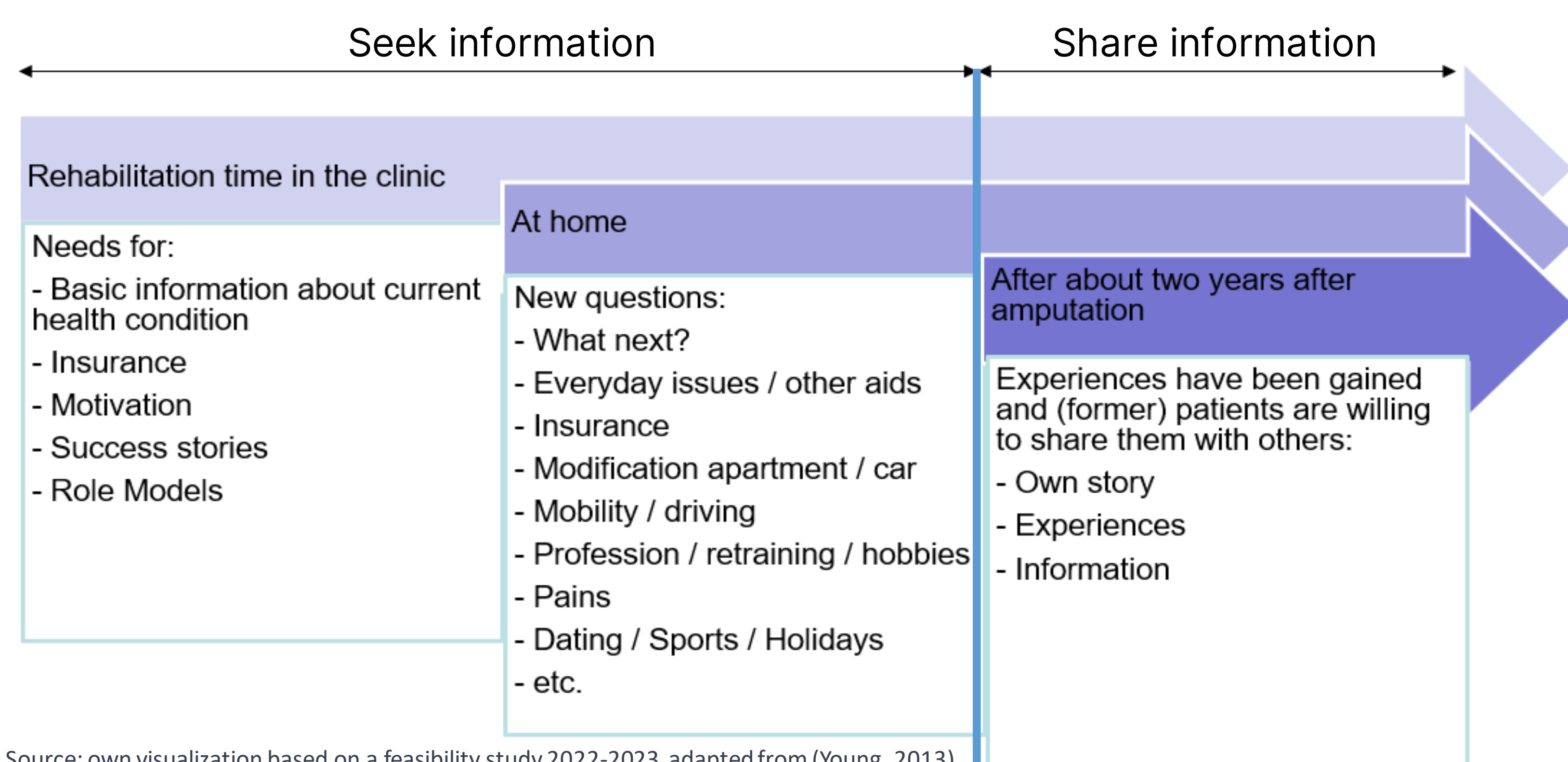
Healthcare delivery value chain in the level of a health condition

Knowledge & development	We aim to continuously improve and evolve by leveraging data and technology, while also fostering the growth of our experts and the knowledge shared within the community.					P a t i e n t V a l u e
Informing	We will provide patient education, patient counseling, education programs, webinars, live talks, posts, and videos to ensure that our community members are well-informed and have access to valuable resources for their healthcare journey.					
Measuring	We will utilize various methods such as tests, PROMs, PREMs, AI, patient record management, and community administration to gather data and measure various aspects of patient experiences and outcomes within the community. This data-driven approach will help us continuously improve and tailor our services to meet the needs of our community members effectively.					
Accessing	Patients will be directed to the community from the first day at the rehab. After discharge, we aim to facilitate access for our community members to various online services within the Rehaklinik, including the orthopedic department, various experts, the work-integration department, and remote consultations. Our goal is to ensure that community members can easily connect with the resources and support they need throughout their rehabilitation journey.					

Monitoring / preventing	Diagnosing	Preparing	Intervening	Recovering / Rehabilitating	Monitoring/ Measuring
- Medical history - Screening - Identifying risks factors - Prevention	- Med history - Specifying and organizing tests - Interpreting data - Consultation with experts - Determining the treatment plan	- Choosing the team - Pre-intervention - Preparations - Pretesting - Pretreatment	- Ordering and administrating drug therapy Performing procedures Performing counseling therapy	- Inpatient recovery - Inpatient and outpatient rehab - Therapy fine tuning - Developing a discharge plan These stages align with our mission to support amputee patients during their recovery journey, providing valuable resources and peer connections from the initial recovery through rehabilitation and treatment optimization.	- Monitoring measuring the patient's condition We aim to incorporate PROMs and PREMs into our platform to track and assess the patient's condition, providing data-driven insights for both patients and healthcare providers.
Patient journey in other clinics				In Rehklinik Bellikon	

Source: based on a feasibility study 2022-2023 adapted from (Porter & Teisberg, 2006)

Online Community is integrated into Healthcare delivery value chain closing the gap after the clinic discharge (aftercare) The activities of the Rehaklinik and the Community are under the blue-marked area.
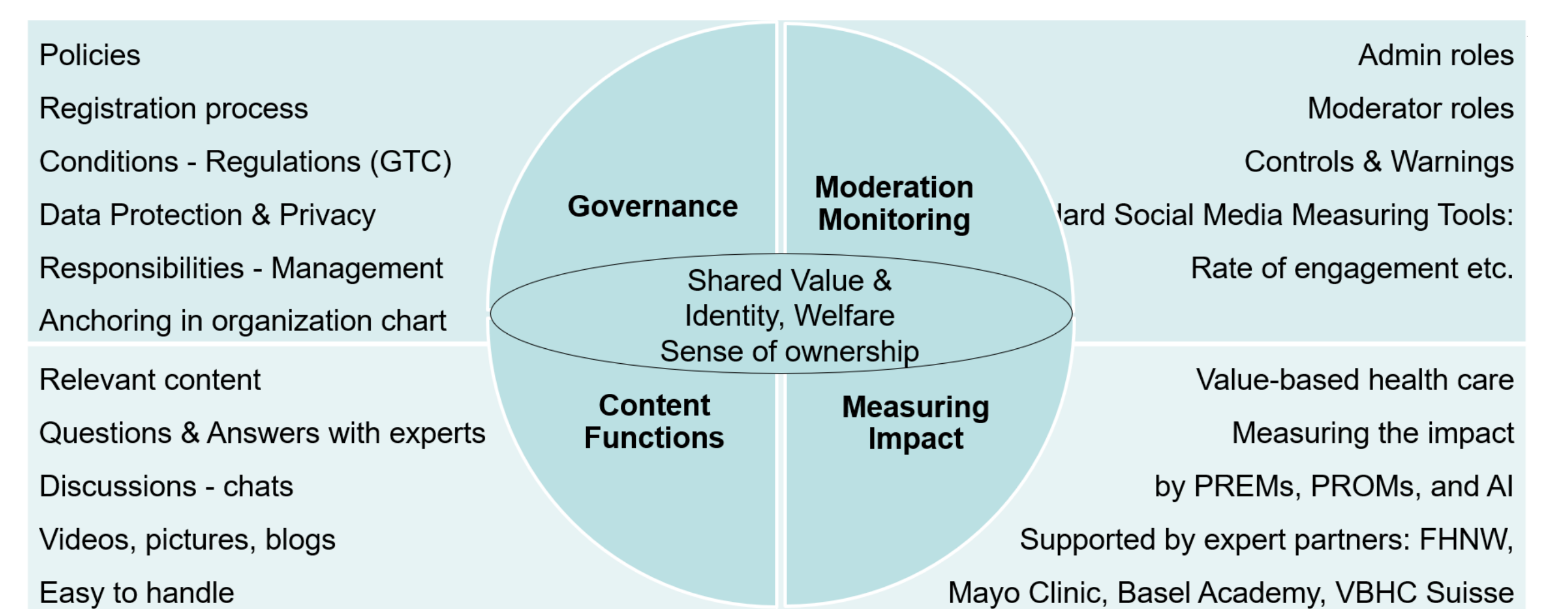
Longitudinal Qualitative Research Design

Sample: (n > 95) Interviews total
SAMPLE TOTAL:
n= 95 Interviews

Amputee Patients target group Rehab Clinic (n=26) Patients (n=14) Experts Per interview: 1hour → Transplant patients group to test scalability (n=17) Patients (n=8) Experts Per interview: 1hour → Other Swiss Clinics (n=4) Doctors (n=2) Nurses (n=7) Management Board Members diverse Swiss clinics Per Interview: 30 Min → Texas Uni, Dell Med / Director Mayo Connect / Chief Evaluation Group Martini Klinik / Chief IT Department Berlin Charité / Director Mayo MCSM Network / CEO Carehubs / University of Basel / VBHC Suisse / >10 Interviews

(n=40) Interviews on patients' needs with patients and experts → (n=25) Interviews Compared to amputee patients test scalability → (n=13) Interviews with other experts to explore further scalability beyond interviewed patient groups and their experts → (n=17) Interviews International experts in healthcare → ongoing interviews

Timeline

2020-21 Feasibility → 2021-22 Development → 2023-24 Implementation

2020-21 Feasibility:
- 2020 Feasibility Study on Patients' Needs → Result: we urgently need a community!
- 2021 Feasibility Study on IT Requirements → Result - Minimum Viable Product (MVP) draft
- Presented to Rehab Clinic CEO → Result – MVP

2021-22 Development:
- 2021 MVP – First MVP Draft → Decision to develop the MVP further
- 2022 / 23 Large feasibility study by FHNW with more than 95 interviews
- Master's Project at VU University Amsterdam Interviews with international experts

2023-24 Implementation:
- 2023 User experience analysis → need for further improvements and strategic planning of community activities
- 2023 Business Plan for implementation and further development, tailoring, customization, adaptation
- 2024 Piloting, scaling up

Source: own visualization based on a feasibility study 2022-2023

Seek information / **Share information**

Rehabilitation time in the clinic

Needs for:
- Basic information about current health condition
- Insurance
- Motivation
- Success stories
- Role Models

At home

New questions:
- What next?
- Everyday issues / other aids
- Insurance
- Modification apartment / car
- Mobility / driving
- Profession / retraining / hobbies
- Pains
- Dating / Sports / Holidays
- etc.

After about two years after amputation

Experiences have been gained and (former) patients are willing to share them with others:
- Own story
- Experiences
- Information

Source: own visualization based on a feasibility study 2022-2023, adapted from (Young, 2013)
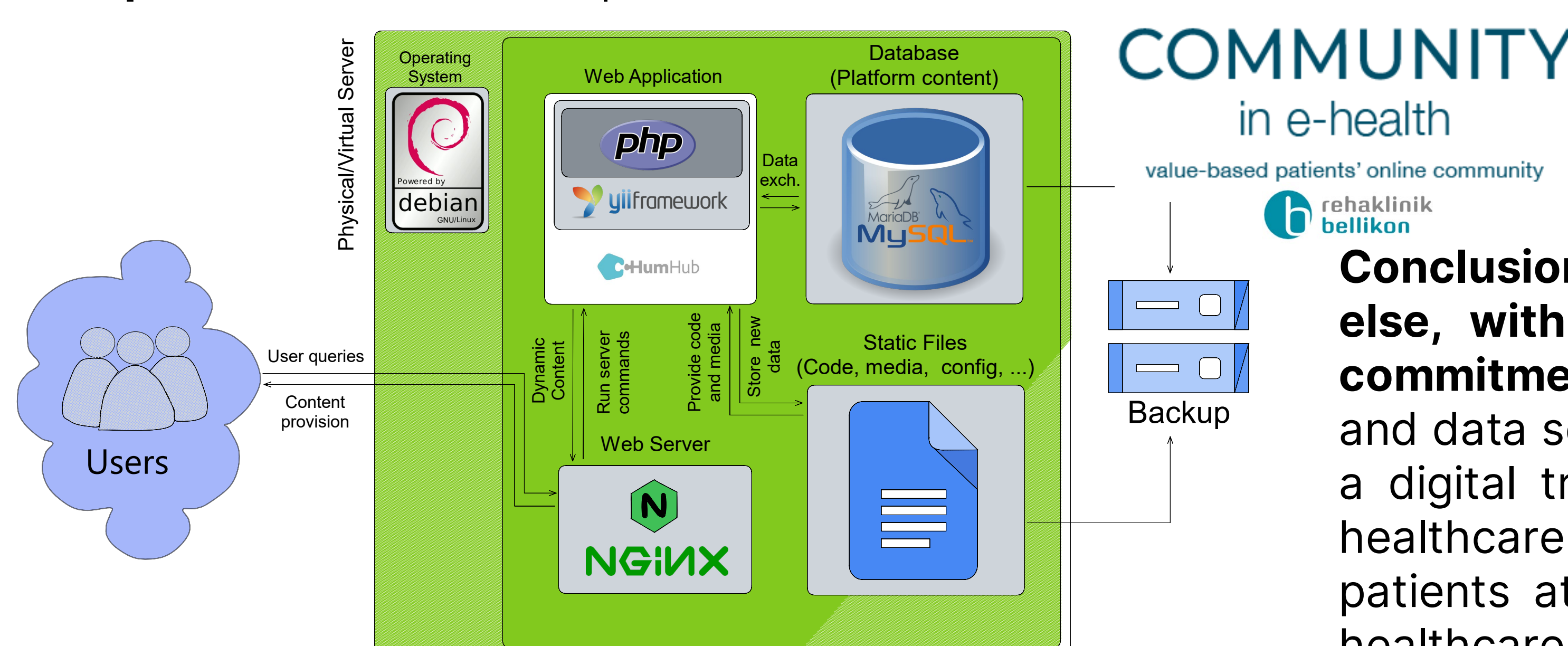
Patients' need is to seek & share information Different patient questions arise at various stages of their health condition, and there is an immediate need for both seeking and sharing information within these periods.

MVP - Based on patients' & experts requirements, we developed a minimum viable product (MVP) These requirements, are separated into four main groups

Governance
Policies
Registration process
Conditions - Regulations (GTC)
Data Protection & Privacy
Responsibilities - Management
Anchoring in organization chart

Moderation Monitoring
Admin roles
Moderator roles
Controls & Warnings
Standard Social Media Measuring Tools:
Rate of engagement etc.

Shared Value & Identity, Welfare Sense of ownership

Content Functions
Relevant content
Questions & Answers with experts
Discussions - chats
Videos, pictures, blogs
Easy to handle

Measuring Impact
Value-based health care
Measuring the impact by PREMs, PROMs, and AI
Supported by expert partners: FHNW, Mayo Clinic, Basel Academy, VBHC Suisse

Source: own visualization based on a feasibility study 2022-2023

Data protection Server Setup

Physical/Virtual Server — Operating System (debian) — Web Application (php, yii framework, HumHub) — Database (Platform content) (MariaDB MySQL) — Static Files (Code, media, config, ...) — Web Server (NGINX) — Data exch. — Backup — Users — User queries — Content provision — Dynamic Content / Run server commands / Provide code and media / Store new data

**COMMUNITY in e-health**
value-based patients' online community
rehaklinik bellikon

Source: own visualization based on solution from the feasibility study 2022-2023

Conclusion - our project prioritizes patient care and outcomes above all else, with financial sustainability seen as a natural outcome of this commitment. We are dedicated to ensuring ethical VBHC & AI integration and data security throughout. While the journey to self-financing resembles a digital transformation, it promises long-term improvements across the healthcare system, affecting processes, enhancing quality, and placing patients at the core of healthcare delivery, ultimately revolutionizing the healthcare culture.
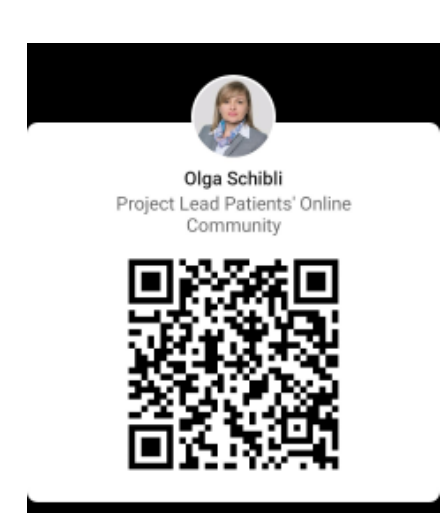
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Young, C. (2013). *Community Management That Works: How to Build and Sustain a Thriving Online Health Community*. J Med Internet Res. doi:10.2196/jmir.2501
Skousen, T., Safadi, H., Young, C., Karahanna, E., Sami, S., & Chebib, F. (2020). *Successful Moderation in Online Patient Communities: Inductive Case Study*. J Med Internet Res. doi:10.2196/15983