# Setting up a digital clinic for mental healthcare

Exploring the expectations of professionals and clients about the 100% digital clinic for basic mental healthcare at GGNet

## Master Thesis

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University of Twente

Health Sciences

3 July 2020

UNIVERSITY OF TWENTE.

GGNet

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Date: 3 July 2020

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Faculty: Science and Technology (TNW)

Study: Health Sciences

Master track: Optimization of Healthcare Processes

Master thesis: Master Assignment HS 2019-2020 (Course code: 201600036)

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# PREFACE

This thesis was written in the context of the completion of the Master Health Sciences at the University of Twente. The thesis study was carried out on behalf of mental healthcare organization GGNet, specifically the House of Innovation department, from February till July 2020. During my bachelor Public Administration and Organisational Science I got acquainted with different sectors in healthcare, including youth care and hospital care. After the first contact with GGNet in November, I was very enthusiastic to learn more about mental healthcare.

*"Under pressure everything becomes liquid, including people's behaviour".* This is a quote that was mentioned by a host of a webinar about online treatment in healthcare that I have followed. This quote appealed to me because it is central to this thesis. Online treatments were more the exception than the rule four months ago, but this has increased enormously in the past period due to the corona virus. It has shown that adaptability of stakeholders is crucial to major changes. It still remains a challenge to maintain and secure change in the future. With this thesis I hope to contribute with insights into the stakeholders that are central to this change.

The corona virus also meant that I had to write most of my thesis at home, nevertheless I received valuable guidance from all my supervisors. I would like to thank my supervisors from the University of Twente, Pieter-Jan Klok and Marloes Postel for repeatedly providing me with critical and useful feedback. Furthermore, I would like to thank my external supervisors Sven Hagg and Carla Roovers for their sharing of information, our interesting discussions and the supervision during my internship. Finally, I would like to say a word of thanks to all the health care professionals, clients and management members of BAS GGNet for their time, effort and participation in this study.

I hope you will enjoy reading this thesis.

Marloes ter Riele
Wilp, 3 July 2020

# ABSTRACT

Background: In order to meet the increasing demand of care and the impending staff shortages of nurses, psychologist and psychiatrist, transformation of mental healthcare is necessary. Using e-mental health and specific providing online care is an example of organizing mental health care differently. Treating clients online has gained more and more ground. GGNet recognizes the possibilities that online treatment offers and has therefore made the strategic decision to start with a 100% digital clinic for basic mental healthcare this year. However, the transition to providing online therapy is not only a technical change but in particular an important social and organizational change. There are major challenges to secure successful implementation of the digital clinic in routine mental healthcare. This is to a large extent influenced by the individual stakeholders that are involved. Exploring the expectations of professionals and clients can give a better understanding of how stakeholders can be best facilitated and meaningful input for setting up the digital clinic.

Methods: Qualitative research methods were applied in this study, consisting of semi-structured interviews. The Normalization Process Theory (NPT) was used to explore the expectations of stakeholders. The target groups of this study were both professionals and clients of basic mental healthcare at GGNet. In addition, the management members were interviewed to provide a broader understanding. The four constructs of the NPT model were used to structure the topic guides for the interviews. The emergence of the corona virus during this study has also been taken into account in the interviews.

Results: A total of 12 professionals, 5 clients and 2 management members were interviewed. Professionals and clients often mentioned increasing accessibility and convenience, but also working from home as meaningful qualities of the digital clinic. Missing face-to-face contact and high energy investment were often mentioned as unfavorable qualities. Professionals are willing to participate part-time in the digital clinic. Clients are willing to participate but not for 100%, they still would like to maintain face-to-face contact. The majority of the stakeholders feels competent to work online. They do see important technical challenges, the system of the digital clinic needs to be user-friendly. All professionals gave a positive final opinion, but emphasized that clients should be able to choose which care suits them. Clients also emphasized this, they remained cautious.

Conclusion: This study found that professionals and clients expect the digital clinic to have meaningful qualities with significant added value, but also unfavorable qualities which emphasize the downsides. Nevertheless, both professionals and clients are willing to participate in the digital clinic. However, clients would also like to maintain face-to-face contact. Their engagement in a 100% online treatment is low. In addition, professionals emphasize that clients should be able to choose which care suits them. For the clients in this study, this seems to be blended care. To achieve successful implementation of the digital clinic in routine mental healthcare, effort is required to increase the willingness to engage among stakeholders and to meet preconditions for optimal use. Steps recommended to GGNet are focused on communication and inspiration, setting goals, paying attention to the wishes of the client, reasoning from a desired situation and offering openness about meeting expectations.

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# 1 INTRODUCTION

Permanent pressure on budgets, high work pressure and scarcity of staff are growing problems with a high impact for professionals and clients in Dutch mental healthcare. The Dutch mental healthcare is experiencing an increasing demand for care, while the availability of care provision is falling. The shortages vary per function, with 8% of the current number of nurses (MBO nurses, HBO nurses and nurse specialists), 7% of the current number of psychologists (GZ psychologists and clinical psychologists) and 12% of the current number of psychiatrists [1]. This impending staff shortage of nurses, psychologist and psychiatrists cannot be solved in the short term. There is an imminent shortage of 125.000 nurses in 2022 and a shortage of 950 GZ-psychologists in 2020. These shortages contribute to other problems in mental healthcare, including the increasing waiting lists, unsafety at forensic clinics, closing of mental healthcare locations and decreasing employee satisfaction [1]. In short, continuing on the current foot means getting stuck. In addition, clients are more and more changing into care consumers who want to have access to mental healthcare seven days a week and close by. Healthcare does not always fit within office hours, clients are increasingly asking for the possibility to get help at other times as well. The demand for care is changing, but the available care provision is not changing fast enough [2]. Transformation is necessary for future-proofing mental healthcare and several steps have already been taken in recent years. However, the deployment of these actions is much too slow and not enough. For the solutions for the future, organizing healthcare differently is inevitable but also desirable. Change is needed to balance the Dutch mental health care [1, 2].

KPMG emphasizes in the 'Health check GGZ' report of 2019 that the use of technology and digitalization is an essential part of organizing mental healthcare differently. E-mental health utilises technological developments to respond to today's challenges. Offering suitable and on-demand care contributes to meeting clients' expectations [2, 3]. E-mental health can be defined as *"The use of information and communication technology to support or improve mental healthcare"* [4]. Many authors believe that e-mental health has enormous potential to address the gap between the identified need for mental health services and the limited capacity to provide services. While at the same time e-mental health increases the number of people in reach of mental healthcare [3, 4]. E-mental health interventions are associated with a number of benefits over traditional face-to-face care: increased accessibility and convenience for the client with regards to time and location of the treatment, the relative anonymity and neutrality of such interventions, the reduced costs for healthcare providers and increased quality of care in terms of effectiveness and efficiency [5-7]. There are various e-mental health applications available and the supply is growing. E-mental health is not just about the technology, it presents real opportunities to engage and empower clients. It represents a cultural change in mental healthcare, stimulating an active role of clients [7].

## E-mental health in practice

Providing online care is a way of organizing mental healthcare differently. In 2014, Minister Schippers predicted that in 2019 everyone would use video calling in contact with their healthcare provider. In practice it appears that offline therapy is still often preferred, supplemented with online interventions [8]. This is also called blended care: *"An integrated assistance offering of both online and face-to-face interventions with the aim of making healthcare more client friendly, qualitatively better and more efficient"* [9]. Blended care is increasingly being applied in mental healthcare institutions since 2014, mixing traditional and digital psychological care [10]. However, not all clients experience the added value of face-to-face contact as such. The added value strongly depends on the needs of the client [9, 11]. Marte Roemer of the Zorgkliniek emphasizes: *"It is only a matter of time before the next generation seizes the online opportunity en masse"* [8].

Online treatment in mental healthcare has gained more and more ground [12]. The first 100% online treatments offered via the internet were launched at the end of 1990s, but the trend of online treatment has grown in recent years [3]. Treating clients online has several unique advantages: it gives control to the client, it is flexible and accessible, it provides fast help, it is an important solution for long waiting times and contributes to the reduction of stigma and reaching isolated groups [11, 13, 14]. In addition, it enables professionals to live and work around the world. Psychologists who move abroad treat Dutch clients online, creating more available psychologists [8]. Beside the fact that online treatments can provide solutions for important problems, findings provide evidence that consumer engagement is trending upward in recent years in three important areas: partnering with providers, tapping online resources and relying on technology [11, 15]. Health consumers want to use mobile technology to better manage their healthcare and improve their access and connectivity to their health providers. We are in a period of unique convergence with ubiquitous internet availability, mobile devices and social resources that can be combined to provide the most disruptive set of factors to ever affect the provider consumer relationship [15, 16, 17].

All these factors seem to be leading the growing establishment of digital outpatient clinics at different mental healthcare institutions in the Netherlands. In the digital clinic the client can work fully digital with their practitioner on their targets. The treatment consists of online exercises and assignments that a client can work on the moment it suits them, in their own environment and independently. For example, it contains information about various psychological complaints, tools for looking at your thoughts differently and relaxation exercises. This is supplemented by conversations with the practitioner. The contact with the practitioner takes place from screen to screen, with video calling. This means for example that the intake interview takes place entirely online [14]. Care is provided remotely, but client experiences show that online care can also be close and personal. Although more studies are necessary, e-therapy seems to be equivalent to face-to-face therapy in therapeutic alliance and relationship [18, 19].

## Implementing a 100% digital clinic

GGNet states the following in their vision document 2020-2023: *"The use of digitalization and technology plays an increasingly important role in our society. Technology helps people and their loved ones to manage themselves, it helps professionals to work with each other and it makes care independent of time and place. It offers possibilities to better match the demand of care of the future. Our care does not always fit within office hours. That is why we want to offer clients the opportunity to get help at other times as well"* [20]. GGNet recognizes the importance of the use of technology and digitalization, for organizing mental healthcare differently. Becoming a solid and agile organization, ready for the fast-moving world around us, is an important goal for GGNet. They expect that treating clients online contributes to meeting clients' expectations and preparing for the development of a digital society. The important benefits of treating 100% online and the successes of others who already started with a digital clinic are important considerations. GGNet therefore has made the strategic decision to start with a 100% digital clinic this year. The digital clinic will in any case be implemented for basic mental healthcare, the simultaneous implementation for specialist mental healthcare is still under consideration. Basic mental healthcare (BAS) is for everyone from the age of eighteen who has to deal with mild to moderately severe mental health complaints. The following complaints can be a reason for registering with BAS: mood complaints, anxiety complaints, trauma, dealing with physical complaints, long-term psychological complaints for which specialized treatment has already been performed, other complaints such as compulsive thoughts, strong feelings of inferiority, long-term mourning, problems with impulsive behaviour and fear of failure [21].

In recent years, blended care has increasingly been applied for clients of GGNet. The online treatment interventions are available through the secure internet platform Karify, this is in addition to their face-to-face appointments with the practitioner. Of the clients that are treated at BAS, 43% receives online treatment interventions. All the practitioners have connections to promote online treatment and communication, practitioners have an average of 25 clients in online treatment. The use of Karify has become part of the work processes of practitioners, almost all clients have a Karify account and 70% of the online treatment interventions that are available are people actively using. However, there are still points for improvement: the majority of the content used online concerns the welcome and intake module, online feedback is only given by 19% of the practitioners and secure video calling is not used [21, 22]. GGNet scales up and optimizes the use of online interventions. Even though the online treatment interventions at GGNet are still growing, BAS guarantees for 80% of the e-mental health offer at GGNet. In addition, about 25% of GGNet's clients are located at BAS. GGNet therefore sees a 100% digital clinic for BAS as a logical next step in scaling up the use of e-mental health [22]. The decision to set up a digital clinic for BAS has already been taken and the intention is to implement the digital clinic this year. With the aim for 2020 to have at least one operational online treatment team for the 100% digital clinic.

The digital clinic can be deployed on the same e-mental health platform Karify that is currently being used. The plan is to initially start with a standard basic platform and with the practitioners who are enthusiastic about getting started.

Online therapy makes optimal use of e-mental health options, but the transition to full use of only a monitor is a big step for both the professionals and clients of BAS GGNet. Providing online therapy for clients is not only a technical change, but in particular an important social and organizational change [23]. For example, the professionals need to regain balance in their job profiles. It may require a different time distribution and a different availability from professionals, but also new moments of reflection. It's a new way of working, professionals have to integrate this into their existing work practice. Regarding the client, online treatment requires more independence. Clients will follow the treatment at distance, from their own environment. It also requires good collaboration with the practitioner, at all stages of the treatment. For both, it calls attention to their digital and online communication skills. The change to 100% online has impact [24, 25]. Despite the fact that the direction for GGNet is clear, they recognize they are just at the beginning and that there is still a lot of uncertainty and unclarity.

## Challenges in the implementation process

There are major challenges to implement the digital clinic as successfully as possible. It is therefore important to have a strong emphasis on the implementation process. Implementation is defined as: *"A series of planned, conscious activities that are aimed at putting into practice evidence-informed policy and actions in daily care"* [26]. A lot of research has been done into the implementation of innovations in daily practice, which has resulted in many different models. Showing that there is no clear road to success [27]. In this case the decision to innovate has already been taken, prior to the implementation process. Central decision-making by management has a positive effect on the dissemination and adoption of the innovation, it legitimizes change and supports the creation of preconditions. However, it is important that decision-making is also decentralized by professionals, there must be commitment at different levels [27, 28]. The top-down decision does not guarantee that innovations will find their way [29]. Implementing e-mental health is promoted, but it is recommended to acknowledge the multi-level complexity and difficulty of implementation. Careful preliminary assessment contributes in identifying possible facilitators and barriers that can affect implementation [23]. The goal of effective implementation is that end-users, clients and loved ones, benefit from the policies and actions [23, 30].

There are several factors that influence the implementation of e-mental health, identified at the following levels: the individual e-health technology, the outer setting, the inner setting, the process of implementation and the individual health professional and client [31, 32].

Many scholars have shown that the adoption of new technologies in healthcare to a large extent are influenced by the characteristics of the individuals related to the technology. Knowledge, beliefs and expectations of individual health care professionals and clients have a great influence on the acceptance and successfulness of the implementation of e-health technology [32-35]. Expectations, future-oriented abstractions, are among the most important research objects for scholars [35]. Expectations refer to a strong belief that the change will or should be delivered based on stakeholder's standards. Whether an expectation is realistic or not is another matter [36]. Expectations can direct activities, provide structure and legitimacy, attract interest and promote investment [35]. Expectations have been found responsible for the commitment to change, the level of usage and satisfaction. The expectation of an individual can thus stimulate the implementation of innovation, but also hinder it [36, 37]. Wu et al. (2015) state that once there is decided to implement change, the next critical phase is to manage all stakeholders' expectations. If you do not properly manage expectations, the delivered solution may lead to failure [36]. Expectation management may and cannot be missing [38]. Besides, exploring expectations can give meaningful insights and a better understanding of how stakeholders can best be facilitated [39]. Therefore, analysing the dynamics of expectations of individuals is a key element in implementing change as successfully as possible [35, 40]. Wu et al. (2015) state: *"Keep track of every new expectation. If they are realistic and achievable, you should always commit to these new expectations. If not, you should explain why they are not"* [36].

## Research aim

The aim of this study is to explore the individual expectations of professionals and clients about the 100% digital clinic for basic mental healthcare at GGNet. An orientation on the different expectations can provide important input for setting up the digital clinic. Besides, it can form the basis for expectation management which is essential for achieving the desired results when implementing change. The exploration of expectations will be used to identify points of attention and provide recommendations to make professionals and clients successfully start and maintain use of the new digital clinic for BAS.

The following research question is stated:

*What are the expectations of professionals and clients of BAS GGNet towards the 100% digital clinic and how can successful implementation in routine mental healthcare be achieved, according to the Normalisation Process Theory (NPT)?*

The NPT model will be used in this study to explore the expectations of professionals and clients. The model will be explained in more detail in chapter 3 Theoretical Framework.

The research question will be answered using the four constructs of the NPT model, with the following sub-questions:

1. What do professionals and clients expect to be the meaningful and unfavorable qualities of the digital clinic?
2. At what level of willingness to enroll and engage in the digital clinic are professionals and clients located?
3. To what extent do professionals and clients expect that they are able to execute the digital clinic in practice?
4. How do professionals and clients individually appraise the digital clinic based on current experiences?

# 2 CONTEXT

In order to provide more insight into the position of the research question of this study, this chapter will describe the context in which the study takes place. For this attention is paid to the organization of GGNet (paragraph 2.1), current subsidy processes (paragraph 2.2) and important developments during this study (paragraph 2.3).

## 2.1 GGNet

GGNet is a traditional mental healthcare organization in North and East Gelderland. Together with 2.100 colleagues and 200 volunteers, work is being done to restore connections for people with (serious) psychiatric disorders and for their loved ones. The traditional work area is divided into five sub-regions with multiple locations: Apeldoorn, Doetinchem, Zutphen, Zevenaar and Winterswijk/Groenlo. GGNet offers both basic and specialized mental healthcare, about 18.000 people are treated annually. Divided into three divisions: Outpatient, Treatment & Stay and Specialisms. Within GGNet there are several specialties with a very specific target group or disorder, including eating disorders, personality disorders, mild intellectual disability, youth and young adults, elderly, trauma and forensic psychiatry [41].

GGNet's historical roots lie back about 360 years in history, after which many mergers with local mental healthcare organizations have taken place. In its current form GGNet has existed since 2007, when the merger of GGNet and Spatie became reality. All these mergers have created a mix of different cultures in the organization. For 2019 creating a desired culture and shared mindset was formulated in the annual plan as an important goal. It contributes to achieving the vision of the organization and creating sustainable healthy business operations. In addition, getting rid of the internal waiting list for treatment was an important challenge. The inability to attract practitioners to critical positions plays a role in this waiting list problem. In 2019 therefore attention was also paid to continuing to interest and binding employees. The average age of the employees of GGNet is 45 years old [41, 42].

**Basic mental healthcare (BAS)**

In 2018 the strategic choice is made to transfer BAS as a separate organizational unit. It is strongly portrayed as its own brand 'BAS is close'. BAS is now in 13 locations and is expanding further, to keep the barrier for people to contact BAS as low as possible. Clients can go to BAS when they first have to deal with psychological complaints, but also if they have been in treatment for a long time and want to recover further or want to prevent themselves from relapsing. The aim of BAS is to give clients the confidence that they can continue themselves.

There are 57 colleagues working at BAS, ranging from psychiatric nurses, cognitive behavioural therapists, nursing specialists, psychologists and GZ-psychologists [21, 42]. In 2019, for basic mental healthcare 4120 unique clients have been treated. In total 2824 packages were opened in BAS in 2019, the majority of which were declared using Basic GGZ Intensive (53%) and Basic GGZ chronic (22%). This means clients with serious problems or stable chronic problems, with a low to moderate risk. The average waiting time (registration plus treatment waiting time) in 2019 was 7.6 weeks, which is below the standard of 14 weeks [43].

## 2.2 VIPP mental healthcare subsidy

VIPP stands for the Acceleration Program Information Exchange Patient and Professional. The aim of this program is for mental healthcare institutions to make a digitalization step to make healthcare safer, more client-oriented and more efficient. Mental healthcare institutions that apply can receive a subsidy from VIPP funds if they demonstrate before 1 February 2021 by means of a report that they have achieved the objectives. VIPP consists of three parts: Patient & Information, Patient & Medication, Patient & E-health. Each of the parts consists of two modules, institutions can apply for a maximum of three modules [44]. GGNet has chosen to participate in VIPP modules A1, B1 and C1 because the implementation program is in line with the national standards and the goals of the organization. Among other things, the use of technology to reorganize healthcare and to be able to cope with the increasing demand for healthcare in times of declining available professionals is an important goal. This is in line with the objective of module C1: activities that lead to mental healthcare institutions making more use of e-health modules are part of the treatment. The standard that is associated with C1, which must be achieved before February 2021, is that at least 10% of the clients who have had treatment contact in the past 90 days demonstrably have used an e-health module. A measurement in early February 2020 shows that this VIPP standard has not yet been achieved, the use of e-health within GGNet is increasing but is not rising fast enough to achieve the objective. To achieve the norm clients must be motivated to start using e-health, practitioners are important ambassadors for this. To achieve VIPP objectives, a broader upscaling of e-health is necessary. A digital clinic for BAS may contribute to achieving the objectives [22, 44].

## 2.3 Emergence of the Corona virus (COVID-19)

In December 2019, an outbreak of a new corona virus started in the Wuhan region of China. This virus can cause the disease COVID-19, a situation which poses a serious public health risk. People with the new corona virus have fever and respiratory complaints differing in mild to severe illness, including illness resulting in death. The disease is spread from person to person and community spread has been detected in most countries worldwide, the WHO has labelled the corona virus a pandemic. Community spread means that some people have been infected and it is not known how or where they became exposed [45].

The first patient with the virus in the Netherlands was found on February 27, after which the virus has spread at increasingly rapid rate, leading to a large number of people needing medical care at the same time. To prevent further spread of the virus in the Netherlands, measures have been taken by the government. People with complaints stay at home, everyone tries to work at home, social contact is avoided, people keep 1.5 meter distance and many public locations are closed. This impact of the corona virus requires mental healthcare providers to close their doors for clients who need face-to-face contact [46].

European mental healthcare institutions have yet to experience the full impact of the corona crisis. At the same time, the demand for mental healthcare is expected to rise. Anxiety including fears of contamination, stress, grief and depression are triggered. Besides, the social and economic impact the virus has on individual and societal level has consequences. Mental healthcare providers are forced to search for solutions for digital contact, to accommodate their current clients and to face developments [47, 48]. It is expected that the corona virus will lead to an important shift in mental healthcare, the 'black swan' moment as Wind et al. (2020) call it. The virus is a stimulator for the implementation of online therapy and e-health tools in routine practice, where previously many attempts have failed due to numerous barriers [48]. At GGNet video calling and internet interventions also provide solutions to continue mental healthcare. Where the use of e-health did not rise fast enough in early February, this increased considerably within a couple of months. The report by the e-health supplier Karify, specifically about the use of video calling GGNet wide, shows that the number of video calling conversations has increased considerably since the arrival of the corona virus in the Netherlands (Figure 1). This is a measurement from early January until the end of May, the data is not filtered for test calls and interrupted calls. In May, 1.012 of the video calls were made at BAS.

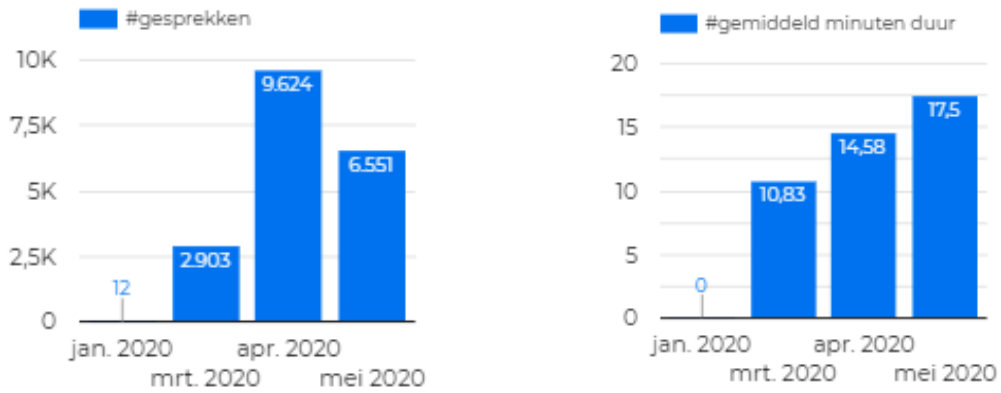


*Figure 1. Karify report with number of video calls and average duration of video calls in minutes (January - May 2020).*

The corona virus has boosted the use of online care at a rapid pace. This affects the above mentioned VIPP standards and can also play an important role in people's expectations and the extent to which they embrace online care. It is therefore an important context variable that will be taken into account in this study.

# 3 THEORETICAL FRAMEWORK

In this chapter a theoretical framework is given. Paragraph 3.1 will provide insight into the different steps of the e-mental health implementation process. Subsequently, paragraph 3.2 discusses the different levels of adopting e-mental health. In paragraph 3.3 and 3.4 the evaluation of expectations of stakeholders and their characteristics will be discussed. Finally, a summary will be given in paragraph 3.5.

## 3.1 The CeHRes Roadmap: the e-health implementation process

E-health contributes to global issues of keeping our health system affordable, accessible, acceptable and of good quality. E-health technologies facilitate the transformation to a sustainable system of integrated care where prevention, education and self-management are substantial, prominent, available and accessible options for all. Today's evidence demonstrates the impact of e-health. However, the central issue now is to translate this knowledge into practice [49]. Many e-health initiatives are subject to slow implementations, change resistance and increasing budget deficits. Implementing e-health is often not very successful due to lack of understanding the issues related to e-health's components compatibility, neglecting the e-health synergy and lack of support of e-health integration effort. The shift towards successful implementation is necessary to scale up e-health technologies that work [50]. In healthcare innovations often involve highly organized, institutionally sanctioned and systematically regulated changes in the structure and delivery of services. Technology is embedded in the reality of the multifaceted environment of health care. Integration and the involvement of users and context is therefore important [49, 51]. A comprehensive perspective on the implementation of e-health is needed to come to effective implementation. This perspective is often lacking in the current e-health implementation frameworks [50, 52].

A more complete framework is desired, as findings show that a holistic development process increases the chances of a successful adoption and sustained use of e-health technology. It increases the likelihood of achieving the desired effects on health and healthcare [53]. Van Gemert-Pijnen et al. (2011) emphasize the need to create a better fit between technological, human and contextual factors. A holistic approach, which means that the importance of the whole and the interdependence of its parts are taken into account [49, 52]. From the review of current frameworks and from empirical research the strategies and principles for a holistic development approach are derived and combined into the *Centre for eHealth Research Roadmap* (CeHRes Roadmap) [52]. The CeHRes Roadmap as illustrated in Figure 2 consists of five intertwined phases and connecting cycles. The phases comprise the entire process of e-health development to actual implementation and evaluation.

The connecting cycles represent the formative evaluation cycles, which ensure that activities during a phase are related to the stakeholder perspective, the context, and outcomes of previous phases. The CeHRes Roadmap answers to the call for more flexible and agile intervention development approaches, as the separate blocks of the roadmap are not time-ordered [52, 53]. The roadmap is meaningful for GGNet since they want to guarantee connection with their stakeholders and do not approach the digital clinic implementation process time ordered. The final destination is clear for GGNet, however the 100% digital clinic still has to go through the whole process of the roadmap. The project team must get an understanding of prospective users and their context, one must determine which values the different stakeholders deem important, based on requirements a prototype of the technology needs to be developed, marketing plans and organizational working procedures have to be put into practice and finally the 100% digital clinic needs to be evaluated. The evaluation is an important step for determining the added value of the technology and has an impact on possible scaling up to for example specialized mental healthcare [53]. It can be concluded that all the phases of the CeHRes Roadmap are applicable and of importance for GGNet. The CeHRes Roadmap considers especially Value Specification, this phase is essential for good e-health development and relevant to this study. The values, needs and wishes of clients and professionals need to be explored and translated into user requirements. It forces the development team to be precise, which helps in dealing with implementation-related issues [53].

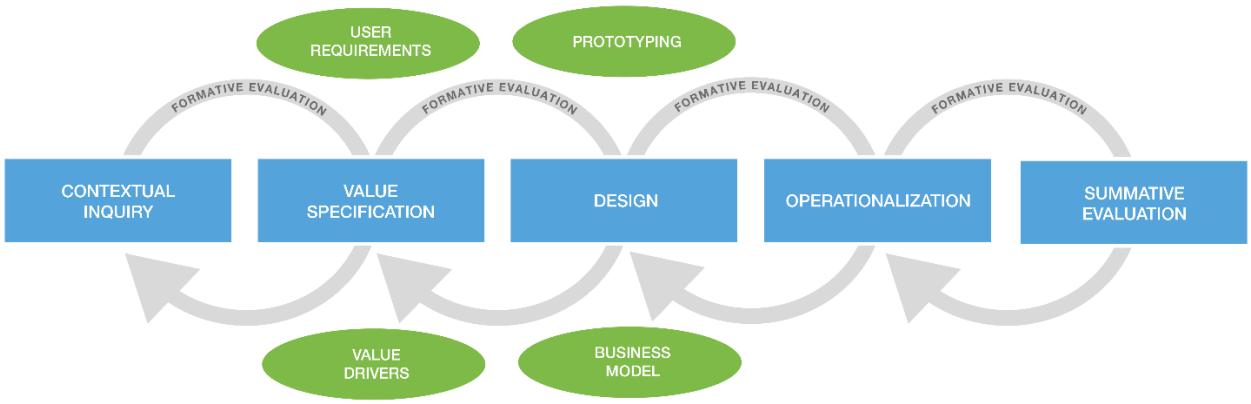


*Figure 2. The Centre for eHealth Research (CeHRes) Roadmap* [52].

## 3.2 Levels of Adoption of eMental Health (LAMH) model: different individual levels

In the Operationalisation phase of the CeHRes Roadmap information from the context, stakeholders and the business model are used to create an implementation plan. This study will focus on gathering input from the expectations of relevant stakeholders, the professionals and clients, as the adoption of a 100% digital clinic requires them to adopt new behaviours. A model that is well suited to describe the process of behaviour change to adopt a new technology and which also can be used in the implementation plan as well, is *The Diffusion of Innovations Theory* of Rogers (2003) [53, 54]. This theory is originated to explain how an innovation diffuses through a specific population or social system over time [54].

The end result of this diffusion is that people adopt the innovation. The rate of adoption can be explained by the characteristics and perspective of the target population. When implementing an innovation, there are different strategies used to appeal to different adopter groups: innovators, early adopters, early majority, late majority and the laggards. The innovativeness of each group helps in understanding their behaviour in the process. The innovations that are perceived by individuals as possessing greater relative advantage, compatibility, trialability, observability and less complexity will be adopted more rapidly than other innovations. Hence, one's perception of the innovation influences the degree of adoption [54, 55].

The Diffusion of Innovations Theory of Rogers is used in many studies to understand the target population of an innovation. Feijt et al. (2018) performed a study into the perceived drivers and barriers to the adoption of e-mental health by psychologists. On the basis of similarities between the theory of Rogers and the findings of their study, the authors proposed *the Levels of Adoption of eMental Health (LAMH) model* shown in Figure 3 [56]. The model incorporates the five different adopter groups and links them to the general characteristics, drivers, barriers and requirements for change that were found relevant for each level. A factor is located under a particular level if this is most important for the clinical psychologists at that level. Showing that the sceptic psychologists at level 1 are averse of using e-mental health, when they experience pressure by management this results in a strong feeling of resistance. This group is characterized by a relatively low level of computer literacy and lack of exposure to e-mental health. At level 2 where psychologist make minimal use of e-mental health, they are becoming more convinced. However, they are generally unsure how to implement it into their daily practice. There tends to be a lack of knowledge about the possibilities, psychologists do not want to spend a lot of time and effort. Psychologists at the third level are using e-mental health and their conviction of added value is growing, this group is also confronted with the challenges and limitations of e-mental health [56]. Level 4 psychologists show a much higher level of personal interest and intrinsic motivation in keeping track of developments, such as level 5 psychologists who in addition also have a clear vision about the positive changes that e-mental health will bring to health care [56]. Overall, the models shows that the professionals' ability, willingness and belief in the beneficial outcomes of e-mental health are key driver of its adoption.

From the LAMH model it can be inferred that incomplete adoption has consequences for a successful implementation. It is therefore important that the implementation of the 100% digital clinic is tailored to the stakeholders' individual level. The model can be practically applied by informing how individuals can be addressed and influenced on a much more specific level. This is of importance to this study, since it contributes to the placement of the professionals and clients in this study.

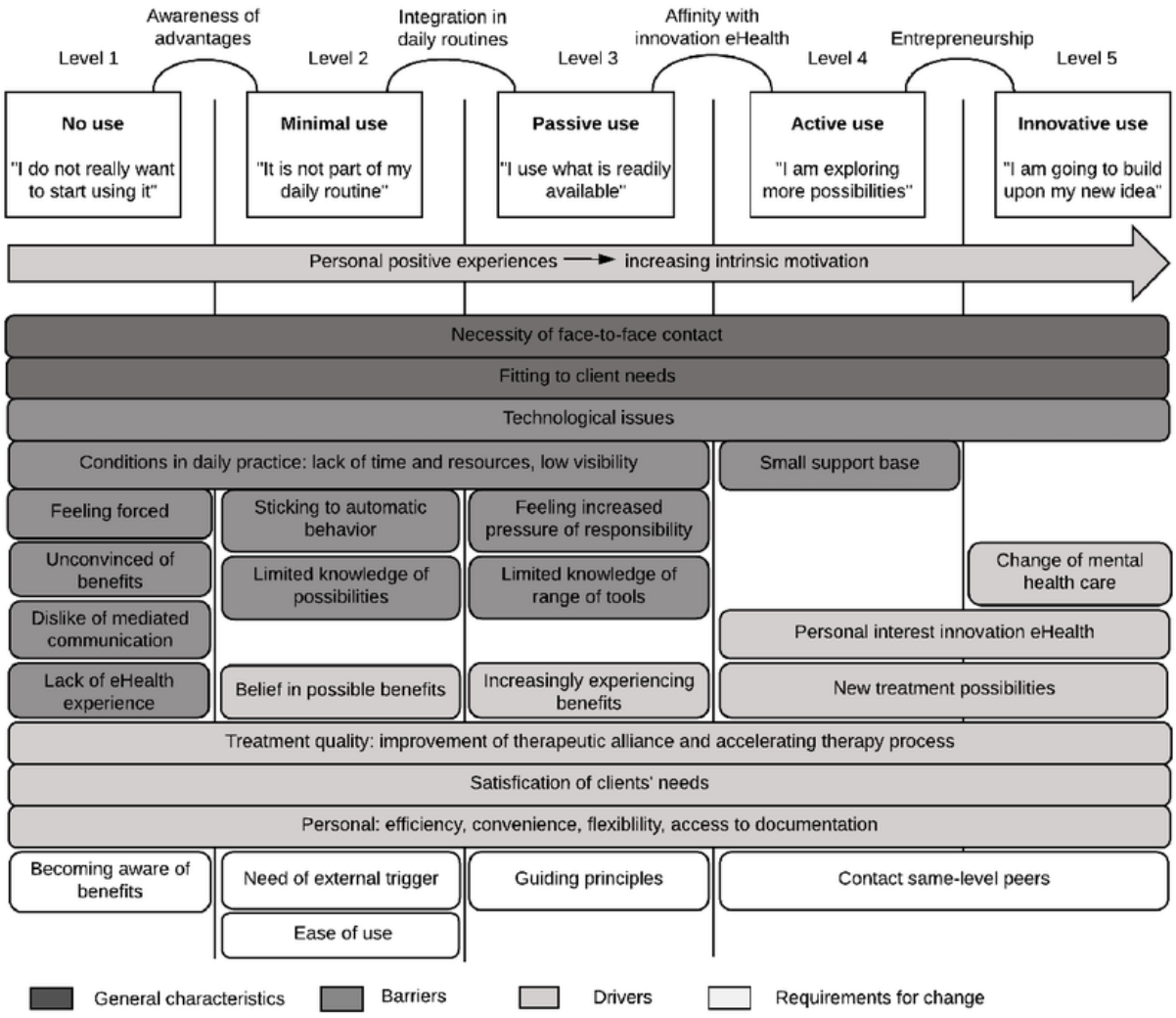


*Figure 3. The Levels of Adoption of eMental Health (LAMH) model* [56].

## 3.3 The Normalisation Process Theory: evaluating expectations of stakeholders

The models above provide insight into the process of implementation and adoption of e-mental health technology in practice. It provides insight into the overall process, but it also shows the specific individuals that need to be taken into account. These specific individuals are the deciding factor in ensuring implementation. It is easy for people to know what they should do, harder for them to be able to do it and most difficult of all to embed this into their daily practice [57-60]. A key problem therefore is that of understanding how innovations become routinely incorporated or embedded in everyday practice instead of fading and disappearing over time. A focus on really embedding new technologies has proven to be much more complex and time-consuming [57]. While the knowledge on implementation is growing, the challenges involved in sustaining change often have very little attention. Recent literature shows the conceptual framework for sustainable e-health implementation of Fanta et al. (2018), which uses a system-approach to implement e-health for the long term. It is focused on the interactions between the elements of a sustainable e-health system [61].

One theory that focuses on the specific individuals that play a role in change becoming an ongoing routine element is *The Normalisation Process Theory* (NPT). NPT also characterizes implementation and embedding as agentic, dynamic and complex practices and effects that are unevenly distributed across social space and time [62]. NPT states that a normalization process is a process of embedding and integrating health care innovations in routine care as a product of action of individuals and groups. It focuses on the things that people individually and collectively do to normalize an innovation, before it becomes part of routine health care practice [62, 63]. NPT proposes that implementing technology can be achieved through 'energizing' four mechanisms: *Coherence, Cognitive Participation, Collective Action* and *Reflexive Monitoring*. Coherence is about sense-making, the established meaningfulness of the innovation. Understanding the potential value of the technology. Cognitive Participation focuses on the process of enrollment and engagement of individuals. During an implementation process the actual implementation in practice is also important. Collective Action is about the execution of a practice, the ability to do the work. Finally, Reflexive Monitoring is about how stakeholders appraise the technology. This assessment reflects the interaction between the other constructs, whereby a judgment is made about the innovation based on practical experiences. This construct is aimed at systematic evaluation. The four constructs are influenced by group processes and social conventions as well as the organizational factors and social structures people operate in, illustrated in Figure 4 [39, 62, 63].

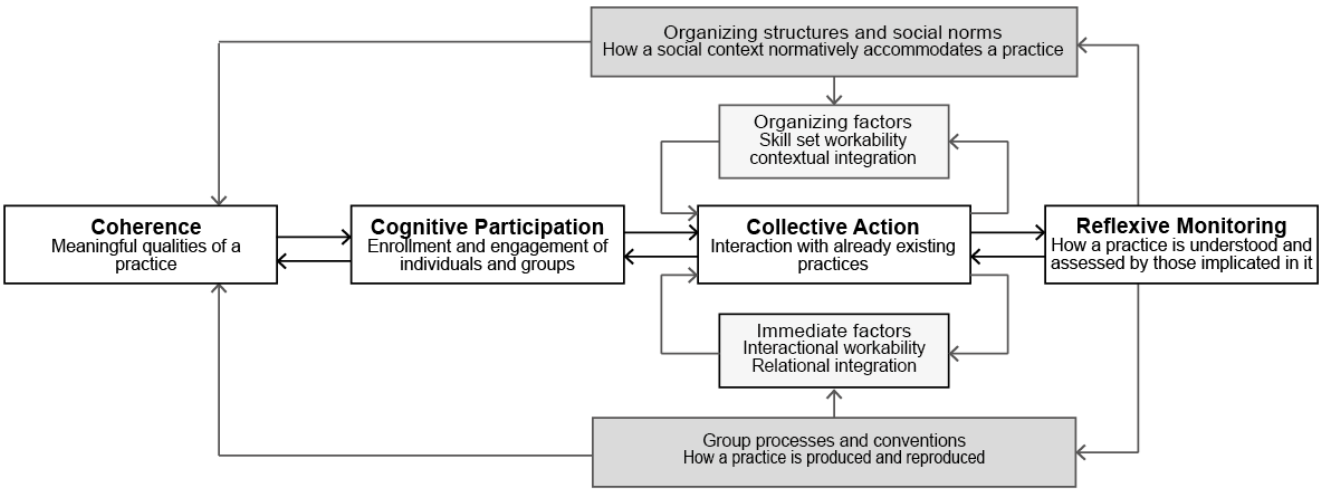


*Figure 4. Visualisation of the Normalisation Process Theory (NPT)* [63].

NPT is generally accepted as a consistent framework that can be used to describe, assess and enhance implementation potential [39, 62-65]. Recently NPT is used to explore users' expectations of change and outcome, to generate a better understanding of how they can best be facilitated through the adoption process. McCrorie et al. (2019) concluded in their study that the four core mechanisms of NPT provided a useful framework to explore individual and group expectations for change and outcome [39]. This provides essential understanding for those managing the change process.

NPT is concerned with the social organisation of the work of making practices routine elements, it therefore has potential to address the path towards successful implementation and integration [39, 65]. The framework of NPT gives the possibility to look at the values of clients and professionals as is shown in the CeHRes roadmap as an important step, with attention for the different adoption levels that are discussed in the LAMH model. The NPT model is concrete and comprehensive, it is suitable for zooming in on the relevant stakeholders and exploring their expectations. The four constructs of this model will be used in this study as basis for exploring expectations, the other models will not be used but will be of value in the interpretation.

## 3.4 The people in the change process

The NPT model considers the complexity of the implementation of e-mental health. The fact that human services are delivered through the actions of individuals which exist within complex social contexts, contributes to this [66]. It is therefore of importance to consider notable characteristics of the stakeholders that are involved in the 100% digital clinic.

**The professional**

Understanding the professional and their change responses may be critical for the change to the 100% digital clinic. In public management literature there is an established base for considering the role of professionals in public services. A number of dimensions of professionalism recur as being important: professionals have expert knowledge, professionals are socially powerful, professionals are autonomous, professionals often have confidential relationships with their clients, professional outputs are difficult to measure, professionals have discretion in their work, professionals are extraordinary and professionals are self-regulating [67, 68]. Professionals value their independent and cocksure nature [67-69]. Mental healthcare professionals come in varieties, with different degrees of professionalization. Psychiatrist can be ranked as having the highest degree of professionalization, being a medical doctor and belonging to one of the classical professions. The professionalization of psychologists is also quite high, but lower than that of psychiatrists. Next in line regarding the degree of professionalization are the mental health nurses, the social workers in mental healthcare can be classified as having the lowest degree of professionalization [68]. Nevertheless, the study of Leemeijer et al. (2016) shows that psychologists put more emphasis on their professional autonomy and responsibility than psychiatrists, who take more space to accommodate client's preferences and autonomy. This remarkable difference is partly due to the fact that healthcare professions have evolved over time [68]. The more professionalized a profession is, the more it will be inclined to adhere to its traditional professional autonomy. The strong professional culture makes it difficult for managers to make change work for professionals, as they sometimes naturally resist change processes. When a change process is accompanied by control or coercion, it is quickly seen as a threat to their autonomy [68, 70, 71].

A high professional status can lead to difficulties, however the healthcare systems are in the midst of reshaping some values and developing new ones. From values aimed at the professional to more societal and client-focused values. New societal demands and changes cannot be ignored, professionalism is being redefined [68, 72]. Besides, several studies show that acceptance and willingness to change is largely dependent on the difference in employees and their experiences. Different generations respond differently to change, younger generations are more adaptable and consider change as a norm [73, 74].

**The client**

The client is the actor for whom the digital clinic was ultimately designed, they thereby influence the care process. Online treatments offer many opportunities for the healthcare sector, but it is important to be aware that not every client group is eager for online [75]. Previous studies show that very few clients have followed internet treatments for psychological problems in recent years, in addition 82% says they are in doubt or even certain that they would not want to use an online treatment form [76, 77]. Roettl et al. (2016) looked into what predicts the clients' willingness to undergo online treatment. Their findings show that the willingness to undergo online treatment is partly determined by the level of existing experience, willingness to communicate online with the practitioner and health information-seeking personality and social motivation for such behaviour [77]. These findings are in line with Rogers diffusion of innovation theory, showing that early adopters are sooner willing to undergo online treatments. This group may spread their opinion and experiences with online treatment among others.

Besides the willingness of clients, it is also important to consider the suitability of clients. Several studies note that e-health is not suitable for every client group [75, 78-82]. The University of Twente has developed the Fit for Blended Care instrument in collaboration with various mental healthcare institutions. With the help of this instrument it can be determined whether an individual client is suitable to make use of online treatment options. Necessary criteria that determine whether it suits a client are: client has internet connection, client has a quiet workplace, client has sufficient computer and internet skills, client can express himself sufficiently, treatment goals are clear, there are treatment components or modules that match the client's treatment goals, there is no crisis and the estimated IQ of the client is higher than 80 [78]. This shows that both technical possibilities and the skills of a client are key issues related to the suitability. In addition, the crisis sensitivity, diagnosis, previous and current treatment are also important points of attention [78-80]. For certain diagnoses online treatment may not be appropriate. Suler (2001) describes that severe pathology, risky behaviours such as lethally suicidal conditions and people with borderline personality disorders may not be appropriate for online work. Ferrero et al. (2012) give individuals with psychotic disorders, those with significant suicidal ideation or current victims of violence or sexual abuse as examples for not appropriate candidates [80, 82].

Online therapy will not be appropriate for all people seeking help, however there is still little clinical research which makes it unclear for which client groups e-health is specifically (un)suitable. Practitioners need to feel confident in recommending e-mental health to clients and clients need to be provided with information on a range of treatment options, to ensure the option that is most suited to their needs [79].

## 3.5 Summary

This theoretical framework has emphasized the role of individuals as a decisive factor in successful implementation. This concerns the individuals who ultimately need to adapt the innovation and must integrate this into their new daily practice, the users and in this case the professionals and clients. The four constructs of the NPT model focus on the things that people individually do to normalize an innovation and have proven to be effective for exploring the expectations of individuals. Variables can be derived from the important findings from literature, that are in line with these constructs. Following on the construct of *Coherence*, literature shows that understanding and insight into the meaningfulness and added value of the innovation is important. The willingness of individuals, their degree of engagement, matches the construct of *Cognitive Participation*. For clients, this is determined by experience, willingness to communicate online, health information-seeking personality and motivation. For professionals, their motivation and experience are also important actor characteristics. In addition, literature shows that the emphasis that professionals place on their autonomy and responsibility influences the difficulty of their enrollment. The construct *Collective Action* includes competency and skills, technical workability and the integration in the client-practitioner relationship. Besides, it is important for professionals that e-mental health interacts with their existing practice and is suitable for the specific clients they treat. Finally, the construct of *Reflexive Monitoring.* The literature shows that not everyone is eager for e-mental health, but opinions are subject to change. Belief is influenced, among other things by experience in practice. Another important finding from literature is that individuals are influenced by their context. The structure and standards prevailing in an organization, as well as group processes that take place around the innovation, influence how a practice is produced and reproduced.

The NPT model constructs and the important variables from literature that influence these constructs are summarized in Figure 5. The variables at the top are specifically aimed at the professionals, the variables at the bottom focus on the clients. The two variables that relate to the social context in which the professionals and clients operate in, outline and affect the entire model. This figure will be included in the empirical part of this study.

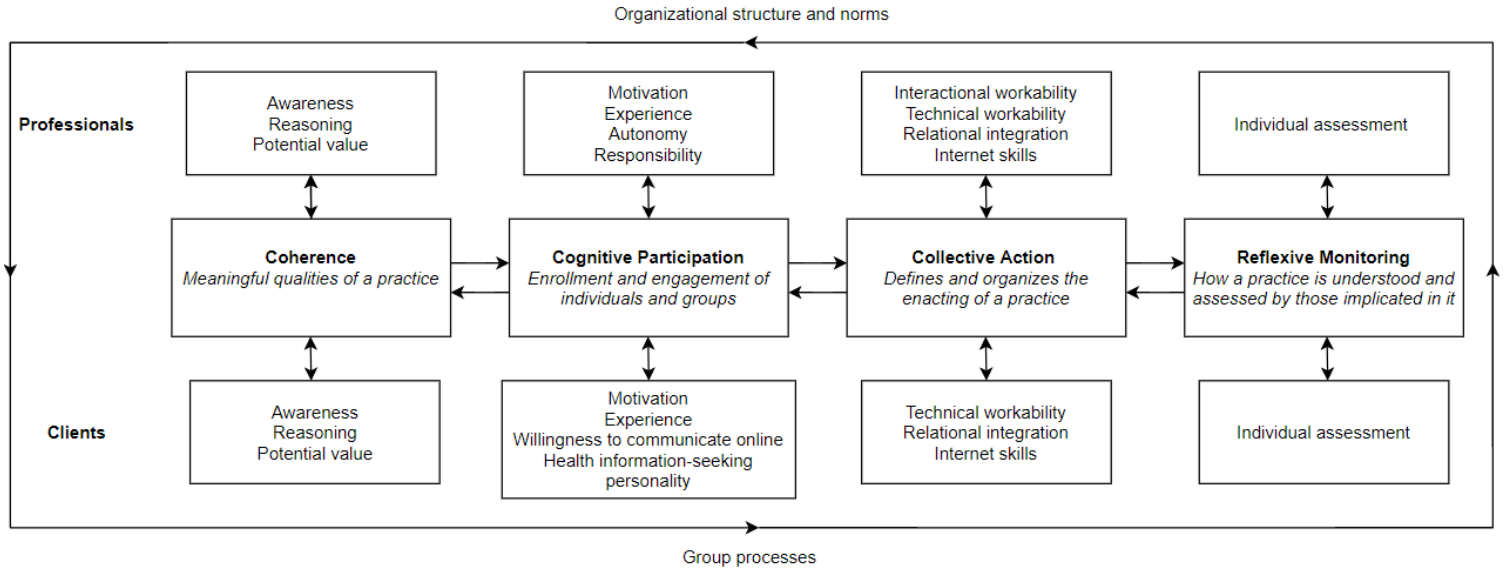


*Figure 5. NPT constructs and related variables from literature.*

# 4 METHODS

## 4.1 Research design

This study aims to find out the expectations of professionals and clients towards a 100% digital clinic for basic mental healthcare at GGNet. Qualitative research methods were applied, as this offers the opportunity to expose different expectations and perceptions of participants. Based on the nature of this study, *semi-structured interviews* were used. This way of interviewing is sufficiently structured by means of a topic guide, but also offers the possibility of a flexible course of the conversation. It provides freedom and openness for participants to deliberate on their perspective, thoughts, feelings, experiences and expectations [83]. Ethical approval for conducting interviews in this study was obtained by the Ethics Committee BMS (Request number: 200353) of the University of Twente and the director of BAS GGNet.

## 4.2 Setting and participants

The target groups of this study were both professionals and clients of BAS. In addition to these target groups, it was also decided to interview the management members of BAS. By interviewing the management members, attention is paid to the organizational structure, standards and vision. This provides a broader understanding and supplements this study. The inclusion criteria for professionals were that participants needed to be working at one of the BAS locations in Apeldoorn, 's-Heerenberg, Beekbergen, Brummen, Doetinchem, Duiven, Eibergen, Epe, Groenlo, Lobith, Winterswijk, Zevenaar or Zutphen. Professionals from different functions could participate: psychiatric nurse, nursing specialists, behavioral therapists, psychologists or GZ-psychologists. The inclusion criteria for clients included people with an active, starting or completed treatment at BAS GGNet, competent and able to participate in an interview. Besides, the practitioner has given permission to approach the client. The inclusion criteria for management were that participants should hold a position within BAS management and be involved in the digital clinic project. Finally, all participants needed to be available for the interview in April or May 2020.

The project members of the digital clinic within GGNet offered support in recruiting participants for this study, by sharing contact information of professionals, clients and management. As for the professionals, the project members shared a list of professionals who have expressed their interest in online treatment and who are open to exchange. Clients were contacted by means of a contact list from an existing client panel within BAS. This is a selected group of clients who have indicated that they are available to share their vision and opinion. Since BAS does not have any managers, persons with final responsibility for the digital clinic were contacted for the interviews. Given the accessibility of the participants, it was decided to initially approach these groups of participants to take part in this study. The groups of participants were asked after the interview for suggestions for new contacts to approach for participation in the study.

The initial actors could thus open up possibilities for a wider network of contacts, this is also known as a snowball-effect [83]. A disadvantage of this sampling method is that the sample will inevitably remain within respondents' social systems. However, this is not a problem in this study as the goal is to locate people from a specific population, namely from BAS GGNet.

Regarding the development of the corona virus during the conduct of this study and the associated measures resulting from this virus, including no social contact and mandatory working at home, the interviews were forced to take place remotely. All the interviews therefore were conducted by telephone or video call. Prior to the interview participants were asked to indicate their preference for either of these two types of contact. A shortcoming of conducting interviews by telephone is that there is no non-verbal communication and interviews are often shorter. That is why participants were also given the choice to make video calls. An important advantage of remote interviewing is that it is less time consuming for participants, as opposed to face-to-face interviewing. Given the limited time available for professionals to schedule interviews, a short telephone or video-call interview may encourage participation [83]. The interviews were conducted between April and May 2020.

## 4.3 Materials and procedure

Attention has been acquired to this study through an introduction by the project members of the digital clinic to the director of BAS. After the approval of the director, a first recruitment has started. All the participants received a personal invitation via email, including information about the purpose of this study and the interviews. Participants who have indicated that they were willing to participate, received a second mail including an information letter with a complete overview of the study and a consent form. A number of questions about the background information of the participants has also been added to the consent form. This consists of general questions about the participants' age, function and experience. Clients were also asked questions about their media use, internet skills and health-information seeking personality. The questions for clients about these three variables are based on the fit for blended care instrument of the University of Twente which operationalizes the variables. In this way, the consent form also functions as a short questionnaire and supports in collecting data. By combining the questions in the consent form with the interviews, important background information is gathered and time is saved for other topics in the interviews. Participants were asked to read the information letter and to return the completed and signed consent form, prior to the interview. The information letter and consent form can be found in Appendix I.

In this study three different topic guides were used for the semi-structured interviews with the professionals, clients and management which all can be found in Appendix II. The topic guides were based on the central concepts from the literature, which are presented in Figure 5 of the theoretical framework of this study.

In all three topic guides the four constructs of the described NPT model are central and the associated variables from literature have been translated into questions for the topic guides. The variables have been used to measure the value of the constructs and to provide insight into stakeholders' expectations. In the studies of McCrorie et al. (2019) and Finch et al. (2018) the NPT model has also been used as a starting point for the empirical part of the research, these topic guides were used as a guideline [39, 84]. Table 1 provides an overview of the interview topics specified to the stakeholder being interviewed. Table 1 shows that the topics *autonomy* and *responsibility* specifically concern the actor characteristics of the professional and the topic *vision* specifically concerns management. In addition, the variables *internet skills* and *health information-seeking personality* are only questioned from clients. The questions in the consent form for clients correspond with these variables, it is therefore not discussed as a topic in the interview. Since professionals of BAS use technology for their work it is assumed that they have at least the basic skills that are required, therefore they are not specifically questioned on the topic of internet skills. Finally, an important point to note concerning the construct of 'Reflexive Monitoring'. This construct is about systematic evaluation, but since there is little to no practical experience with a digital clinic only a current individual assessment is included as variable here. In addition the context variable the *emergence of the corona virus* has been made part of this individual assessment for both professionals and clients. The emergence of the corona virus during this study has a major impact on the shift to online treatment and the experiences of participants, as discussed in the Context chapter. It can have an important influence on the individual assessment of participants, therefore attention will be paid to this during the interview by reflecting on this together with participants.

*Table 1. Overview of topics per stakeholder group.*

| Overview of topics specified to stakeholders | | | |
|---|---|---|---|
| **Construct** | **Professional** | **Client** | **Management** |
| Coherence | Awareness<br>Reasoning<br>Potential value | Awareness<br>Reasoning<br>Potential value | Awareness<br>Reasoning<br>Potential value |
| Cognitive Participation | Motivation<br>Experience<br>Autonomy<br>Responsibility | Motivation<br>Experience | Vision<br>Motivation |
| Collective Action | Interactional workability<br>Relational integration<br>Technical workability | Relational integration<br>Technical workability | Interactional workability<br>Relational integration<br>Technical workability |
| Reflexive Monitoring | Individual assessment<br>*Emergence corona virus* | Individual assessment<br>*Emergence corona virus* | Individual assessment<br>*Emergence corona virus* |
| Social Context | Organizational structure and norms<br>Group processes | Organizational structure and norms<br>Group processes | Organizational structure and norms |

## 4.4 The research group

A total of nineteen participants were interviewed for this study, of which twelve professionals, five clients and two management members. The research group in total consists of fifteen women en four men. The group of professionals consists of nine women and three men working in various functions, of which the share of professionals between 25-45 years is more than 50 percent. The other professionals are between 55-60 years old. The professionals work at six different locations of BAS, including Zevenaar (n=5), Doetinchem (n=3), Winterswijk (n=2), Zutphen (n=2), Apeldoorn (n=1) and Duiven (n=1). All professionals except one have been recruited through a list of interested professionals. It turned out to be difficult in practice to approach other professionals via the group of participants. As a result, the target group of this study is coloured, the professionals who are perhaps less or not interested in online treatment are missing. However, the management members of BAS emphasize that the club of professionals largely consists of people who are open to development and innovation.

The group of clients consists of four women and one men. The group differs in active or completed treatment at BAS, but are all active in the client panel. The management members are both women and closely involved in basic mental healthcare, working as director of BAS and project leader digital clinic. Table 2 provides an overview of the characteristics of the participants and the numbering as it will be used in the Results chapter. To prevent participants from being easily identified, their age is shown in categories of ten years. It was decided not to include the management members, as they are easily traceable given the small sample.

*Table 2. Characteristics of professionals (P) and clients (C).*

| Respondent | Age category | Function / treatment status |
|---|---|---|
| P1 | 40 - 50 | Nursing specialist |
| P2 | 30 - 40 | GZ psychologist |
| P3 | 30 - 40 | Cognitive behavioral therapist |
| P4 | 40 - 50 | GZ psychologist |
| P5 | 50 - 60 | GZ psychologist |
| P6 | 50 - 60 | Social psychiatric nurse |
| P7 | 20 - 30 | Psychologist |
| P8 | 50 - 60 | GZ psychologist |
| P9 | 50 - 60 | GZ psychologist |
| P10 | 30 - 40 | Nursing specialist |
| P11 | 30 - 40 | Psychologist |
| P12 | 20 - 30 | GZ psychologist |
| | | |
| C15 | 40 - 50 | Completed |
| C16 | 30 - 40 | Active |
| C17 | 40 - 50 | Completed |
| C18 | 50 - 60 | Completed |
| C19 | 50 - 60 | Active |

## 4.5 Data analysis

Participants in this study were asked permission to record the interview. This was done using the consent form and again as a first question of the interview. The audio-recordings of the interviews were transcribed, in order to be able to analyse and compare the data. The characteristics that could identify participants were as much as possible left out. The transcripts were worked out in the O-Transcribe program, in this program sound clips can be easily delayed and paused. The data from the enclosed background questions in the consent form and from the transcripts of the interviews has been analysed through open coding. Coding was done in the NVivo computer program: in this program codes can easily be ordered hierarchically and linked. During the coding process fragments from the interviews are linked to a code, based on these codes the coding trees for all three participant groups have been created separately. The coding trees structure the findings and can be found in Appendix III. First an initial coding tree was set up, this coding tree remained open to new codes during the process of analysis and gradually refined. The coding trees were discussed with two other students, resulting in a final draft of the coding trees.

# 5 RESULTS

In this chapter the results of the interviews with the various stakeholders will be discussed. First of all, Paragraph 5.1 will provide some context information about the vision, understanding and current experiences of stakeholders regarding the 100% digital clinic. Subsequently, the first two sub-questions of this study will be answered in Paragraph 5.2, focusing on the NPT constructs *Coherence* and *Cognitive Participation*. Paragraph 5.3 describes the third sub-question which is in line with the *Collective Action* construct. Finally, Paragraph 5.4 will deal with the last sub-question focusing on *Reflexive Monitoring*.

## 5.1 Context stakeholders

This first paragraph will first discuss the motives of management to start with a digital clinic, subsequently important aspects of the process of sense-making of professionals and clients will be discussed. This will provide insight into the context and starting point of stakeholders.

**Rationale of management**

Both management members (M=2) state that the plans for a digital clinic for BAS started at the end of last year and can also be found in the current annual plan. In their view, a digital clinic means the same as the current basic mental healthcare offer, except that everything is digital. The management members state five important reasons for implementing a digital clinic:

- Increasing the accessibility of care and thereby meeting the wishes of the client
- The availability of an own online care platform for the client
- Development and innovation of the organization
- Increasing the responsibility and self-management of clients
- Solving the staff shortages

*"It has significance for both the client and the staff. We also thought it was a logical step because we also consider innovation to be of great importance. It is of course a development that you see in all kinds of organizations in the Netherlands, we cannot stay behind, it is part of this time. Even if it is not primarily a cost saving, we do not yet see that in other organizations either"* (M14).

Both management members believe that BAS is a good place to develop the digital clinic, it has an innovative character and professionals who are open to development. They also indicate that they think it is appropriate for specialist mental healthcare, a project proposal is currently being written for this but no final decision has yet been taken. However, until now no formal decision from the managing board has been made about the digital clinic for BAS either.

*"It is not something that had been presented to the management and board of directors, and that has led to a formal decision. I discussed it with the board, they thought it was interesting to hear. They also had questions, it is always a strategic choice. And with that strategy I notice that for the 100% digital clinic it is not entirely clear who is the initiator for this. Does it lie with the director of the House of Innovation or really with management? Because then there must be a management decision"* (M13).

The management members state that there is confusion about who is the initiator of the digital clinic for BAS. This seems to cause the lack of a formal decision, for both BAS and a possible GGNet wide approach. The management members both indicate that their goal is to get started quickly with the digital clinic and to take steps. Both short and long-term goals are not yet clearly defined, these are also expected to be adjusted gradually. One management member indicates the risk of disapproval when simply getting started, but emphasizes that waiting for a formal decision often provides unnecessary delay.

**The understanding of professionals and clients**

The majority of the professionals (P=11) have a clear idea of what a 100% digital clinic entails. If participants did not mention all the different aspects of the digital clinic in their explanation, this was supplemented by the researcher prior to the interview. However, it appears that professionals have a good understanding of these aspects, including the combination of video calling and working with Karify. The understanding of the professionals seems to have been strengthened by the advent of the corona virus, which has ensured that a 100% online treatment is currently the daily practice for both professionals and clients.

*"The opposite of what we did before. So that there will be no face-to-face contact anymore. So both the intake, and any contact before, as well as the treatment itself and the closure all go online. That you no longer see each other in person, but through video calling. It actually resembles what is happening now"* (P7).

The significance of the digital clinic is less clear to the majority of the clients (C=4). They have an idea of what an online treatment means, but how it is structured in practice is still unclear to them. This shows a difference between professionals and clients, which has also been reflected in expressing expectations about the reasons for the introduction of the digital clinic. Despite the fact that both professionals and clients indicate that they have no insight into what the specific reasons are, the majority of the professionals dare to give an educated guess. Where clients have more difficulty with formulating the reasons and make limited comments on this. Table 3 below gives an overview of the different reasons mentioned by professionals and clients.

*Table 3. Motivation for the 100% digital clinic according to professionals and clients.*

| Reason | # Professionals | # Clients |
|---|---|---|
| Innovation | P=10 | |
| Meeting wishes client | P=7 | C=2 |
| Efficiency | P=4 | C=2 |
| Financially | P=4 | C=2 |
| Meeting wishes practitioner | P=2 | |

Ten out of twelve professionals expect that progress and development are important spearheads for the organization. Innovation is expected to be an important reason according to the majority of the professionals. Followed by meeting the wishes of the client, whereby both professionals and clients mention the easy availability and broad accessibility of care as reasons. Some of the professionals and clients mention that a digital clinic can have an impact on the efficiency and the costs of care, but they seem to have hope that other reasons are more central to the choice of the organization to introduce a digital clinic.

*"I hope it is at least the most important for clients. That a certain group of people find it more pleasant for practical reasons, that we then offer care in this way. That it can complement the offer we have now"* (P7).

All professionals indicate that they consider a digital clinic to be in line with the goals and ambitions of BAS, innovation is central to this. Four professionals emphasize that this innovative character is less evident at GGNet. They experience that GGNet is less concerned with innovation and often lags behind. This raises uncertainty whether a digital clinic is also suitable for GGNet and specialist mental healthcare. Two professionals are also unsure whether all layers and parts of the organization are motivated to this change.

*"Uhm, yes, I wonder, does everyone wants to make that development or is it because they have to do it? Or because they choose this very clearly? If you really stand for it, it fits your goals and ambitions, then there is no ambiguity about it. Then we all work together, also with specialist mental healthcare"* (P3).

**First impression and current experience**

As for the first impression about the plans regarding a 100% digital clinic for BAS, the professionals were divided. Half of the professionals (P=6) indicate that they had a positive first impression of the plans and that it generated a lot of enthusiasm. The other half of the professionals emphasized that it sparked their interest, but that it also raised a lot of doubts and concerns. The fact that there are still many questions and ambiguities seems to contribute to this. All the professionals have experience with e-health in the treatment of clients, but they indicate that it has increased significantly since the corona virus outbreak. For many this is a new experience which affects their impression both positively and negatively.

*"I am a bit ambiguous. We are now a month later and we are practically a digital clinic. I think it suits some clients and areas, it should have added value. But it should also remain an option, not the only offering. Yes, I notice that I am very questionable"* (P10).

In contrast to the professionals, the clients form a unit in terms of their first impression. The first impression of all five clients was that it is a positive addition, that could exist as something extra besides the face-to-face contact with the practitioner. They don't see it as the only form of treatment. The clients have little experience with online treatment, their contact with the practitioner is or was face-to-face. Two clients with an active treatment will soon start with video calling, four clients have experience with assignments in Karify.

*"I think it is maybe a little scary. Or scary, I would rather do a mix. For example, three appointments video calling and then one face-to-face. I think it is a good thing, it is an addition. I don't think you should expect it to suit everyone. I think it is something extra"* (C16).

## 5.2 Coherence and cognitive participation: the willingness of stakeholders

In this paragraph the first two sub-questions of this study are discussed, which are in line with the first two constructs of the NPT model. The first sub-question is: *What do professionals and clients expect to be the meaningful and unfavorable qualities of the digital clinic?* These results will be combined with the results of the second sub-question: *At what level of willingness to enroll and engage in the digital clinic are professionals and clients located?*

**Established meaningfulness**

Both management members are closely involved in setting up the digital clinic for BAS, they strongly believe in the added value it can offer. All professionals and clients also see added value in the digital clinic, but in addition they also see downsides. This perception of meaningful and unfavorable qualities is set out in Table 4 and 5, first the professionals followed by the clients.

*Table 4. Meaningful and unfavorable qualities of the digital clinic according to professionals*.

| **Meaningful qualities professionals** | |
|---|---|
| Increasing accessibility and convenience | Almost all professionals (P=11) see increased access to care as an important meaningful quality. Because they work location and time independently and care is approachable for different target groups. |

| | |
|---|---|
| | *"The biggest advantage, I think, is reaching people you currently don't reach. That you tap into a group that is currently not looking for help. Because of shame, too little time or distance, things like that. You can reach this group now. That is an important goal"* (P9).<br><br>In addition to the accessibility, three professionals indicate that it also provides convenience for clients. It offers them more flexibility and they are less dependent on the practitioner. They can work on their treatment from home in their own time. |
| Equivalent treatment and efficiency | Eight professionals emphasize that a 100% online treatment is an equivalent treatment to face-to-face. They feel they can achieve the same effect with this form of treatment.<br><br>*"I can just see someone, I can see if the tension is rising and if there are tears. That makes a difference, because that is an important part. And when I see it, I can also say: hey I notice that it touches you. Video calling works pleasantly, that would make no difference to me"* (P6).<br><br>Some professionals (P=5) indicate that online treatment is much more efficient. This is due to the type of contact, but also because a client works more independently on assignments. Six professionals emphasize that online treatment stimulates the self-management of clients.<br><br>*"Some people have the idea that they come here to talk a little bit, to ventilate. Of course that's not what a treatment should be. I think a 100% digital treatment limits that possibility, just because of the type of contact and that they have to get to work themselves. Also because you emphasize the change, what do you want to change?"* (P2). |
| Involvement | Five professionals discuss that online treatment gives a special insight into the life of a client, this provides information but also stimulates mutual involvement and connection.<br><br>*"When we talk about connection, last week we had a boy in the group who played guitar. During the break he took his guitar and played music for all of us.* |

| | |
|---|---|
| | *I saw him grow and smile, he got a lot of positive reactions from the other group members. That is very nice, that are again possibilities that arise, because you are at home"* (P6). |
| Development | Some professionals (P=3) also see the development and innovation of a digital clinic as an important plus for themselves. It offers them a challenge to discover new possibilities and to express their creativity. |
| Working from home | In addition to a new challenge, it also offers professionals the opportunity to work from home. Many professionals (P=10) find this very pleasant, it offers them more space and flexibility. |
| Technical aids | Three professionals specifically mention the convenience that technical aids offer. It gives a professional more tools and stimulates clients in various ways.<br><br>*"The value of digital is that it is easier to recall things, you can think about them afterwards. What many people do in a face-to-face conversation is talking, but not so much writing things down and then reflecting on them. I now see that happening to the people to whom I use digital means"* (P2). |
| **Unfavorable qualities professionals** | |
| Missing face-to-face contact | In addition to the meaningful qualities, professionals also see important unfavorable qualities to a digital clinic. The lack of face-to-face contact is strongly mentioned by almost all professionals (P=11). Professionals value this form of personal contact with clients and colleagues, they do not want to miss this. In addition, some professionals feel that they get a less complete picture of clients when face-to-face contact is lacking, partly because they find it difficult to receive all non-verbal signals via a screen. This affects the treatment of clients.<br><br>*"Feeling the human being, smelling the human being, seeing the human being as a whole. Yes, I would miss that very much if everything was online. I would almost say it is inferior. I know that digital also works well, but I would miss that part very much. It is also something emotional, when someone is physically in front of me there is another dimension that plays a role "* (P8). |
| High energy investment | Eight professionals emphasize that they experience the online treatment of clients as tiring and intensive. The fact that it requires a lot of energy is seen as an important downside. |

| | |
|---|---|
| | *"A disadvantage is that it is more tiring to work behind a screen all day. I notice that it costs a lot more energy to make calls and video calls all day than to work face-to-face. In the first week after corona I thought: I once signed up for this, but I believe that I am acutely withdrawing my registration. I was completely broken"* (P10).<br><br>It is difficult for professionals to estimate whether the intensity of online treatment is the result of the current situation concerning the corona virus, or that it is inherent in online treatment. Two professionals emphasize that the current overflow from work and private life also contributes to this. The new situation requires professionals to manage their time well.<br><br>*"Normally I go for a walk for half an hour during the break. But because I work at home, start working early and no longer prepare my lunch, I no longer have time to walk. So you just have to organize that for yourself completely differently. Today I thought, I'm just going to make lunch again"* (P5). |
| Difficulty treating online | Four professionals emphasize the difficulty of treating online. In practice, conducting conversations is sometimes more difficult and it is hard to stimulate and motivate clients. This lack of motivation among clients is also seen as an important obstacle. |

Professionals identify meaningful qualities of the digital clinic, but also expect important unfavorable qualities. Nevertheless, all professionals (P=12) indicate that they are willing to participate in the 100% digital clinic. They are motivated to give online treatment and see it as their task to stimulate clients, explain assignments and actively discuss them together. They experience that it still requires precisely customization and responsibility. Almost all professionals (P=11) emphasize that they want to give online treatment for a maximum of one or two days a week.

*"Yes, I can imagine that, but not full-time. I notice that I can easily switch between face-to-face and digital, so if it works for a client then I have no problem with that. I'm willing to, but I think for max 50%"* (P7).

Both management members are also positive about the willingness of professionals to enrol and engage in the digital clinic, they see that this has grown since the advent of the corona virus. They also emphasize that they recognize that the new situation requires a lot of energy from professionals. It is therefore important that professionals consciously choose online treatment, find a way that suits them and take time to get used to it.

*Table 5. Meaningful and unfavorable qualities of the digital clinic according to clients.*

| **Meaningful qualities clients** | |
|---|---|
| Increasing accessibility and 24/7 treatment | All clients (C=5) emphasize that the access to care is increased by offering treatments online. It provides 24/7 access to care for a client, which is seen as an important plus. In their own time and in their own home they can work on assignments, send a message to the practitioner or read information. It also offers flexibility, for example by being able to follow a treatment in the evening.<br><br>*"The patient, that's the one who is in treatment for of course 24 hours a day and 7 days a week. I mean, if you lie awake at night, you can send a message the moment you want to. You can tell what you are struggling with or you share your successes. The therapist can find the right moment to respond to that. This can be done very easily online"* (C15).<br><br>Two clients state that there is still a stigma on the step to psychiatry, so online treatment can feel safer and more anonymous. This makes it possible to appeal to a broader target group, who otherwise would not have taken the step towards mental healthcare.<br><br>*"When I first entered psychiatry, I was still working in maternity care at people's homes. I went to Zutphen, and saw the large building I had to enter. I was very afraid of that, a big nightmare. Imagine I ran into someone? It is not shame, but something you are not proud of"* (C19). |
| Equivalent treatment and efficiency | Unlike the professionals, only one client mentions the equivalence of video calling with face-to-face contact. However, four clients do recognize that digitizing certain parts of the treatment does increase the efficiency, such as questionnaires and intakes. This creates space for other matters in the conversations with the practitioner. |
| Involvement | One client states that video calling can also contribute to the treatment, because it gives insight into a client's environment. It is emphasized that it should not be an invasion of privacy or control, but that it can complement the stories that people tell in the treatment room and offer new opportunities for intervention. This new involvement is experienced as positive. |

| | |
|---|---|
| Working from home | Finally, all clients (C=5) state that following treatment from home offers benefits for both client and practitioner. Especially in practical terms, it offers flexibility and convenience.<br><br>*"For example, if I'm not well and I have a headache, I have to get ready and drive for half an hour. When I can do that at home, it could be in my pyjamas under a blanket on the couch. Yes I think I would be less likely to cancel"* (C18). |
| **Unfavorable qualities clients** | |
| Missing face-to-face contact | All five clients indicate that they value the face-to-face contact with their practitioner and that they would miss this in an online treatment. In which four clients emphasize that they have doubts whether they would achieve the same results with online treatment as they now do in face-to-face contact with their practitioner. The lack of face-to-face contact and not having to leave your home are seen as major downsides.<br><br>*"I always call it the 'GGNet shot', you are just in a different room where you can feel safe, in the room of GGNet. It is so much more than that, it is the smell and the dirty coffee. It is waiting in the waiting room before you are called in. It is so comprehensive when you are talking to someone, face-to-face is a different experience. You can be vulnerable. Now if I don't feel like talking I say: oh sorry my connection drops"* (C16). |
| Shortcomings treating online | In addition to missing face-to-face contact, clients (C=4) expect that online treatment has significant shortcomings. They experience that it is easier to hide emotions and to pretend to be fine. It is difficult for the practitioner to see body language and feel tensions. All clients (C=5) are therefore afraid that it can also aggravate someone's problems if practitioners do not pay close attention to the specific client and their situation.<br><br>*"I was at a point in my life when I didn't trust anyone anymore. And I don't think I would have trusted my practitioner if I had only seen her on my mobile. I had a depression and a burnout, it wouldn't have been good for me, so I really have my doubts about it. Having a mental illness should not be underestimated"* (C17). |

The clients still experience mixed feelings about a 100% digital clinic, all five clients indicate that they are willing to participate but that they still would like to maintain the face-to-face contact with their practitioner. Clients do not seem to have full engagement yet, but they see opportunities in reducing the face-to-face contact if there is a good balance. This is in line with the expectations of the management members, who expect that a large part of the current clients is very attached to the classic meeting and face-to-face contact.

## 5.3 Collective action: the ability of stakeholders

The third sub-question relates to the *Collective Action* construct and is formulated as follows: *To what extent do professionals and clients expect that they are able to execute the digital clinic in practice?* The enactment of a practice relates to the competence of stakeholders, integration with existing work practices, relational integration and workability of the technology. Finally, context information on stimulating the enactment of the digital clinic will be provided.

**The competence of stakeholders**

Most of the professionals (P=7) indicate that they do not experience any difficulty with working online, they feel that they have the skills needed. Three professionals say that they still need more time and practice, but also feel competent. For two professionals, their competence has increased significantly since the corona virus outbreak.

*"Three weeks ago I did not feel competent at all, but now I do. You find yourself in a new situation, I had a lot of resistance, but now I notice that it is all going step by step. I actually do not know computers at all, but by doing I learn a lot"* (P5).

Four out of five clients, of different ages, indicate that they feel competent to use the technology of the digital clinic. In the consent form they also state that they have all the appointed internet skills. One client emphasized that she is less digitally skilled and often asks her daughter for help. Although the majority of the clients (C=4) see no problems regarding the technical aspect, they indicate that they see more obstacles with regard to the psychological aspect.

*"Yes, that is sometimes quite difficult. If you have ADHD, for example, you can completely forget the video call appointment with your practitioner. Because you do all kinds of things in between, you have a lot of impulses at home, and you can't find your phone anywhere. I think you are less prepared, because you are at home and you don't have to travel 15 minutes by bike or car"* (C16).

**Interactive workability**

The professionals, all having different functions, indicate that a digital clinic fits their profession and can be combined with their existing way of working. All professionals (P=12) hereby mention that for the vast majority of their existing clients, online treatment could be done in practice. Different client groups are appointed by the professionals who are specialized in this, including: trauma, eating disorders and anxiety disorders. However, the professionals expect that not all their clients are open to online treatment, because they cannot or do not want to. This will differ per person and they therefore emphasize that it is important to look at who it actually fits. This is also confirmed by all clients (C=5) and both management members.

*"We work very customer-oriented. When we talk about anxiety or depression, about sadness or fear of failure or uncertainty, then I think an online treatment is certainly suitable. You can also practice in the home situation, which has added value. But I think it is a big turnaround for clients, there are some people who like it and others just don't like it at all"* (P4).

The management members thereby emphasize that it is very difficult to filter clients for their suitability for online treatment, as this depends on many factors. They therefore state that when practitioner and client notice that an online treatment doesn't fit, they still can choose to go for regular face-to-face care.

*"It is very personal. We hear from one client that they dare to be more vulnerable, from another we hear that they tell less. You cannot estimate the probability of success on the basis of someone's problem or relapses. You can paint a general picture, but we notice, for example, that age has little influence"* (M13).

**Relational integration**

When looking at the relationship between a practitioner and client, some of the clients (C=2) expect this will be subject to change. They have the expectation that 100% online does not benefit the treatment relationship, which will result in difficulties. The professionals (P=12) on the other hand do not expect the relationship with a client to differ substantially. Four professionals emphasize that they have experienced through the corona virus situation that the contact with clients is good and that it is also possible to build a working relationship online. An important condition for this is that both client and professional have the motivation to do so.

*"You can tell me that it is fine to do a treatment fully digital, that it is doable and that the contact will be just fine. It's true that every client has different wishes. But I have the feeling that it is getting too distant, I just think it is different"* (C15).

*“Many clients initially said, I really don't want to do that. Then we started trying with the idea that if it doesn't work, we don’t go further. But then the response came: wow I think this was a nice session, it was very intimate. So apparently online also has very direct contact, even though I am not in the same room”* (P5).

The management members expect the relationship between a professional and client to change, but in a positive way. In this relationship, client responsibility and equivalent care are expected to be encouraged.

**The technical aspects**

All stakeholders mention a supporting system and technology as essential parts in the use of the digital clinic. Both professionals (P=9) and clients (C=3) who have experience with the current Karify system indicate that this falls short on several points. The system is experienced as static, chaotic and with insufficient options for users, which creates barriers and demotivation. One of the clients indicates that because of the shortcomings she and her practitioner started looking for other options, they currently prefer to use Zoom.

*"I think Karify, sorry to say it, but I find it almost a gloomy environment in which people work. Very gloomy to see, I don't think it radiates positivity at all. And besides that, I just think it's too limited. It's running really behind”* (P8).

The problems with the current system are also recognized by both management members. They recognize that this has an impact on the use of the digital clinic, both from the side of the professionals and the clients. However, the management members indicate that the provider Karify receives wishes from various mental healthcare organizations between which they make a choice. In addition, there is currently no single online platform that is optimal, there is no good alternative. Therefore, the problems with the current system are unlikely to be solved in the short term. In addition to the disadvantages, they mention that Karify also has a number of advantages: clients have access to their own personal health environment, in all likelihood it will soon be possible to easily link to the electronic health record (EHR) and there are special agreements to get certain treatment modules from BOOM publishing into the system.

*“We choose Karify with GGNet and at the same time I notice that Karify is already a bit old-fashioned. The moment there is a party on the market that is going to be a bit more innovative, a bit more like Google, I have made my choice. And yes I understand it, because I also see how expensive and intensive that is. But it just has to be faster and more convenient”* (M13).

The necessary functions and facilities that stakeholders would like to see reflected in the system of the digital clinic are summarized in the Table 6.

*Table 6. Necessary functions and facilities digital clinic.*

| Requirements | # Professionals | # Clients | # Management |
|---|---|---|---|
| User-friendly system | P=10 | C=4 | M=2 |
| Availability of good devices, Wi-Fi etc. | P=8 | C=5 | M=2 |
| Visualization, interaction and notes | P=8 | C=5 | M=2 |
| Wide range of modules and information | P=7 | C=2 | M=1 |

Ten out of twelve professionals, four out of five clients and both management members see a user-friendly system as an important requirement. The stakeholders emphasize the importance of clear and simple actions and content, but also a positive appearance of the system. Four clients specifically emphasize easy accessibility, at the touch of a button. Three professionals and two clients express their wish to have a single integrated system, for example a link to User (the EHR) and the agenda can be made.

*"I remember that if you had to log in to Karify, I sometimes found that quite difficult. Accessibility must be very easy for me. For example, an app where you have to log in with a pin code would be easy. Just as you do with your Rabobank app. It also helps when you immediately see different buttons on the screen that you can press. It would just have made it easier and I probably would have made more use of it"* (C17).

A second point that is mentioned is the availability of good devices and quality of sound, screen and Wi-Fi connection. All clients indicate that it is their own responsibility to have their equipment in order. Management emphasizes that steps will be taken to provide professionals in technology and workplace facilities. The third point concerns sharing a screen and files, taking notes, sharing animations and videos and a whiteboard function. All parts that, according to the stakeholders, should make the system more interactive.

*"When I video call people, I draw something on a piece of paper that I show through the camera. It could be much more clear and effective if you can make something visual. In addition, it would help if you can switch to assignments or to examples. That is a shortcoming of face-to-face, you can't switch quickly"* (P7).

Finally, the professionals mention a wide range and variety of modules that suit their way of working. Clients mainly emphasize a wide range of background information, which they can read and go through themselves. Management also believes that Karify has to be more in line with the vision of BAS, in several ways.

*"We really want more modules that fit our vision. I am working on getting these modules in Karify. In addition, certain functions are also really necessary. Such as conducting a video call with three people, since we have a construction in which a management practitioner is involved. But those features just aren't there yet"* (M14).

**Stimulating the use of the digital clinic**

The professionals agree that a well-functioning system and technique are the main promoting factors in the use of the digital clinic. Another factor mentioned by some professionals (P=4) is the importance to know the content of the system and to acquire skill and speed. In addition, the motivation of both professional and client is mentioned as a stimulating factor (P=4). The majority of both professionals (P=9) and clients (C=4) experience that they receive sufficient support from the organization when it comes to technology and working online. Some of the professionals (P=5) do indicate that due to the rapid changes recently, they mainly have to find and make time for themselves to explore all possibilities. The four clients emphasize that they first try to solve the problems they face together with their practitioner. One client indicates that this is not always easy, because the Karify environment of the practitioner looks very different. Two professionals also mention this point, they have no idea what the Karify environment of the client looks like.

*"Sometimes I can't help them because I can't see it. My portal looks different than that of the client, I have never seen that portal. So then I don't really know how to help someone, that's difficult"* (P12).

Although professionals and clients experience that the organization offers them sufficient support, they also mention wishes for additional support. For example, five professionals indicate that they would like to receive more training and inspiration from the organization. The webinars that have been organized in the past period are experienced as a good example. Two clients would appreciate a short manual about Karify in the form of a folder, finding information in the emails they are now receiving is not always easy for them.

## 5.5 Reflexive monitoring: the assessment of stakeholders

Finally, the last sub-question will be discussed in this paragraph: *How do professionals and clients individually appraise the digital clinic based on current experiences?* Associated with the construct *Reflexive Monitoring.* Attention will be paid to the current assessment of stakeholders and their reflection on how the new practice affects them and others around them.

**Individual appraisal**

All twelve professionals give a positive final opinion about the introduction of the 100% digital clinic for BAS. This is largely based on the fact that they see it as an important development, which may be promising for the future. They see potential, but also say they still have questions and uncertainties. The professionals emphasize that it is important that it remains an option, clients must be able to choose which care suits them. This condition is also emphasized by four clients, who give a cautiously positive final opinion. They see the possibilities it can offer, but also notice drawbacks in 100% online. They therefore emphasize it should really suit a client. The clients themselves would prefer to also have face-to-face contact with their practitioner.

One client gives a mainly negative opinion about the digital clinic, with the condition that there should be more balance between face-to-face and online contact.

*“I don’t think 100% online is a good idea. You can't keep an eye on someone and you lose control of a patient. I think someone who has mental health problems is trying to get closer to himself again. And with video calling you create even more distance. I think it's a great idea when you combine it with face-to-face”* (C16).

Despite the fact that stakeholders sometimes still have their doubts and questions about the digital clinic, they see few risks in it. Some professionals (P=4) mention the risk that it is difficult to check whether clients are really exposed to therapy. One client refers to the use of final words such as ‘100%’ as a risk, this client emphasizes that it can sound oppressive. Another client also emphasizes the risk of losing sight of customization and a personal approach. Finally, one client indicates that online care offers an opportunity to record conversations and take photos, which can pose risks for a practitioner.

All professionals (P=12) experience that their colleagues have a variable attitude towards a digital clinic, one colleague suits it better than another colleague. All clients (C=5) also express this expectation, they think that younger people are more comfortable with online treatment than older people. Despite these differences, all stakeholders (N=19) recognize that the corona virus has had a huge impact on people's attitudes towards online treatment. Practitioners and clients have more or less been forced to become acquainted with online, but have experienced that it certainly offers results at this time. It has thereby positively influenced their opinion. According to the management members, this development also gives an impulse to accelerate the start of the digital clinic.

*“The corona virus affected it very much. We are in a new situation, you kind of start backwards. Instead of slowly trying some things first, you suddenly have to do everything online and experience retroactively what goes well and what works less. It has shown that much more is possible, we learn that now. I think that if the corona virus did not take place, half of my colleagues would never have started”* (P11).

# 6 CONCLUSION & DISCUSSION

In this chapter, the most important results of this study are put into perspective. First, paragraph 6.1 will provide an answer to the research question central to this study. In the following paragraph 6.2 the results per sub-question are discussed and interpreted. Subsequently, the strengths and limitations of this study will be addressed in paragraph 6.3. Finally, recommendations for practice and future research will be given in paragraph 6.4.

## 6.1 Conclusion

The aim of this study was to explore the individual expectations of professionals and clients about the 100% digital clinic for basic mental healthcare at GGNet. The following research question has been formulated: *What are the expectations of professionals and clients of BAS GGNet towards the 100% digital clinic and how can successful implementation in routine mental healthcare be achieved, according to the Normalisation Process Theory (NPT)?*

The results of this study show that both professionals and clients expect the digital clinic to have important meaningful qualities, including the increasing accessibility and convenience, the equivalence of treatment, efficiency, involvement and working from home. Unfavorable qualities that are expected are missing face-to-face contact, the high energy investment and shortcomings of online. Despite these unfavorable qualities, both professionals and clients are willing to participate in the digital clinic. However, clients would also like to maintain face-to-face contact with their practitioner, their engagement in a 100% online treatment seems to be low. In addition, professionals emphasize that they consider it important that clients retain the freedom to choose which care suits them. For the group of clients in this study blended care seems to be more suited. Regarding the execution of the digital clinic in practice, the majority of the stakeholders feels competent. They do see important technical challenges, as the current system falls short on several points. The system of the digital clinic needs to be more user-friendly and several functions and facilities need to be available. The professionals currently appraise the digital clinic as mainly positive, despite the steps that still need to be taken they see that it can offer opportunities for clients who are open to this. Clients are still cautious, they expect it to suit some people but do not prefer a 100% digital clinic themselves. To achieve successful implementation of the digital clinic in routine mental healthcare, it is important to manage the expectations of professionals and clients and to pay attention to their needs. Effort is required to increase the willingness to engage among stakeholders and in specific clients. In addition, preconditions that stimulate optimal use of the digital clinic need to be met. The steps that are recommended to GGNet will be further explained in paragraph 6.4.

## 6.2 Discussion

**Expected meaningful and unfavorable qualities**

Stakeholders expect the digital clinic to have both meaningful and unfavorable qualities. The meaningful qualities that are most often mentioned by stakeholders are the increasing accessibility, convenience and working from home. From literature it can be derived that online treatment overcomes isolation of time, mobility and geography. It offers the possibility to reach a large group of people, including isolated or stigmatized groups. Flexibility and accessibility are therefore seen as significant added value [11, 13]. An important unfavorable quality that stakeholders often referred to is missing face-to-face contact. Literature also refers to this as a frequently mentioned limitation. This mainly relates to the lack of non-verbal communication and body language, which makes it difficult to receive all signals. It is stated that video calling could be used to complement the verbal communication [85, 86]. However the professionals in this study still report missing face-to-face contact despite their current experiences with video calling. This shows that video calling is not always perceived as an equivalent alternative and above all that much value is attached to face-to-face contact, by both professionals and clients [13]. Another unfavorable quality that professionals in this study often referred to is the high energy investment. This is not mentioned as an important limitation in the existing literature, but many recent news articles discuss the increase in online work in response to the corona virus and the tiredness that comes with it. There are many people with similar experiences and the phenomenon has been given its own term: “Zoom fatigue”. The high energy investment seems to be linked to the current situation and increase in online communication. However, it is still important to realize that communicating via a screen demands a lot from the brain and that many people are not used to this [87]. Working online therefore requires adjusting, feeling what works and indicating when you become over-stimulated.

Despite the fact that both professionals and clients indicate that the digital clinic also has unfavorable qualities, the clients seem to place more emphasis on this. The clients are less positive about the 100% digital clinic than the professionals. It is interesting that the clients find it difficult to indicate what a 100% digital clinic exactly means and what the reasons for the introduction of this clinic are. In addition, all clients have no experience with online treatments at the time of the interview. Both understanding and experience appear to influence the vision of stakeholders. When people know what digital care entails, they are more open to this and find it more suitable to use [88]. People who have experience with e-health have a more positive attitude than people who do not have experience [56, 89]. Transferring knowledge and trying out online interventions could encourage clients to place more emphasis on the meaningful qualities of the digital clinic.

**Willingness to engage**

Both professionals and clients are willing to participate in the digital clinic. However, the engagement of the clients in the 100% digital clinic is considerably lower than that of the professionals. The clients continue to argue in favor of a combination with face-to-face contact. They expect that a full online treatment will fall short compared to face-to-face. Even though the above paragraph shows that unfamiliarity with online treatment affects people's attitudes, literature also mentions that only a small group of clients prefers internet therapy [76, 77, 90, 91]. Predictors of preference for online therapy include a younger age, higher education and not wanting to wait for face-to-face help [92, 93]. However, studies show that when young people have the choice the majority also chooses face-to-face contact over internet therapy [94]. Face to face often remains the preferred choice. The LAMH model from the theoretical framework even states that face-to-face contact is a general characteristic in the adoption of e-mental health. It is believed to be crucial for an accurate understanding of the client [56]. Many clients do perceive a mix of online and face-to-face to be positive. Clients see the value of online contact next to regular contact and would like to include this in their treatment, this also applies to the clients in this study [24, 56, 95]. It is important to be aware that 100% online will not be suitable for everyone and that only a small part clearly chooses this. The professionals want to continue to provide customization and personalization, it is an important consideration to what extent you can and want to offer this in the digital clinic.

**Ability to execute**

In addition to the willingness of stakeholders, their competence is also important for the enactment of the digital clinic. The majority of the professionals say they feel competent to work online. Some emphasize that until recently they did not feel competent to work online, but that this has increased since the advent of the corona virus. The new situation has led to healthcare continuing digitally. Nevertheless, these professionals had already expressed their interest in the digital clinic before the new situation. Many theories of intrinsic motivation show that feelings of competence are positively linked to motivation. Competence is a basic psychological need and an important factor in motivation. However, it is also mentioned that interest, enjoyment and positive coping are related to the intrinsic motivation of an individual [96, 97]. These last three factors seem to outweigh a sense of competence, as some professionals were motivated to participate despite their limited skill in working online. It reflects that above all it is important to be willing to learn and adapt. Adaptability and openness to change are characteristics that are central to the culture of BAS.

Besides feeling competent to work online, the workability of technology appears to be an important factor in the enactment of the digital clinic. Professionals and clients often mention that a system above all should be user-friendly. They also expect that various functions and facilities will be available. Management recognizes the importance, but indicates that these changes are not feasible in the short term. They depend on the capabilities of the external supplier Karify.

The literature shows that the functioning of technique is an essential factor in the use of e-health. The behavioral intention of stakeholders is determined by the perceived ease of use of the technical system and its perceived usefulness [56, 98]. Concerning the functioning of technical systems, there is often a dilemma between standardization and flexibility [99]. It is important that systems do not determine what a care process looks like, but that they support the requested innovation. Setting up a supporting e-health systems results in an organization responding efficiently to the current wishes and not only optimizing their supply [100]. A certain amount of flexibility is required to be able to work towards a desirable situation that stimulates the users. It is therefore an important consideration to what extent the current system can adapt sufficiently.

**Current individual appraisal**

The professionals emphasize that there are still points of attention that need to be worked on, but their final opinion about the digital clinic is positive. The clients are still cautious, they see possibilities but still prefer to maintain face-to-face contact with their practitioner. All stakeholders believe that the corona virus and increase in online work offered a different perspective on the digital clinic. It has shown that online offers many possibilities and it has therefore positively influenced their opinion. Management also sees that the corona virus has made online treatment the current practice, which gives an impulse to start with the digital clinic. The advent of the corona virus is considered by many as a “black swan” moment for mental health care, an unforeseen event leading to a shift towards online treatment. It is seen as more than a temporary change, once mental health care organizations have developed the capabilities of serving online treatment there is little reason to give this up [48]. Nevertheless, there is also criticism on the changes in mental health care. Critics do not see the current upscaling of digital care immediately leading to a major transformation. They emphasize that the focus is too much on digitalizing of existing care, while transformation means that there is more collaboration, attention for the social context and for providing appropriate care [101]. In addition, it is criticized that there is still a lack of scientific evidence about the shift towards online care. Many studies have been done but these often involve selected clients and practitioners, rigorous comparisons in randomized controlled trials between face-to-face and online care are still rare. There is also still little insight into what the consequences of the current corona crisis will be for psychiatric practice. Critics state that there are still many uncertainties about the shift towards online care and that we are lagging behind in evidence regarding optimal implementation of online care in current practice and circumstances [102]. The current changes have meaning and impact on several levels. It is important to deal with this consciously and to discuss the goals and impact of change, in both the short and long term.

## 6.3 Strengths and limitations

The strength of this study is that all relevant stakeholders of the digital clinic for BAS were involved. In addition to combining the perspectives of professionals and clients, management members were also interviewed. This provided more context, insight in seemingly contradicting expectations and thereby added depth to the results. The combination of insights offers a more complete perspective. However, it is important to note that all professionals except one, have been recruited through a list of interested professionals. Professionals who have not signed up for this list and who perhaps are less enthusiastic about the digital clinic are missing. Despite the fact that the group of professionals of BAS largely consist of people who are open to innovation, a critical perspective may be lacking in this study which influences the representativeness of the sample. It is therefore recommended to incorporate the perspective of a broader group of professionals in future exploration. In addition, only five patients and two management members were included. Nonetheless, the current sample and combination of stakeholders has resulted in relevant insights and recommendations regarding the implementation of the 100% digital clinic in routine mental health care.

With the advent of the corona virus, 100% online treatment has become the current practice for many professionals. As a result professionals seem to have gained a better understanding of a digital clinic, which has also enabled them to better formulate expectations, wishes and difficulties. They were able to include their new experiences with 100% online treatment in this study. However, the downside is that professionals may base their answers on a context where face-to-face contact is currently not possible. This would mean that they are currently more positive about online treatment than they would be when the situation was different. This can have consequences for the reliability of the results. Additionally, the corona virus has led to all interviews taking place by telephone or video call. In the case of a telephone interview, the non-verbal communication and interpretation was lacking. Since many people had to work from home, conversations were often disturbed by background noises, other people or because of the fact that the Wi-Fi connection sometimes dropped. The interruptions resulted in a less fluent interview. An important strength of remote interviewing is that conversations are often much more efficient, therefore many participants were also willing to give an interview. This appears to have contributed to the collection of the participants in this study.

This study focussed on the client panel of BAS to approach clients for an interview, here the limitation applies that only two clients had still an active treatment at BAS. At the time of the interview, these two clients had no experience yet with video calling with their practitioner. The group of clients therefore only has experience with face-to-face contact with their practitioner. This limits the representativeness of the clients of this study, as experience with online treatment can positively influence the attitude of clients [89]. Many clients with an active treatment will currently have experienced online treatment due to the corona virus, therefore more research is needed regarding the expectations and willingness to participate of clients.

Finally, an important limitation of this study was that coding was done by only one researcher and could therefore have led to subjective interpretation of the results. When interpreting the results consistent with one's belief, it could even have resulted in a confirmation bias. Additional discussion with two other students was done to prevent possible bias, however a second coder for part of the interviews could have better exposed any discrepancy in the interpretation of results. Another option to prevent possible bias would have been to use mixed methods, which would allow the results of the qualitative interviews to be tested against a larger group of respondents. Correct application of mixed methods could enhance the interpretation and thus the quality of the results. However, limited time and possibilities have imposed restrictions in the choices that are made in this study.

## 6.4 Recommendations for implementation

To guide successful implementation of the digital clinic in routine mental healthcare it is recommended to take the NPT model as a starting point, as it focuses on the normalization of an innovation and the actions of individuals that play a role in this. The recommendations from this study are therefore aimed at steps that contribute to strengthening the different factors that are reflected in the constructs of this model: the understanding, engagement and ability to execute of stakeholders.

E-mental health takes place in the interaction between the practitioner and client. This also applies to the digital clinic, which focuses on the contact between the practitioner and client that no longer takes place in the treatment room but online. The execution of the digital clinic therefore largely depends on its users. However, management members can ensure activation and connection among users. In order to do that properly, an important first step is that stakeholders understand the meaning of a digital clinic, the reasons from the organization for implementing a digital clinic and the effectiveness of online treatment. Understanding appears to be essential in the process of sense-making and forming a positive attitude *(Coherence)*, it is therefore recommended to communicate clearly about this. This also relates to the goals that want to be achieved with the digital clinic. Management indicates that both short and long-term goals have not been set. However, it is important that e-mental health and innovation are not an end in themselves, but that the possibilities and solutions it can offer are central. A dialogue focused on how the digital clinic contributes to the wishes of the client, without a focus on the technical possibilities, can sharpen the formulation of a clear direction. It is important that clients are involved in this conversation and provide input, in order to make sure that goals and communication match the target group and positively influence their attitude towards online treatment. A clear direction is also valuable in the consideration of a digital clinic for specialist mental health care. In addition, adaptability and openness to change of users are also important considerations for specialist mental health care, future research should focus on this. Finally, a formal decision by the board of directors can contribute to communicating the vision and goals of the digital clinic. This decision can also provide clarity about the commissioning and responsibility.

In order to be a client-oriented organization, it is important to consider the wishes of the client. This study shows that clients attach great value to face-to-face contact, only a small group of people prefers 100% online. Many clients do perceive a mix of online and face-to-face to be positive. Since professionals also would like to continue to provide customization and personalization, it may be a consideration to also offer the possibility for part time instead of full time online in the digital clinic. With the direction that most of the treatment takes place online, but if desired there is still room to meet each other face-to-face. This could increase the engagement of clients and professionals in the digital clinic and the extent to which it is used in routine mental health care *(Cognitive Participation)*. It gives the practitioner and client the freedom to make clear agreements, focused on what is appropriate for the specific situation. For example, together they could decide that only the first and last conversation take place face-to-face. In the process they can also decide to reduce the face-to-face contact and scale up online contact, since the literature shows that experience with online treatment contributes to a positive attitude. Offering this possibility could also be a way of differentiating the digital clinic of BAS from other online offerings. The offline component is not completely excluded and together we look at what fits. Subsequent to this, a second way to increase the involvement of clients in the digital clinic is sharing stories of experts by experience. This can be in the form of a folder or by distributing a video/vlog on social media. Transferring knowledge and experiences could encourage clients. In any case, it is recommended not to speak in terms of the '100% digital clinic'. Since the interviews with the clients show that the label 100% sounds oppressive to them, it suggests that they have no other choice and that they cannot differentiate in their contacts. It is recommended to put more emphasis on general terms such as e-therapy and to match the BAS brand, digital and close by.

An important expectation of both professionals and clients is a supportive and user-friendly system with various functions and facilities, such as interaction possibilities and a diversity of modules and information. It is important that a technical system supports the requested innovation and its users *(Collective Action)*. This requires a certain amount of flexibility, while organizations are often stuck in standardized systems of external parties. Nevertheless, it is valuable to continue to reason from the desired situation and not the situation as it currently is. It is therefore recommended to start the conversation with Karify about the possibilities that the system can offer in the short and long term. Other organizations may also encounter the same problems, this offers opportunities to raise points for improvement together. With the aim to realize crucial points for improvement in the short term, but also to look for alternative solutions for the points that take more time. It is important to provide openness to the users to what extent expectations can and cannot be met.

A second area where action can be taken is to expand the support options for professionals and clients. Inspiring and training professionals, for example through a webinar or knowledge clips, can offer them more insight into the possibilities that the system offers. This can also be aimed at learning how to work online, as online working requires adaption. By also training the professionals in the client's environment, they can offer better support to clients in the event of problems. Clients indicate that they have an interest in a clear, visual and hard-copy folder explaining the different steps of the system.

Stakeholders are reflective and their experiences during the implementation will affect them. The constructs of the NPT model are iterative and interrelated, they all contribute to how a practice is appraised *(Reflexive Monitoring)*. The implementation and normalization process should therefore not be linear, but dynamic. The retrieved steps from the results of this study will contribute to achieving successful implementation, summarized in Figure 6.

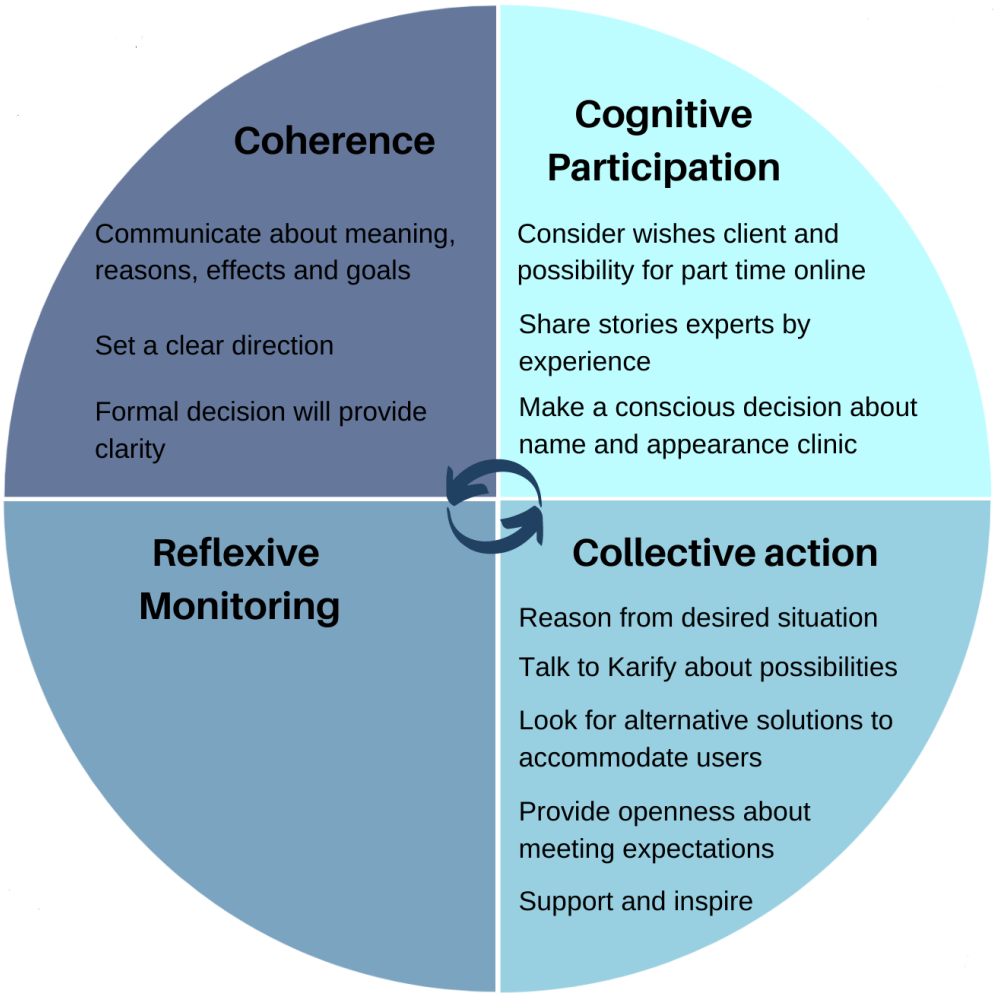


*Figure 6. Overview of the steps recommended to GGNet.*

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# APPENDIX I Informed consent participants


## INFORMATIEBRIEF ONDERZOEK DIGITALE POLI

Mijn naam is Marloes ter Riele en ik studeer Gezondheidswetenschappen aan de Universiteit Twente. In opdracht van GGNet onderzoek ik wat behandelaren en cliënten verwachten van 100% online behandelen, in een digitale poli. GGNet wil daar graag dit jaar mee gaan starten. U heeft aangegeven te willen deelnemen aan dit onderzoek, dank u wel daarvoor. Voor u deelneemt kunt u deze informatiebrief rustig doorlezen.

**Hoe werkt een digitale poli?**

In Nederland verschijnen steeds meer organisaties die 100% online behandelen, digitale poli's worden die genoemd. In een digitale poli werken cliënt en behandelaar volledig digitaal. Een cliënt heeft via zijn computer, tablet of mobiel contact met zijn behandelaar vanuit zijn eigen huis. Via een eigen beveiligde online patiëntportaal heeft de cliënt contact met zijn behandelaar, door middel van videobellen. Naast videocontact vindt de cliënt in het patiëntportaal ook allerlei opdrachten en achtergrondinformatie. Hierdoor kan de cliënt in eigen tempo en in eigen tijd werken aan deze opdrachten. Die hij vervolgens met de behandelaar tijdens het videocontact kan nabespreken. De cliënt blijft dus altijd in zijn eigen omgeving en ziet de behandelaar alleen via het scherm van de laptop, tablet of mobiel. Dit wordt ook wel behandelen op afstand genoemd.

**Doel van het onderzoek**

Het doel van dit onderzoek is het verkennen van de verwachtingen van behandelaren en cliënten omtrent het 100% online behandelen in de digitale poli. Dit kan belangrijke informatie opleveren voor het opzetten van de digitale poli. Aan de hand van dit onderzoek zullen aanbevelingen worden gedaan.

**Deelname aan het onderzoek**

U heeft aangegeven te willen deelnemen aan een interview voor dit onderzoek. Praktisch houdt dit het volgende in:

- Het interview duurt maximaal 25 minuten.
- Het interview is telefonisch of via videobellen, wat u prettig vindt.

Tijdens het interview werk ik met een vragenlijst. Uiteraard kunt u ook uw eigen onderwerpen noemen. Van het interview maak ik een geluidsopname. Dit type ik woord voor woord uit voor dit onderzoek. Uw naam en andere persoonlijke gegevens, laat ik weg. De verzamelde gegevens zijn vertrouwelijk en gebruik ik alleen voor dit onderzoek. Uw deelname aan het onderzoek is vrijwillig. U kunt zich altijd bedenken en uw deelname stoppen, ook tijdens het interview.

**Contactgegevens**

Voor vragen over het onderzoek kunt u contact met mij of met een projectleider opnemen.

*Verantwoordelijk onderzoeker*
Marloes ter Riele
Telefoon: xxxx
E-mail: xxxx

*GZ-psycholoog & beleidsprofessional*
Suzanne de Klerk
Telefoon: xxxx
E-mail: xxxx

Graag wil ik u bedanken voor het lezen van deze informatiebrief.

# Toestemmingsformulier

## Het opzetten van een digitale poli voor basis GGZ

*Officiële titel: Exploring the expectations of professionals and clients about the 100% digital clinic for basic mental healthcare (BAS) at GGNet*

**Verantwoordelijk onderzoeker:** Marloes ter Riele
**In opdracht van:** GGNet

- Ik stem vrijwillig in met mijn deelname aan dit onderzoek. Ik weet dat ik de mogelijkheid heb om ieder moment te beslissen om te stoppen of niet mee te doen met het onderzoek.
- Ik geef de onderzoeker toestemming voor verzamelen en gebruiken van mijn gegevens voor de beantwoording van de hoofdvraag van dit onderzoek.
- Ik geef toestemming voor het maken van een geluidsopname van het interview, ter analyse.
- Ik begrijp dat gegevens en resultaten van het onderzoek vertrouwelijk zullen zijn.
- Ik heb de informatie over het onderzoek en het toestemmingsformulier gelezen. Daarbij heb ik de mogelijkheid gehad om vragen te stellen. Mijn vragen zijn voldoende beantwoord.

Naam respondent: ……

Datum: __ / __ / __

---

Ik verklaar dat ik de respondent volledig heb geïnformeerd over het onderzoek en dat er zorgvuldig en vertrouwelijk met de verzamelde gegevens zal worden omgegaan.

Naam onderzoeker:

Datum: __ / __ / __

---

*De respondent krijgt een informatiebrief samen met een door de onderzoeker ingevulde versie van het toestemmingsformulier toegestuurd. Indien de respondent toestemming geeft wordt een ingevulde versie van het toestemmingsformulier retour gestuurd.*

## **Achtergrond informatie** *(behandelaar)*

Na het invullen van het toestemmingsformulier wil ik u vragen onderstaande algemene vragen over uzelf in te vullen.

1. Wat is uw leeftijd?

   ..... jaar

2. Op welke locatie van BAS bent u werkzaam?

   .....

3. Wat is uw functie bij BAS?

   .....

4. Hoe lang bent u werkzaam in deze functie?

   .....

5. Werkt u met een specifieke doelgroep binnen BAS?
   □ Ja
   □ Nee
   *Indien ja, welke doelgroep?*

   .....

6. Past u momenteel e-health toe in de behandeling van uw cliënten?
   □ Ja
   □ Nee
   *Indien ja, hoe past u e-health toe in de behandeling van uw cliënten?*

   .....

   .....

   .....

## **Achtergrond informatie** *(cliënt)*

Na het invullen van het toestemmingsformulier wil ik u vragen onderstaande algemene vragen over uzelf in te vullen.

1. Wat is uw leeftijd?

   ..... jaar

2. Welke technologie gebruikt u in uw dagelijks leven? *Meerdere antwoorden mogelijk.*
   □ Mobiele telefoon zonder applicaties
   □ Smartphone
   □ Tablet/iPad
   □ Desktop computer
   □ Laptop
   □ Smartwatch
   □ Geen

3. Over welke van de volgende internetvaardigheden beschikt u? *Meerdere antwoorden mogelijk.*
   □ Ik weet hoe ik opgeslagen bestanden kan openen
   □ Ik weet hoe ik een foto van internet kan opslaan
   □ Ik weet hoe ik sneltoetsen kan gebruiken (bijvoorbeeld CTRL-c voor kopie)
   □ Ik weet hoe ik een nieuw venster open in mijn internet browser
   □ Ik weet hoe ik een website kan toevoegen aan mijn favorieten
   □ Ik weet hoe ik een app kan installeren en gebruiken

4. Maakt u gebruik van het internet om informatie over uw gezondheid op te zoeken?
   □ Ja
   □ Nee

5. Maakt u gebruik van apps op uw telefoon gericht op gezondheid, zoals bijvoorbeeld een stappenteller, een calorieënteller of een sportapp?
   □ Ja
   □ Nee

6. Wordt er technologie toegepast in uw behandeling bij BAS?
   □ Ja
   □ Nee
   *Indien ja, hoe wordt dit toegepast in uw behandeling?*

   .....

   .....

   .....

## **Achtergrond informatie** *(management)*

Na het invullen van het toestemmingsformulier wil ik u vragen onderstaande algemene vragen over uzelf in te vullen.

1. Wat is uw leeftijd?

   ..... jaar

2. Wat is uw functie bij GGNet?

   .....

3. Hoe lang bent u werkzaam in deze functie?

   .....

4. Hoe bent u betrokken bij het opzetten van een 100% digitale poli?

   .....

   .....

# APPENDIX II Interview topic guides

## Topic guide: professionals BAS GGNet

**Introductie**
Fijn dat ik u mag interviewen. Zoals u heeft begrepen zijn wij bezig met een onderzoek naar de 100% digitale poli. GGNet wil graag dit jaar starten met het online behandelen van cliënten, in een digitale poli. Wij zijn benieuwd naar uw verwachtingen over deze digitale poli. Hierover wil ik u graag een aantal vragen stellen. Het interview zal maximaal 30 minuten duren.

Graag zou ik het interview willen opnemen. Er zal vertrouwelijk met uw gegevens worden omgegaan en deze worden alleen gebruikt in het kader van dit onderzoek. Heeft u bezwaar tegen het opnemen van het interview?

Heeft u momenteel nog vragen over het onderzoek of het interview?
Dan beginnen we met de eerste vraag.

**Start van het interview**
*Openingsvraag:* De term '100% digitale poli' heb ik nu een paar keer genoemd. Ik ben allereerst benieuwd wat u verwacht dat een digitale poli inhoudt?

Omschrijving '100% digitale poli' volgens GGNet: in de digitale poli werken cliënt en behandelaar volledig digitaal, het contact vindt plaats via het scherm van de laptop, tablet of mobiel. Door in te loggen op een eigen beveiligde online patiëntportaal heeft een cliënt contact met zijn behandelaar, door middel van videobellen. Naast videocontact vindt de cliënt in het patiëntportaal allerlei opdrachten en achtergrondinformatie. Hier kan de cliënt in eigen tijd en tempo aan werken. De cliënt en behandelaar blijven dus altijd in hun eigen omgeving.

| Construct | Topic | Questions |
|---|---|---|
| | Algemene informatie | *Uitgevraagd middels vragenlijst toestemmingsformulier* |
| **Coherence** | Bewustzijn | Wat was uw eerste indruk van de plannen met betrekking tot de 100% digitale poli voor BAS?<br><br>Op welke wijze bent u geïnformeerd over de komst van een digitale poli? Hoe heeft u dit ervaren? |
| | Redenen van implementatie | Wat zijn volgens u de redenen voor de organisatie om een digitale poli voor BAS te introduceren?<br><br>Op welke wijze sluit de digitale poli aan bij de doelen en ambities van GGNet? |
| | Potentiële waarde | Wat is volgens u de toegevoegde waarde van de digitale poli en voor wie? |

| | | |
|---|---|---|
| | | In hoeverre ziet u voordelen in het online behandelen van cliënten? En in hoeverre ziet u nadelen?<br><br>Hoe denkt u dat een 100% digitale behandeling verschilt van het bieden van face-to-face zorg of een mix van face-to-face en online zorg (ook wel blended zorg genoemd)? |
| **Cognitive Participation** | Ervaring | Heeft u ervaring in het online behandelen van cliënten? Indien ja, zou u hier meer over kunnen vertellen? |
| | Motivatie | Wat ziet u als uw rol bij een 100% digitale poli voor BAS?<br><br>Wat lijkt u leuk en minder leuk aan het behandelen van cliënten in een digitale poli? |
| | Verantwoordelijkheid | In hoeverre denkt u dat een digitale poli meer eigen regie zal geven aan de cliënt? Ziet u dit als positief of negatief?<br><br>In hoeverre denkt u dat uw verantwoordelijkheid als behandelaar zal veranderen? |
| | Autonomie | Verwacht u dat de digitale poli invloed zal hebben op uw professionele autonomie? Indien ja, op welke wijze? |
| **Collective Action** | Interactieve werkbaarheid | In hoeverre past de digitale poli bij uw bestaande manier van werken? Zal het hierbij helpen of belemmeren?<br><br>In hoeverre verwacht u dat de digitale poli past bij uw bestaande cliënten? |
| | Relationele integratie | Hoe denkt u dat cliënten zullen reageren op de komst van de digitale poli?<br><br>Op welke wijze zal de digitale poli de relatie met uw cliënten beïnvloeden? |
| | Technische werkbaarheid | In hoeverre voelt u zich capabel om de interventies van de digitale poli te gebruiken in uw werk?<br><br>Wat hoopt u allemaal te kunnen doen met de digitale poli van BAS? Welke faciliteiten en functies verwacht u dat er aanwezig zijn in het platform van de digitale poli?<br><br>Wat zijn volgens u belemmerende en bevorderende factoren bij de technische werkbaarheid van de digitale poli? |

| | | |
|---|---|---|
| **Social Context** | Organisatiestructuur en normen | Ervaart u voldoende ondersteuning vanuit de organisatie bij het digitaal werken? Hoe wordt u hierbij ondersteund? |
| **Reflexive Monitoring** | Individuele beoordeling | Vindt u het online behandelen van cliënten van BAS in een digitale poli een goed idee?<br><br>In hoeverre ziet u risico's in het online behandelen van cliënten? |
| **Social Context** | Groepsprocessen | Hoe denkt u dat uw collega's tegen de digitale poli aankijken? |
| | *Contextvariabele opkomst corona virus* | *Dankzij het corona virus maakt beeldbellen en online behandelen een grote vlucht.*<br><br>Denkt u dat dit de mening van behandelaren heeft beïnvloed? Hoe ervaart u dit zelf? |

**Afsluiting**
Wij zijn aan het einde van het interview gekomen. Heeft u het idee dat ik nog iets belangrijks heb gemist, of wilt u zelf nog iets toevoegen?

Tot op heden ben ik nog op zoek naar respondenten voor het onderzoek. Ter afsluiting wil ik u daarom vragen of u eventueel nog collega's kent of cliënten heeft, die ik zou kunnen benaderen voor een interview?

Graag wil ik u hartelijk bedanken voor uw bijdrage aan dit onderzoek. Indien u interesse heeft in de bevindingen van dit onderzoek, kan ik u na afloop van het onderzoek per mail hierover informeren.

## Topic guide: cliënten BAS GGNet

**Introductie**
Fijn dat ik u mag interviewen. Zoals u heeft begrepen zijn wij bezig met een onderzoek naar de 100% digitale poli. GGNet wil graag dit jaar starten met het online behandelen van cliënten, in een digitale poli. Wij zijn benieuwd naar uw verwachtingen over deze digitale poli. Hierover wil ik u graag een aantal vragen stellen. Het interview zal maximaal 30 minuten duren.

Graag zou ik het interview willen opnemen. Er zal vertrouwelijk met uw gegevens worden omgegaan en deze worden alleen gebruikt in het kader van dit onderzoek. Heeft u bezwaar tegen het opnemen van het interview?

Heeft u momenteel nog vragen over het onderzoek of het interview?
Dan beginnen we met de eerste vraag.

**Start van het interview**
*Openingsvraag:* De term '100% digitale poli' heb ik nu een paar keer genoemd. Ik ben allereerst benieuwd wat u verwacht dat een digitale poli inhoudt?

Omschrijving '100% digitale poli' volgens GGNet: in de digitale poli werken cliënt en behandelaar volledig digitaal, het contact vindt plaats via het scherm van de laptop, tablet of mobiel. Door in te loggen op een eigen beveiligde online patiëntportaal heeft een cliënt contact met zijn behandelaar, door middel van videobellen. Naast videocontact vindt de cliënt in het patiëntportaal allerlei opdrachten en achtergrondinformatie. Hier kan de cliënt in eigen tijd en tempo aan werken. De cliënt en behandelaar blijven dus altijd in hun eigen omgeving.

| Construct | Topic | Questions |
|---|---|---|
| | Algemene informatie | *Uitgevraagd middels vragenlijst toestemmingsformulier* |
| **Coherence** | Bewustzijn | Wat was uw eerste indruk toen u hoorde over de digitale poli voor BAS? |
| | Redenen van implementatie | Wat denkt u dat de redenen zijn voor GGNet om een digitale poli te starten? |
| | Potentiële waarde | Wat is volgens u het nut van een digitale poli en voor wie?<br><br>Wat zijn volgens u de voor- en nadelen van een online behandeling in een digitale poli?<br><br>Denkt u dat het 100% online behandelen verschilt van de zorg die u ontvangt/heeft ontvangen bij BAS? En hoe denkt u dat dit verschilt? |
| **Cognitive Participation** | Ervaring | Heeft u ervaring met online behandelingen? Indien ja, zou u hier meer over kunnen vertellen? |

| | | |
|---|---|---|
| | Motivatie | Hoe kijkt u aan tegen het online communiceren met uw behandelaar?<br><br>Zou u gebruik willen maken van een digitale poli? Waarom wel/niet?<br><br>Welke onderdelen van de digitale poli spreken u vooral aan? |
| **Collective Action** | Relationele integratie | Op welke wijze zal een 100% digitale behandeling de band met uw behandelaar veranderen? |
| | Technische werkbaarheid | *Voor de digitale poli logt u in via uw computer, tablet of mobiel op een eigen beveiligd patiënten portaal. Hier heeft u contact met uw behandelaar, door middel van videobellen. Daarnaast kunt u er opdrachten maken en achtergrondinformatie lezen.*<br><br>Denkt u dat het u zal lukken om de digitale poli te gebruiken?<br><br>Wat zou u helpen om de digitale poli te gaan gebruiken?<br><br>Wat hoopt u allemaal met de digitale poli te kunnen doen? |
| | Internet vaardigheden | *Uitgevraagd middels vragenlijst toestemmingsformulier* |
| **Social Context** | Organisatiestructuur en normen | *Indien ervaring met online behandelingen:*<br>In hoeverre ervaart u ondersteuning vanuit GGNet bij het gebruiken van technologie in uw behandeling?<br><br>Stel dat u vast zou lopen met de technologie van de digitale poli, hoe zou u dan graag geholpen willen worden door GGNet? |
| **Reflexive Monitoring** | Individuele beoordeling | Vindt u het online behandelen van cliënten van BAS in een digitale poli een goed idee?<br><br>In hoeverre ziet u risico's in een online behandeling in een digitale poli? |
| **Social Context** | Groepsprocessen | Hoe denkt u dat andere cliënten zullen aankijken tegen een digitale poli? |
| | *Contextvariabele opkomst corona virus* | *Vanwege het corona virus wordt er nu veel gebruik gemaakt van online mogelijkheden, zoals bijvoorbeeld beeldbellen.*<br><br>In hoeverre heeft dit uw mening ten aanzien van online behandelen veranderd? |

**Afsluiting**

Wij zijn aan het einde van het interview gekomen. Heeft u het idee dat ik nog iets belangrijks heb gemist, of wilt u zelf nog iets toevoegen?

Graag wil ik u hartelijk bedanken voor uw bijdrage aan dit onderzoek. Indien u interesse heeft in de bevindingen van dit onderzoek, kan ik u na afloop van het onderzoek per mail hierover informeren.

## Topic guide: management BAS GGNet

**Introductie**
Fijn dat ik u mag interviewen. Zoals u heeft begrepen ben ik bezig met een onderzoek naar een 100% digitale poli voor BAS. Naast de verwachtingen van cliënten en behandelaren, ben ik benieuwd naar uw verwachtingen over de digitale poli. Hierover wil ik u graag een aantal vragen stellen. Het interview zal maximaal 30 minuten duren.

Graag zou ik het interview willen opnemen. Er zal vertrouwelijk met uw gegevens worden omgegaan en deze worden alleen gebruikt in het kader van dit onderzoek. Heeft u bezwaar tegen het opnemen van het interview?

Heeft u momenteel nog vragen over het onderzoek of het interview? Dan beginnen we met de eerste vraag.

**Start van het interview**
*Openingsvraag:* De term '100% digitale poli' heb ik nu een paar keer genoemd. Ik ben allereerst benieuwd wat volgens u een 100% digitale poli inhoudt?

| Construct | Topic | Questions |
|---|---|---|
| | Algemene informatie | *Uitgevraagd middels vragenlijst toestemmingsformulier* |
| **Coherence** | Bewustzijn | Wanneer heeft GGNet tot de komst van de 100% digitale poli voor BAS besloten?<br><br>Hoe heeft u behandelaren geïnformeerd over de komst van de digitale poli? |
| | Redenen van implementatie | Wat zijn de redenen van GGNet om een digitale poli voor BAS te introduceren?<br><br>Op welke wijze sluit de digitale poli aan bij de doelen en ambities van GGNet? |
| | Potentiële waarde | Wat is volgens u de toegevoegde waarde van de digitale poli en voor wie?<br><br>In hoeverre ziet u voordelen in het online behandelen van cliënten? En in hoeverre ziet u nadelen?<br><br>Hoe denkt u dat een 100% digitale behandeling verschilt van het bieden van face-to-face zorg of een mix van face-to-face en online zorg (ook wel blended zorg genoemd)? |
| **Cognitive Participation** | Visie | Waar zal de digitale poli voor BAS die naar verwachting dit jaar wordt geïmplementeerd uit bestaan?<br><br>Wat zijn de doelen van de digitale poli op de korte en lange termijn? |

| | | |
|---|---|---|
| | Motivatie | In welke mate verwacht u dat behandelaren en cliënten gemotiveerd zijn om te participeren in de digitale poli? Wat zijn hierbij volgens u belangrijke overwegingen?<br><br>Verwacht u hierbij grote verschillen tussen bepaalde behandelaren en cliënten? |
| **Collective Action** | Interactieve werkbaarheid | In hoeverre past de digitale poli bij de bestaande manier van werken binnen BAS?<br><br>In hoeverre verwacht u dat de digitale poli past bij de bestaande cliënten van BAS? |
| | Relationele integratie | Op welke wijze zal de digitale poli de relatie tussen een behandelaar en cliënt beïnvloeden? |
| | Technische werkbaarheid | In hoeverre denkt u dat behandelaren en cliënten zich capabel voelen om de interventies van de digitale poli te gebruiken?<br><br>Wat zijn volgens u belangrijke faciliteiten en functies die aanwezig behoren te zijn in het platform van de digitale poli?<br><br>Wat zijn volgens u belemmerende en bevorderende factoren bij de technische werkbaarheid van de digitale poli? |
| **Social Context** | Organisatiestructuur en normen | Op welke wijze biedt de organisatie ondersteuning aan behandelaren en cliënten bij het digitaal werken? |
| **Reflexive Monitoring** | Individuele beoordeling | Vindt u het online behandelen van cliënten van BAS in een digitale poli een goed idee?<br><br>In hoeverre ziet u risico's in het online behandelen van cliënten? |
| | *Contextvariabele opkomst corona virus* | *Dankzij het corona virus maakt beeldbellen en online behandelen een grote vlucht.* Denkt u dat dit de mening van behandelaren en cliënten heeft beïnvloed? Hoe ervaart u dit zelf? |

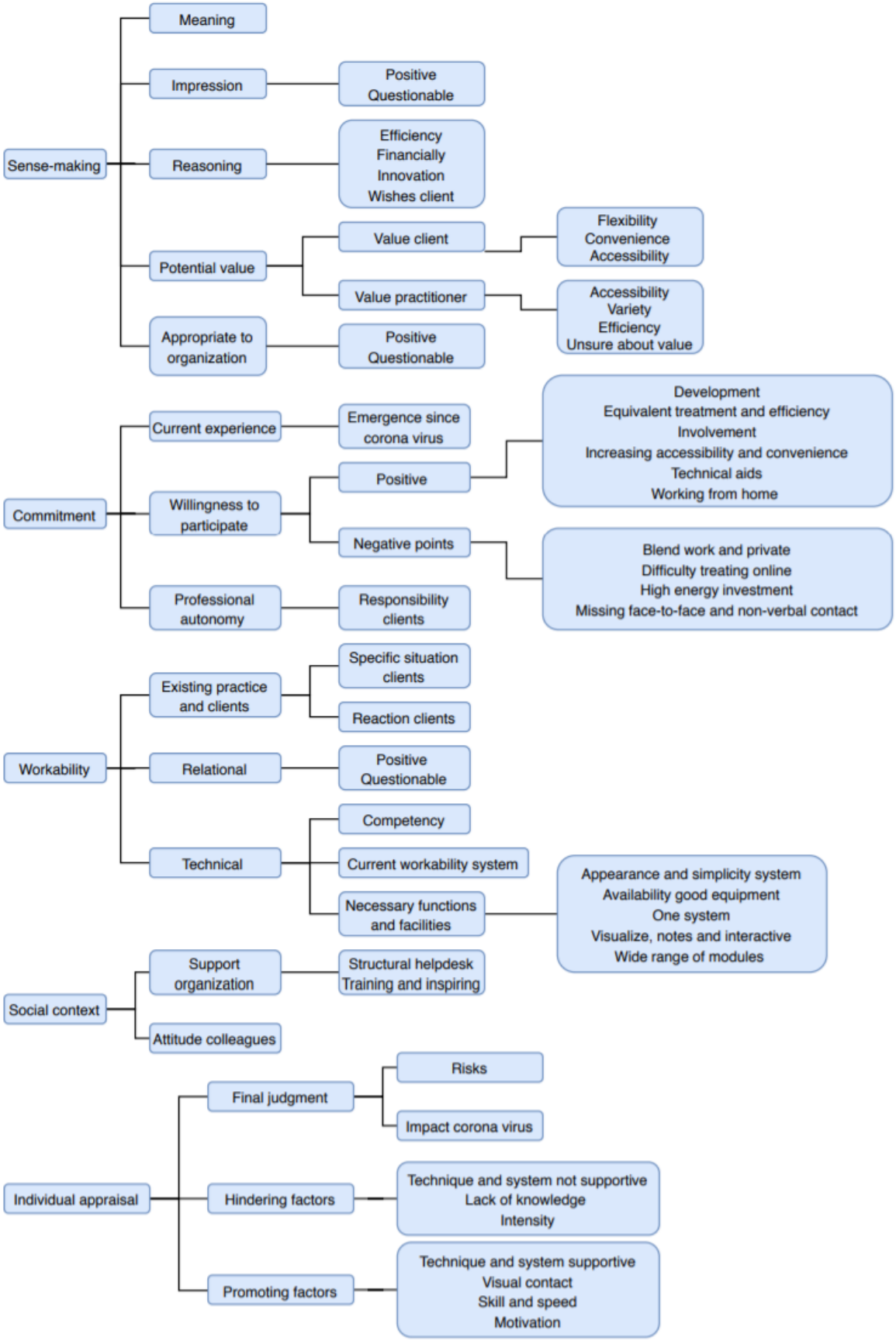
**Afsluiting**

Wij zijn aan het einde van het interview gekomen. Heeft u het idee dat ik nog iets belangrijks heb gemist, of wilt u zelf nog iets toevoegen?

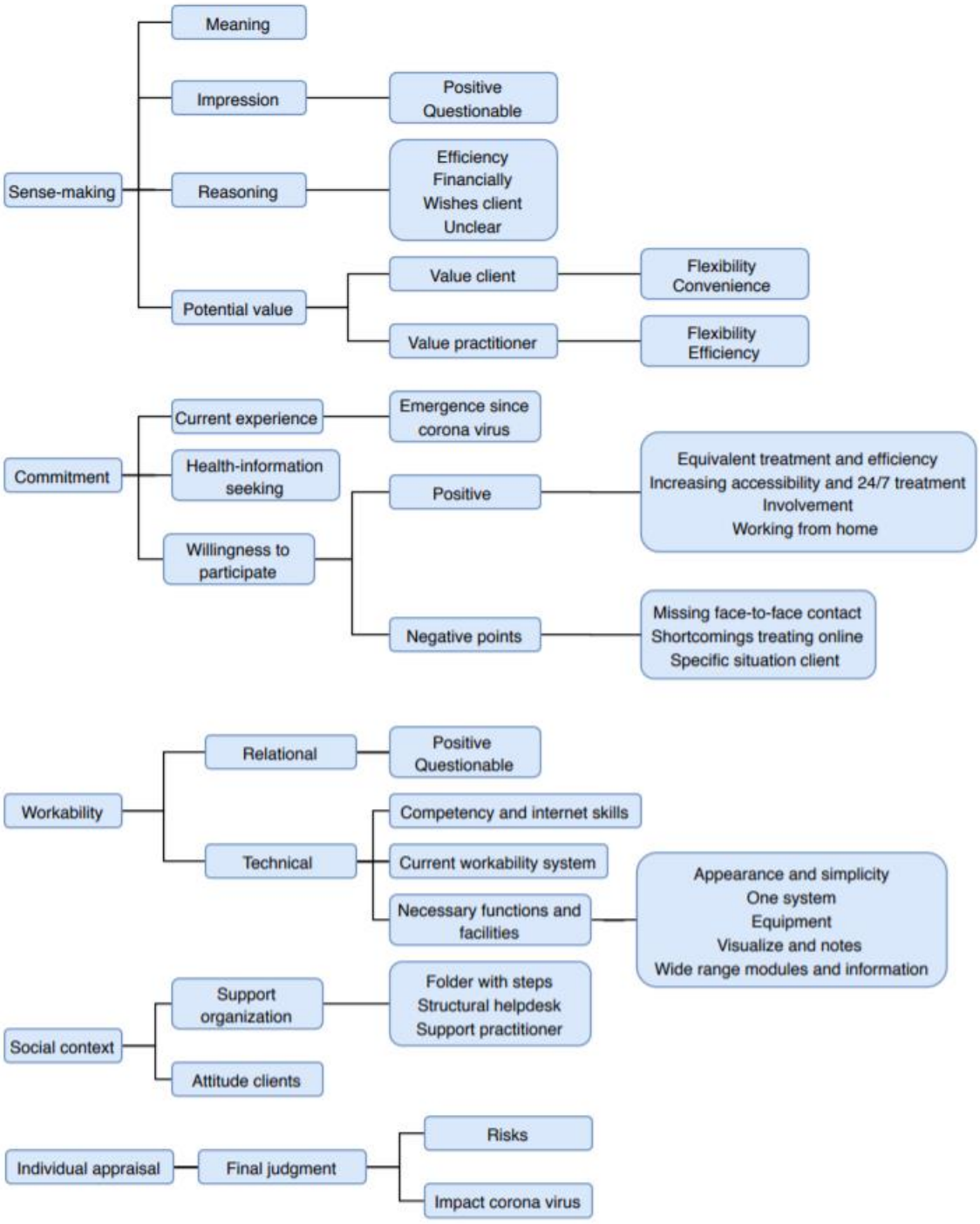
Graag wil ik u hartelijk bedanken voor uw bijdrage aan dit onderzoek. Indien u interesse heeft in de bevindingen van dit onderzoek, kan ik u na afloop van het onderzoek per mail hierover informeren.

# APPENDIX III Coding trees

**Coding tree professionals**



**Coding tree clients**



**Coding tree management**