

Digital Psychosocial Follow-up for Childhood Critical Illness Survivors: A Qualitative Interview Study on Health Professionals' Perspectives

Marte Hoff Hagen^{1*}, Gunnar Hartvigsen², Letizia Jaccheri¹, Sofia Papavlasopoulou¹

¹Department of Computer Science, Norwegian University of Science and Technology, Trondheim, Norway

²Department of Computer Science, University of Tromsø – The Arctic University of Norway, Tromsø, Norway

*Corresponding author: marte.h.hagen@ntnu.no

Abstract

Background: Digital solutions have been reported to provide positive psychological and social outcomes to childhood critical illness survivors, a group with an increased risk for long-term adverse psychosocial effects.

Objective: To explore health professionals' perspectives on the potential of digital psychosocial follow-up for childhood critical illness survivors.

Methods: Using a qualitative approach, expert interviews with six health professionals working at a Norwegian hospital were conducted. Transcribed interviews were analyzed using Braun and Clarke's six-phase thematic analysis framework. Concurrent data collection and analysis using inductive coding was also employed, and a model of codes was constructed.

Results: The interview yielded thirteen unique codes regarding the health professionals' perspectives on the potential for digital psychosocial follow-up for childhood critical illness survivors, organized in a model comprising the two main themes: *Affecting Factors* and *Digital Usage*. Demographic factors (the child's medical condition, age, gender, and residence) and environmental factors (the child's family and health professionals) tended to affect the current psychosocial follow-up. Hospital limitations concerning a lack of digital solutions, worse relationship building with video communication, and children's already high screen time reflected the current state of digital usage. However, ongoing digitalization, existing successful digital solutions, children's good digital skills, and an ongoing process of creating an artifact are also seen as opportunities for digital usage in future psychosocial follow-up for childhood critical illness survivors.

Conclusions: Researchers can build further on these findings to investigate the potential of digital psychosocial follow-up for childhood critical illness survivors, and clinicians can use it as a starting point for improving psychosocial follow-up.

Keywords: Childhood Critical Illness, Long-term Follow-up Care, Psychosocial, Digitalization, Expert Interview

Introduction

Healthcare is evolving to better meet patients' needs, focusing on five key characteristics called P5 medicine: preventive, personalized, predictive, participative, and psycho-cognitive (1). This transformation involves, particularly in the psycho-cognitive dimension, an

increased emphasis on *psychosocial follow-up*, defined as the "psychological and social services and interventions that enable patients, their families, and health care providers to (...) manage the psychological/behavioral and social aspects of illness and its consequences (...) to promote better health" (2, p. 9). Child

and adolescent psychiatry is an essential component of this follow-up, especially for childhood critical illness survivors.

Any condition requiring Pediatric Intensive Care Unit (PICU) treatment can be considered a childhood critical illness (3, 4). Hospitalization and intensive treatment procedures at a PICU during childhood can impair a child’s psychological and social functioning (5), increasing the risk for long-term adverse psychosocial consequences for childhood critical illness survivors (6, 7).

Literature indicates that digital psychosocial follow-ups for childhood critical illness survivors could improve their psychosocial well-being (8–11). These digital solutions, mainly web applications and virtual reality (VR), are increasingly used (8, 10–12). It is important to involve the perceptions and experiences of health professionals in their design to ensure these solutions can be integrated into the current healthcare system (13, 14). While previous research has investigated health professional perspectives on such digital solutions (e.g., (15)), recent studies have focused on their perspectives on solutions targeting survivors of specific medical conditions like cancer (e.g., (16, 17)).

This study aims to explore health professionals’ perspectives on the potential of digital psychosocial follow-up for childhood critical illness survivors in general. Specifically, it will answer the research question: “What are health professionals’ perspectives on the potential of digital psychosocial follow-up for childhood critical illness survivors?” To gain a comprehensive understanding of these perspectives, a case study (18) of health professionals at a Norwegian hospital was conducted. The findings of this study are relevant for informing clinicians caring for critical childhood illness survivors. Moreover, the results can enhance the research and

development of effective digital solutions for this vulnerable group.

Methods

The Standards for Reporting Qualitative Research (SRQR) (19) are followed to report this study. The Norwegian Centre for Research Data provided ethical assessments regarding collecting, storing, and processing data (Notification Form 477311).

Study Design

Expert interviews with health professionals with insight into psychosocial follow-up for childhood critical illness survivors were utilized to gather specific knowledge of the digital potential (20). This study design has also been used in a similar study to identify health professionals’ perspectives on the potential for digitalizing a healthcare process (21).

Recruitment and Participants

The Division of Paediatric and Adolescent Medicine at a Norwegian public hospital, treating children and adolescents below the age of 18, served as the primary site of recruitment for health professionals who work with childhood critical illness survivors. The first author recruited health professionals through hospital-provided phone numbers and mail addresses, using a combination of snowball and purposive sampling methods to ensure diverse perspectives. The demographic information of the interviewees can be found in Table 1. To enhance the study’s trustworthiness, the interviews were triangulated (22) with stakeholders covering the five most prominent roles concerning the psychosocial follow-up of childhood critical illness survivors. Out of the hospital’s eight departments that interact with children with critical illness, the interviewees worked across three departments; the most relevant

TABLE 1. Overview of the interviewees.

<i>Interviewee</i>	<i>Sex</i>	<i>Role</i>	<i>Department</i>	<i>Duration</i>
I1	Female	PICU nurse	Intensive Care	25:34
I2	Female			
I3	Female	Child psychiatrist	Psychiatry	40:16
I4	Male	Child psychologist	Psychiatry	35:24
I5	Male	Pediatrician	Surgery	24:31
I6	Female	Special pediatric nurse	Surgery	45:10

Note. PICU = Pediatric Intensive Care Unit

departments for the subsequent phase of this research project focuses on a target group from the surgery department. The interviewees provided informed consent to be able to participate in the audio-recorded interviews.

Data Collection

From February to March 2022, the first author collected the data utilizing semi-structured interviews to maintain a general structure while allowing the interviewees to discuss aspects not initially considered (23). The main topics covered in the interview guide included: 1) the current psychosocial follow-up for the childhood critical illness survivors at the hospital, 2) the psychosocial needs of the survivors, and 3) the hospital’s experiences with digital solutions. Different perspectives were gathered through both group and individual interviews. I2 was included in a group interview with I1 at I1’s request, while the remaining interviews were conducted individually. Using an iterative data collection and analysis strategy, interviews were conducted until no new codes were identified. Interviews were conducted in Norwegian and lasted between 24 and 45 minutes. Due to the COVID-19 pandemic, the interviews were performed digitally and audio-recorded on the video communication platform Zoom because it is the preferred and licensed platform for the hospital. The first author verbatim transcribed a total of 2 hours, 50 minutes, and 55 seconds of audio recordings of the interviews in the word processing software Microsoft Word.

Moreover, these transcriptions were anonymized for analysis.

Data Analysis

The first author analyzed the Norwegian transcriptions using the software NVivo Release 1.7 and Braun and Clarke’s six-phase framework for thematic analysis (24), applicable in qualitative health research (25). These phases included: 1) familiarizing with the data, 2) generating initial codes, 3) searching for themes, 4) reviewing the themes, 5) defining the themes into a model, and 6) writing the research by including quotes that were the most representative of the findings (24). An inductive approach was utilized to ensure that the generated codes and themes were strongly linked to the data (24). Concurrent data collection and analysis were employed for Phases 1 through 4 to identify emergent themes and construct a model. Following each interview, emergent themes were discussed with the other authors. After interviewing I6, it was observed that this final interview yielded no new codes, leading to the decision to terminate the data collection process. Phases 5 and 6 of the analysis were then completed, and the extracted data and model were translated into English. All authors agreed on the model and the presentation of the research.

Results

The interview findings yielded 84 extracted quotes. A model of 13 codes, four sub-themes,

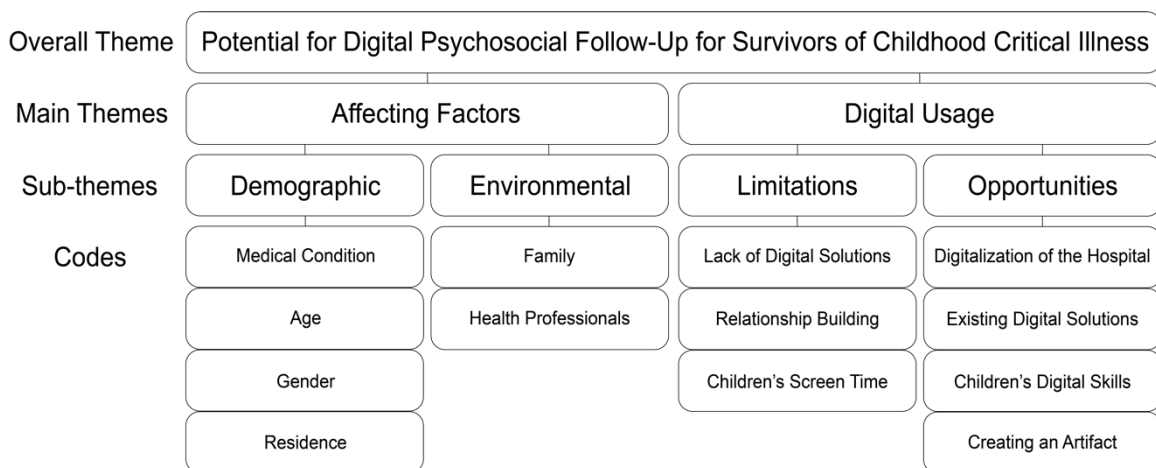


FIGURE 1. Overview of the identified themes.

and two main themes was constructed. The model is presented in Figure 1.

Affecting Factors

The first main theme, *Affecting Factors*, was divided into the sub-themes *Demographic* (Table 2) and *Environmental* (Table 3). These factors affect the psychosocial follow-up for childhood critical illness survivors at the hospital and, consequently, the potential for the adoption of digital psychosocial follow-up.

Demographic

Table 2 summarizes the different codes of the potential demographic factors affecting how and if a childhood critical illness survivor receives psychosocial follow-up. The rest of this section provides a detailed description of each code.

Medical condition The interviewees indicated that the child’s medical condition is one significant demographic factor affecting the frequency of psychosocial follow-up. For example, an interviewee described the psychosocial follow-up as follows: “A bit random (for different medical

“A bit random (for different medical conditions), and we (as the child and adolescent psychiatry,) are usually a little behind. We come in when the child is (old), has (physical) and social problems.” (I4)

Another interviewee elaborated on this challenge of not capturing every childhood critical illness survivor that needs follow-up:

“A part of the children (admitted to PICU), we meet in retrospect. (...) There are very many who talk about pretty bad experiences in hospitals. They have had nightmares, difficulties, and fear of coming to the hospital, and they get nauseous only by being close to the hospital and throwing up. So, they actually describe pretty traumatic experiences that may not necessarily have been captured.” (I3)

Age The child’s age is also an essential demographic factor that could affect the content in the psychosocial follow-up. For example, an interviewee explained how psychosocial needs vary with age:

“Because you need a lot of comfort and support early. Then you really need a lot of help with routines to stand in treatment and then, in a way, learn to cope if you’re bullied, feel different, or are excluded.” (I4)

Gender The gender of the child is another demographic factor of the psychosocial follow-up the interviewees highlighted as potentially affecting. For example, an interviewee talked about boys as a non-reached group:

“I’ve at least been involved with some boys we think should have had (psychosocial) follow-up who say no (because) some of the boys I’ve had, like from middle school and older, some aren’t so fond of talking. (...) I don’t

TABLE 2. Summary of content in the different codes of the affecting demographic factors.

<i>Codes</i>	<i>Summary of Content</i>
Medical Condition	<ul style="list-style-type: none"> – The frequency of psychosocial follow-up for childhood critical illness survivors tends to differ for diverse medical conditions. – There is a tendency for survivors not to be referred to the psychosocial follow-up despite the fact they have experienced trauma during their hospitalization.
Age	<ul style="list-style-type: none"> – The psychosocial needs tend to vary with the child’s age. – The psychosocial follow-up tends to vary in content with the child’s age.
Gender	<ul style="list-style-type: none"> – Compared to girls, boys tend more likely to withdraw from the psychosocial follow-up even though they also could need it.
Residence	<ul style="list-style-type: none"> – The psychosocial follow-up tends to be better the closer the child lives to the hospital.

know if it's a boy thing that you don't want to talk about things or that you should be tough.” (I3)

Another interviewee elaborated on this concern about boys as a non-reached group:

“I don't know if it's a boy thing that you don't want to talk about things or that you should be tough.” (I3)

Residence Lastly, the distance from the child's residence to the hospital is a demographic factor affecting the psychosocial follow-up, according to one of the interviewees:

Obviously, (the psychosocial follow-up) depends on where (the children) live, even if it's not supposed to be like that. The closer you live to the hospital, the better offer you get, simply because it's more accessible.” (I4)

Environmental

Table 3 summarizes the different codes of the potential environmental factors affecting if and how a childhood critical illness survivor receives psychosocial follow-up. The rest of this section provides a detailed description of each code.

Family The interviewees indicated the child's family as the most significant environmental factor for the psychosocial follow-up. For example, an interviewee pinpointed the challenge of not capturing every childhood critical illness survivor that needs psychosocial

follow-up when it depends on the family's initiative and awareness for all children below the age of 16:

“It's the guardians who consent on behalf of the children under 16 years of age. (When) children stay at the hospital for such a short time that we don't have time to catch what will be the problems (...), it's up to the family themselves to be active and contact their doctor, (but) they don't know about us.” (I3)

The family's culture also affects the psychosocial follow-up as immigrant families are another group the interviewees considered hard to reach. For example, an interviewee explained:

“Some immigrant families refuse to meet psychologists because (...) they often consider psychologists a highway towards the (Norwegian) child protection service (and) are terrified we'll assume the care isn't good enough.” (I4)

Further, the interviewees talked about how they evaluated how a child's psychosocial offer should be mainly based on the family. For example, an interviewee said:

“We identify the psychosocial aspects. What's it like for the family to (have a child) hospitalized? How worried are they about the child? Do they have other children? (...) How are siblings taken care of while the family is in the hospital

TABLE 3. Summary of content in the different codes of the affecting environmental factors.

Codes	Summary of Content
Family	<ul style="list-style-type: none"> - The guardians of the childhood critical illness survivor consent to or request the offer of psychosocial follow-up on behalf of the child until the child is 16 years old. - Not all families are aware of the psychosocial follow-up offer. - Immigrant families are more likely to withdraw the psychosocial follow-up compared to non-immigrant families due to concerns about a connection between child and adolescent psychiatry and the Norwegian child protection service. - The family tends to be an essential part of the evaluation of the child's offer.
Health Professionals	<ul style="list-style-type: none"> - Pediatricians evaluate if the child receives the offer. - The timing of when the pediatrician provides the offer could influence the decision.

and when they come home? We're concerned with networks - who has them as resource persons who can help? We're concerned about who in the family needs other follow-ups when they aren't in the hospital." (13)

Health professionals Additionally, the child's pediatricians are affecting the psychosocial follow-up. For example, the pediatrician was informing how he evaluated if a child needed psychosocial follow-up:

"It will be a bit of a gut feeling about whether you thought there were children here who worked well or not. (...) The most common is whether you feel that the child functions normally to interact and develop in a usual way." (15)

Moreover, one interviewee pinpointed the importance of the timing of when the health professionals are telling about the psychosocial follow-up offer:

"Asking at the right time and the right way is essential. Saying we're part

of a team. Then it will take more to say no to us, just like they connect physiotherapists, neuropsychologists, and various other professions." (13)

Digital Usage

The second main theme, *Digital Usage*, was divided into the sub-themes of *Limitations* (Table 4) and *Opportunities* (Table 5) for digitalizing childhood critical illness survivors' psychosocial follow-up at the hospital.

Limitations

Table 4 summarizes the different codes of the potential limitations of adopting digital solutions in psychosocial follow-up for a childhood critical illness survivor. The rest of this section provides a detailed description of each code.

Lack of Digital Solutions

The interviewees indicated that the hospital's lack of integration of digital solutions in their practice is the most significant limitation for digitizing psychosocial follow-up. For example,

TABLE 4. Summary of content in the different codes of the limitations for digital usage.

Codes	Summary of Content
Lack of Digital Solutions	<ul style="list-style-type: none"> - The hospital currently tends to lack the use of digital solutions. - The hospital lacks uniformity and guidelines for the use of digital solutions.
Relationship Building	<ul style="list-style-type: none"> - Video communication could hinder relationship-building for the child compared to face-to-face communication.
Children's Screen Time	<ul style="list-style-type: none"> - Many children tend to have high screen time and are so obsessed that they forget their necessary needs.

TABLE 5. Summary of content for the different codes of the opportunities for digital usage.

Codes	Summary of Content
Digitization of the Hospital	<ul style="list-style-type: none"> - The whole hospital is undergoing a digitization process. - Forced video communication with Skype during the COVID-19 pandemic tends to be beneficial for children with bowel problems, children aged 15-16 years, and children living far from the hospital.
Existing Digital Solutions	<ul style="list-style-type: none"> - The digital platform "HC And" is successfully used in other hospitals. - There exist many promising digital solutions the hospital could use (e.g., telehealth, apps, VR, technology in procedures, and technology to socialize).
Children's Digital Skills	<ul style="list-style-type: none"> - Children generally tend to have high digital skills.
Creating an Artifact	<ul style="list-style-type: none"> - The hospital is in the process of creating its own mascot to help children feel better in hospital settings.

an interviewee described the digital usage for the psychosocial follow-up as follows:

“(Except) that we’ve used Skype for the last two years due to the COVID-19 pandemic, we haven’t used any other technology. The hospital is technologically retarded, so we’re far, far behind. (...) There are few (digital solutions) in use, and when it’s in use, it’s relatively random when, where, and how they are in use.” (I4)

Relationship Building Moreover, the same interviewee pinpointed that a limitation of this video communication is that it can weaken the relationship building:

“For some patients, it has been significantly worse simply because they have a poor concentration range or various reasons why it doesn’t work. You cannot build a good relationship via (video communication).” (I4)

Children’s Screen Time Lastly, one interviewee expressed concern regarding the potential limitation of the high amount of screen time:

“(The child and adolescent psychiatry) have many children who today (...) spend too much time on screen. So, we have quite a few children, and they forget to go to the bathroom because they sit on the screen all the time.” (I3)

Opportunities

Table 5 summarizes the different codes of the potential opportunities of adopting digital solutions in psychosocial follow-up for a childhood critical illness survivor. The rest of this section provides a detailed description of each code.

Digitalization of the Hospital The interviewees indicated that the digitalization of the hospital presents the most significant opportunity to digitize psychosocial follow-up. For example, an interviewee was excited about the ongoing digitalization:

“The whole hospital is getting a new platform, where we get a lot of technology that we bring with us into the home. But

we’ll be a little ahead in terms of an app (facilitating) communication with the parents and patients, (...) enabling more close communication.” (I1)

Moreover, another interviewee experienced the forced digitalization of the hospital with video communication during the COVID-19 pandemic as beneficial for groups of children harder to reach because of their medical condition, age, or residence:

“I’ve excellent experience with some children, especially (...) those children who are constipated and struggling with, I was going to say, leakage and such, (...) 15 - 16 years old children who simply don’t want the treatment, (those with) a long journey, who spend a whole day coming here and don’t really want to come at all, and other slightly tired children. (...) For some of those patients, it’s a fortunate benefit of using Skype, where we instead meet for short conversations regularly than they have to go to the hospital. (...) I feel that a large part of those children have (cooperated more) and been much more willing to talk and be in treatment when, in a way, it costs much, much less.” (I4)

Existing Digital Solutions The interviewees also discussed the ability to use existing digital solutions relevant to psychosocial follow-up for survivors of childhood critical illness. They were enthusiastic about the reported benefits of the existing Danish digital platform “HC And”. For example, an interviewee said:

“There were excellent numbers (in research evaluating the digital platform) that show that it helps. Then it becomes less use of coercion, less restraint, and less traumatic experience for the child. (...) If it’s going to help that way, then another app could help in another way.” (I6)

Further, one interviewee was optimistic regarding existing digital solutions in general:

“There are quite a few cool things that are, could I say, well-developed and have

worked for many, many years that one could have used (in the psychosocial follow-up). Video conferencing is one thing, but, in a way, one could have used apps of various kinds to remind the child to do their routines. One could have used a lot more VR glasses, that kind of thing; a lot of cool technology could have been used in procedures, such as unpleasant procedures in hospitals; technology to keep in touch with the class and friends when you're ill for a while. So, I think there's a lot that could have been used much more systematically and better." (I4)

Children's Digital Skills The interviewees also highlighted the digitalizing opportunities lying in children's generally high digital skills. For example, an interviewee said:

"Most children can handle these (existing relevant) apps almost better than adults. And then it's quite easy to learn new technology. For today's children it's easier for them to relate to apps than maybe even to read." (I6)

Creating an Artifact Lastly, one interviewee mentioned an opportunity to digitalize psychosocial follow-up by exploiting the hospital's child and adolescent psychiatry's ongoing work on creating an artifact:

"We are working on putting this mascot in place (that) should help the children to feel better in the hospital (since) they encourage all hospitals with a child and adolescent psychiatry to have their own mascot and have a lot of mascot information that makes the kids feel better." (I3)

Discussion

In addressing the research question, expert interviews with six health professionals at a Norwegian hospital revealed their perspectives on the potential of digital psychosocial follow-up for childhood critical illness survivors. The interviews identified a model of four affecting demographic factors (medical condition, age, gender, and residence) and two affecting environmental factors (family and health professionals) that need to be considered.

Related to the potential of digital usage, the model identified three limitations (lack of digital solutions, relationship building, and children's screen time) and four opportunities (digitalization of the hospital, existing digital solutions, children's digital skills, and creating an artifact). The results indicated the benefits of a digital solution for psychosocial follow-up for survivors of childhood critical illness to reduce their issues after hospitalization in the context of the psycho-cognitive, preventive, and predictive dimensions of P5 medicine (1).

The findings further demonstrated the detriment and unintended harm that can come to survivors because of a lack of such digital solutions. It is important to stress that not every traumatized child at the Division of Paediatric and Adolescent Medicine at the Norwegian hospital needing psychosocial follow-up got an offer. These results broadly align with previous relevant qualitative research regarding health professionals' perspectives, pinpointing how the digitalization of psychosocial follow-ups could increase this lacking accessibility for unreached groups (16, 17, 26). The adoption of digital solutions for psychosocial follow-up should focus on reaching all survivors of childhood critical illness, addressing the global call of psychiatry access lack (27).

Factors to Consider in Digital Psychosocial Follow-up

The interview findings indicated that different demographic factors affect the current psychosocial follow-up. The interviewees expressed that the psychosocial follow-up could vary with both age and medical condition in terms of content and frequency. These findings expand on previous research, which emphasized medical condition (28) and age (17, 29) as affecting factors for psychosocial follow-up, by underscoring the significance of both factors in the same study. Furthermore, this aspect points to the importance of the personalized dimension of P5 medicine (1) in a digital solution for psychosocial follow-up. Similar qualitative research also reflects this need for tailored solutions (17, 26, 30), and a review of personalized intervention for youth mental health further supports this idea by

calling for tailored treatments to optimize patient outcomes (31).

Regarding the gender of the child, the interviewees indicated boys are more likely to withdraw from the psychosocial follow-up. This tendency is in line with a systematic literature review of factors associated with males' low medical and psychological help-seeking rates that identified that adherence to traditional masculinity norms like emotional control reduces males' willingness to seek help (32). One interviewee also outlined that the child's residence is another factor involving a tendency for increased risk of less psychosocial follow-up for a specific group: people living far from the hospital. This observation of residence as an affecting factor for psychosocial follow-up is directly in line with other related studies (17, 28), and a recent literature review finding people's probability of using psychiatry services decreased as the distance to the offer increased (33). Thus, adapting of digital solutions should prioritize solutions including boys and children living far from the hospital.

Moreover, the interview findings revealed that a child's current psychosocial follow-up is affected by environmental factors—family and health professionals. This points to the significance of considering the participatory dimension of P5 medicine (1) in a digital solution for psychosocial follow-up, as seen in a German expert interview study targeting a similar population about psychosocial follow-ups for survivors of rare diseases (29). To ensure the adoption of such a digital solution, family and health professionals, important stakeholders in the child's psychosocial follow-up, should be involved in the design process along with the child. Health professionals' support is especially essential for implementing such digital solutions into their practice (13).

Research on patients' willingness to adopt telehealth during COVID-19 found that their health professionals' attitudes could impact this willingness (34). Similarly, a meta-analytic literature review on dropout in child and adolescent psychiatry found higher effect size on factors related to the child's health professionals as a dropout predictor compared to factors related to the family (35). The interview findings highlighted that medical

doctors primarily determine whether a child should receive a psychosocial follow-up offer, and the timing of when the health professional gives this offer could also affect the decision. This finding is broadly in line with a qualitative Australian study on health professionals' perspectives on digital psychosocial follow-up for childhood critical illness survivors, highlighting a need to offer such solutions early (17).

Regarding the child's family, the interviewees explained that it is not the child but its guardians or parents who get or have the authority to request the offer until the child is 16 years old. Moreover, the whole family plays a crucial role in the health professionals' evaluation of how the child's offer should be. The cultural background of the family also influences the utilization of psychosocial follow-up, with immigrant families tending to use it less than non-immigrant families due to a fear of the child protection service in Norway. The fear of a connection between the Norwegian welfare system and the child protection service has also been reported in the literature (36). This resonates with literature reviews finding a medium effect size on minority status and cultural barriers as dropout predictors for psychosocial follow-up (35, 37). Thus, the adoption of digital solutions should prioritize the inclusion of diverse cultures.

Potential of Digital Psychosocial Follow-up

The interviewees pointed out the lack of digital solutions incorporated into the Norwegian hospital, which could make it challenging to introduce a new digital solution for psychosocial follow-up for childhood critical illness survivors. Digital solutions for mental health have low uptake in healthcare despite the potential to decrease cost and increase accessibility (13). The interviewees mentioned the digital platform "HC And", VR, and telehealth as successful examples of digital solutions that could inspire a solution for digital psychosocial follow-up and persuade skeptical stakeholders. Digital transformations in healthcare are traditionally considered slow because of healthcare's complex organization, high amount of sensitive data to handle, high resistance toward digitalization, and low degree

of user-friendly digital solutions (38). It is important to design, assess, and certify widely available training programs for health professionals to address their most essential needs in implementing digital mental health interventions in their practice (13, 14). Therefore, the digitalization process of a solution for digital psychosocial follow-up needs to be as long as necessary to train health professionals' adaption. However, children's current digital life with high digital skills, pinpointed by the interviewees, could make it easier to introduce them to digital solutions compared to the stakeholders in other age groups.

The interview findings pinpointed that the ongoing digitization of the entire hospital and the rapid digitization with video meetings during the COVID-19 pandemic can also aid in adapting digital solutions for psychosocial follow-up. The latter digitization process was beneficial for some children who are harder to reach physically, such as those with medical conditions that make social settings challenging, older children, and those living far from the hospital. This positive experience of telehealth as more accessible aligns with previous research about specific groups responding positively to the forced digitalization of psychosocial follow-up during the COVID-19 pandemic (39, 40). Qualitative research on health professionals' experiences with digitalization during the COVID-19 pandemic also found that digital solutions could address communication challenges related to the transition between hospital and home that existed before the pandemic (41). Therefore, the present study adds to the current hope in psychiatry and psychology that this pandemic-driven digitalization process with telehealth could transform psychosocial follow-up (40, 42–44). Besides, exploiting the continuous development of child and adolescent psychiatry in hospitals can enhance children's engagement in digitalization. This development can involve incorporating a hospital's artifact in a digital solution for psychosocial follow-up for childhood critical illness survivors.

However, one interviewee pointed out that relationship-building can be worse with video communication compared to face-to-face for

some children. These findings are consistent with similar research where health professionals are concerned about missing non-verbal cues in digital solutions (15, 26). Thus, digital psychosocial follow-ups should be hybrid solutions that also includes children who struggle with video communication.

Previous research regarding the health professionals' and patients' experience of the pandemic-driven digitalization of telehealth highlighted that telehealth mostly worked well if the patient and health professional had previously met face-to-face (40). Regarding web-based psychological treatments for adults, health professionals also preferred hybrid solutions (13). One interviewee also pinpointed the importance of a hybrid solution, stating that children's screen time is already high and obsession with the digital world could cause them to forget real-world necessities.

Study Limitations

This study's single-site design may restrict the generalizability of the results to other hospitals. Conducting a multi-site study involving hospitals with varying psychosocial follow-up and digital situations could help explore the broader applicability of these findings. The present study concluded with six interviewees because the last interview yielded no new codes. This sample size aligns with Braun and Clarke's recommendation of a minimum six interviewees for small research projects utilizing thematic analysis (45). Furthermore, prior qualitative health research has demonstrated that six interviewees could be sufficient to achieve saturation in thematic analysis (46, 47), particularly for expert interviews (48, 49).

Clinical Significance

Further research may build upon the study's indications of a potential for a hybrid solution that integrates all dimensions of P5 medicine (1). Future work could investigate a larger and more representative sample of health professionals, possibly from multiple hospitals. A multi-site study on hospitals with different psychosocial follow-up and digital usage could further investigate the generalizability of the findings of the present study. Additionally, these findings should be explored more in-

depth with other stakeholders, particularly the target group of childhood critical illness survivors. In particular, the authors plan to use the results of this study to design a digital psychosocial follow-up solution for a specific target group of child survivors of Hirschsprung's disease or anorectal malformation at the Norwegian hospital.

In a clinical context, the significance of this findings lies in its potential impact on psychosocial follow-up for childhood critical illness survivors. Increased knowledge of demographic and environmental factors that affect children may help health professionals caring for critical childhood illness survivors offer better psychosocial support, ultimately enhancing the quality of life for vulnerable children. This knowledge can also ensure that child and adolescent psychiatry services do not overlook those at risk of not receiving necessary support. The findings of this study and further research can also be used as a starting point for developing digital solutions for psychosocial follow-up at hospitals, guiding designers and developers to create appropriate tools that lead to better solutions for psychosocial follow-up for childhood critical illness survivors.

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Conflicts of Interest

The authors declare that they have no competing interests.

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