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RESEARCH ARTICLE

How patients and clinicians experience the utility of a personalized clinical feedback system in routine practice

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Abstract

Objective: The objective was to explore how a person-adaptive clinical feedback system (CFS) effects its users, and how meaning and relevance are negotiated.

Methods: We conducted a 10-month case-study of the implementation and practice of Norse Feedback, a personalized CFS. The data material consisted of 12 patient interviews, 22 clinician interviews, 23 field notes, and 16 archival documents.

Results: We identified four main categories or themes: (i) patients' use of clinical feedback for enhanced awareness and insight; (ii) patients work to make clinical feedback a communication mode; (iii) patients and clinicians negotiate clinical feedback as a way to influence treatment; and (iv) clinical feedback requires an interactive sense-making effort.

Conclusion: Patients and therapists produced the meaning and relevance of the CFS by interpreting the CFS measures to reflect the unique patient experience of the patient–therapist relationship. Patients regarded CFS as a

tool to inform therapy with important issues. Patients became more self-aware and prepared for therapy.

KEYWORDS

clinical feedback, implementation, psychotherapy, routine outcome monitoring

1 | INTRODUCTION

Researchers and policymakers point to the benefits of using routine outcome measures/clinical feedback systems (ROM/CFS, hereafter termed clinical feedback) in the treatment of mental illness. McLeod (2017, p. 93) argued that alongside mindfulness interventions, CFS represents "… the most significant innovation in therapy practice within the past 20 years." Most studies of clinical feedback have demonstrated that it has positive effects on therapy outcomes compared to *treatment as usual* (Brattland et al., 2018; Carlier et al., 2012; Delgadillo et al., 2018; Gondek, Edbrooke-Childs, Fink, Deighton, & Wolpert, 2016; Knaup, Koesters, Schoefer, Becker, & Puschner, 2009; Lambert, Whipple, & Kleinstäuber, 2018; Østergård, Randa, & Hougaard, 2018). The superior effects of clinical feedback seem to depend on the quality of its implementation and clinical use. De Jong, van Sluis, Nugter, Heiser, and Spinhoven (2012) reported that although no overall effect of feedback was found in their study, patients who were not on-track improved when therapists were open to receiving and using patient feedback, which indicated that therapist's characteristics moderated the effect of feedback. However, the results of studies on clinical feedback are not uniform. A Cochrane review of 17 studies found insufficient evidence to claim clinical feedback affects the outcomes of adult patients with common mental-health disorders (Kendrick et al., 2016).

Clinical feedback is intended to function across various mental-healthcare settings. These settings involve nested practices, tools, standards, and people that affect each other (Timmermans & Epstein, 2010). Knowledge generated from science and technology studies underscores that implementation not only changes practice, but that technologies are also changed by how clinicians negotiate their utility (Timmermans & Berg, 2003). Therefore, it is important to understand what happens when clinical feedback is used by stakeholders in different settings, to gain insights that can foster more successful implementation and a compatible CFS. This paper aims to contribute to implementation knowledge by exploring in-depth how patients and clinicians experience the meaning of using a CFS in clinical practice.

The research literature shows that the implementation of clinical feedback raises multiple issues and questions. Boswell, Kraus, Miller, and Lambert (2015) divided barriers to uptake into practical and philosophical domains, such as time constraints and fear of misusing outcome data. These issues arise in other studies, as well; for example, concerns about inadequate infrastructure or that clinical feedback may disrupt ordinary work routines (Boyce, Browne, & Greenhalgh, 2014; Ionita, Fitzpatrick, Tomaro, Chen, & Overington, 2016; Lucock et al., 2015), and some therapists fear being judged based on performance measures, whereas others think it does not fit with how they work (Unsworth, Cowie, & Green, 2012).

Kaiser, Schmutzhart, and Laireiter (2018) found that CBT-oriented therapists had a more positive attitude toward clinical feedback than did therapists from a humanistic-existential tradition, whereas Lucock et al. (2015) found no clear relationship between attitudes towards clinical feedback and therapeutic orientation (i.e., CBT-, psychodynamic-, and integratively-orientated therapists). Some clinicians think clinical feedback may also challenge traditional beliefs in senior therapists' authority and the workplace hierarchy if the CFS indicates their level of effectiveness is lower than average (Ionita et al., 2016). This may affect senior clinicians' motivation to use CFS (Ionita et al., 2016). Clinicians also question the validity of the measures used, which may be viewed as too brief, too broad, unable to account for patients' variations in day-to-day conditions, too reductionist, or less helpful

for patients who are not on-track (Callally, Hyland, Coombs, & Trauer, 2006; Ionita et al., 2016; Lucock et al., 2015; Meehan, McCombes, Hatzipetrou, & Catchpoole, 2006). Some also fear that such measures will reveal additional patient problems, and consequently, additional work (Meehan et al., 2006).

Therapists' initial worries or objections to clinical feedback can be subject to change, in particular, in response to being exposed to its use in clinical processes. Ionita et al. (2016) found that some skeptical clinicians sought to learn about the theory behind clinical feedback, and others adapted their perspective by becoming accustomed to receiving feedback and appreciating that their clients like providing it. Employing clinical feedback does something to the psychotherapy session when its utility is negotiated. For example, clinicians appreciate clinical feedback's ability to present a broader picture of a patient's condition and progress and its ability to enhance patient dialogue (Callally et al., 2006; Thew, Fountain, & Salkovskis, 2015). Furthermore, some therapists highlight their ability to screen for further problems (Meehan et al., 2006) and flag risks (Unsworth et al., 2012). Some experienced users of the CORE-OM, which is a self-report outcome measure on psychological distress and change (Barkham, Mellor-Clark, & Stiles, 2015), used patient progress reports to enhance conversations with patients, and found that asking questions about what affected the patient was most helpful for focusing the session (Unsworth et al., 2012).

From the patient's perspective, a recent meta-synthesis (Solstad, Castonguay, & Moltu, 2019) reported that patients have concerns about the motives of service providers to implement CFS and the inability of these systems to capture the complexity of mental health. Patients in this review had to be reassured that clinical feedback would be used for their benefit.

Patients' reports about clinical feedback's supportive aspects showed that they felt more involved in treatment planning and evaluation. They also reported the ability to share their thoughts through the tool, highlighting themes relevant for therapy, and that it contributed to heightened self-awareness (Delgadillo et al., 2017; Kaiser et al., 2018). In summary, studying how CFS meanings are negotiated in clinical encounters may provide important knowledge about potential benefits relevant to implementation.

Attitudes toward and the adoptability of CFS may be affected by whether the measures are nomothetic (using standardized items) or idiographic (using person-generated items). Sales and Alves (2016) argue that, compared with nomothetic measures, CFSs that include idiographic measures provide proximity to the clinical reality, encourage patients to expose their views, support the best choice of intervention, and contribute to treatment planning. Sales, Neves, Alves, and Ashworth (2018) also showed that nomothetic measures fail to capture substantial aspects of patients' self-defined problems. When therapists with neutral to positive attitudes toward CFS were asked to choose between the two types of measures, they strongly preferred idiographic measures, and those measures were also more frequently used (Jensen-Doss et al., 2018). However, 86.1% never used standardized progress measures or used them less than once a month, and 59.7% reported similar use of individualized progress measures (Jensen-Doss et al., 2018).

The literature cited above indicates that clinical feedback does a variety of things in various contexts. Importantly, clinical feedback inevitably does something more than its intended purpose, such as creating staff anxiety, evoking defensiveness, and posing a risk of higher workloads. To our knowledge, few studies have examined the significance of clinical feedback as a tool to negotiate meaning. In this study, we investigated how patients and therapists experience the use of a personalized CFS (Norse Feedback [NF]), where personalization results from an Item Response Theory (IRT) analysis in an initial screening, in their everyday therapeutic work within a multifaceted public mental-healthcare institution.

2 | METHODS

2.1 | The case

The present article reports a portion of a larger case-study exploring variations in how implementing clinical feedback affects its setting and users. An overview of this program can be found in Table A1. Case studies are

suitable to explore and describe complex phenomena in real-world contexts in-depth, combining data and sampling techniques (Yin, 2014). The analysis of the present article will not report findings that represent all the collected data material. Instead, the data material was selected and limited by the scope of the current research question.

In designing a rigorous case-study, the coherence of the research question and defining and bounding the case are essential (Yin, 2014). As NF was an in-house innovation in an early phase of implementation, we chose not to do a cross-case study between different sites. To explore variations, we chose to follow implementation closely on the first units to implement NF. We were allowed to follow the implementation project manager to planned activities and meetings, in addition to conducting in-depth interviews with clinicians and patients. In this way, we were able to get comprehensive insights about the multiple issues NF raised that complemented the interviews. We bound the case in time by the second step of the NF implementation in the autumn of 2016 and 10 months thereafter.

2.2 | Setting and context

NF was initiated in 2014 by the last author to strengthen user involvement, to build a culture for progress monitoring, and to empower users. NF's aim was to improve treatment through patients' self-monitoring, clinical feedback, and learning. Consequently, NF is the implementation of both a policy and a digital clinical tool.

Building on the reported needs of clinicians and patients (Moltu et al., 2018; Solstad et al., 2019), one core aim of NF was to capture the personal complexity of each individual patient's process through treatment. To achieve this, NF employed a strategy of initial broad screening over a variety of clinically relevant domains. To be able to measure across all these domains, a large number of potential items was necessary, beyond what is acceptable for session use. Subsequent administrations, therefore, learned from the patients' initial responses and compared scores to risk-adjusted norms to evaluate which areas were of particular relevance for any individual's status and process. Irrelevant scales were collapsed into a single trigger item, whereas relevant scales for the individual were tracked session by session (McAleavey, Nordberg, & Moltu, 2019). Thus, subsequent administrations of NF were tailored to the individual, and the number of items was significantly reduced to 43, on average, after the initial screening. To our knowledge, this is a unique feature that distinguishes NF from existing CFSs commonly used in mental-health services. However, what is initially irrelevant may later become an important area in a patient's process. To ensure the flexibly to adapt to this possibility, the trigger items—that is, the items providing the highest sensitivity in the lower difficulty level of a scale in IRT analyses (de Ayala, 2009)—were administered every session. When a response from a patient moved above an empirical threshold, this instantaneously opened the full scale for in-depth measurement and feedback. As such, the feedback system adapts flexibly to the patient process, and theoretically, the number of administered items will decrease as the patient recovers in treatment.

The processes of computer learning and adapting the measures to any individual patient represents a middle ground strategy between the idiographic and nomothetic approach to measurement. For clinical content, NF includes a wide base of clinical phenomena and experiences potentially relevant to therapy and well-being. The initial administration of the system provides measures of, and feedback on resource dimensions (capacity for change, social safety, and recovery environment), symptom experiences (sad affect, somatic anxiety, trauma re-action, eating problems, substance-use problems, and substance-use recovery), problem-maintaining internal pro-cesses (situational avoidance, social avoidance, experiential avoidance, self-criticism, hopelessness, worry, irritability, and need for control), and personal consequences (general functioning and cognitive difficulties). NF asks patients to rate the statements on a scale ranging from 1 to 7, or choosing the category "not relevant/do not know." In addition, NF includes direct feedback on alliance and therapeutic needs, which is administered by the second measure in a process, as the initial screening is conducted before the first consultation. In summary, NF personalizes subsequent process measures from a base of 94 items.

The implementation setting for this study was a public mental-health clinic in a district general hospital on the west coast of Norway. The mental-health clinic consists of three inpatient and outpatient district psychiatric

centers dispersed in different county locations. The centers work in close cooperation with primary healthcare. The study context served approximately 2,000 unique outpatients and 370 unique inpatients in 2017. The professional staff in the study setting included clinical specialists in psychology and psychiatry, resident psychologists and medical doctors, specialized clinical nurses, and social workers. In total, 345 clinicians worked in the clinic. Overall, participants in the study described their working conditions as being characterized by high staff turnover, time and work pressure, and a sense of constant change (Hovland & Moltu, 2019).

2.3 | Participants

We recruited a total of 34 study participants. The 22 clinicians in the study included 15 females and seven males. Table 1 provides an overview of the participants. Henceforth, we use "clinician" as a generic term and "therapist" when the clinician performs therapy. We used a combination of purposive and snowball sampling (Tjora, 2017) to recruit clinicians and patients who were actively involved in using NF in their everyday clinical experience. Clinicians who had neither tried clinical feedback nor had any responsibility during the implementation process were not invited to participate. No clinicians withdrew from the study, but we were unable to schedule follow-up interviews with two of them.

The 12 patients included 8 females and 4 males, half of whom were recruited from one inpatient unit, and the other half from two outpatient units. The inclusion criterion was that patients were using NF as part of their treatment. All patients were currently in ongoing specialized treatment for common mental-health and/or addiction problems. Inpatients were undergoing continuous and intensive treatment. We recruited outpatients to participate in our study with the help of already recruited therapists who regularly used NF in treatment. Patients at the inpatient unit were recruited after an information meeting, and clinicians subsequently invited patients to participate. Eligible participants were invited to individual or group interviews. One patient withdrew from the study before the interview.

TABLE 1 Overview of the participants

Participants[a]	N	Age range	Gender (n)	Site	Unit	Additional information
Inpatients	6	20–60	Women (4) Men (2)	A	IP	
Outpatients	6	20–45	Women (3) Men (3)	A (4) B (2)	OP	Focus group interview
Individual psychotherapists	14	25–60	Women (8) Men (6)	A (6) B (8)	IP (11) Op (4)	Some were patients from both units; some had dual roles as NF superusers and unit coordinators
Milieu therapists	4	45–60	Women (4)	A (3) B (1)	OP	Three had dual roles as NF superusers and unit coordinators
Management	4	35–65	Women (3) Men (1)	A (2) B (2)	IP, OP and AT	All were unit leaders
Project leader	1					Project leader worked across all units

Abbreviations: AT, addiction treatment unit; IP, inpatient unit; NF, Norse Feedback; OP, outpatient unit.
[a]Nine of the 11 employees at Site A were interviewed twice.

Neither patients nor clinicians had previous experiences with CFS, as the NF was the first implemented CFS at the mental-health clinic. Thus, we could not explore how the participants experienced the NF innovation compared with nomothetic measures.

2.4 | Data collection

For the scope of this article, we have used in-depth interviews as the key source for analyses and field notes as a secondary source. Before conducting the study, the first author developed an interview schedule. The two main questions were how clinicians and patients experienced the implementation process, and how they experienced NF in daily clinical practice (see Appendix A for the interview schedule). The questions aimed to function as topic reminders, whereas strategies were developed to follow-up and deepen participant leads. Clinicians who had been part of the first stage of implementation and all the patients were interviewed on one occasion. At Site A, we had the opportunity to obtain fresh insights from clinicians' first experiences of using NF, as well as how they experienced the process of implementing it. These clinicians had a follow-up interview between 3 and 6 months after their first interview to explore possible changes. The interviews lasted 50 min on average (range = 30–80 min). We interviewed the outpatients in a group format. The data material amounted to 33 h of interviews, of which half was transcribed verbatim by the first author, and the other half was transcribed by a professional transcription agency. A total of 50 sources constituted the basis for the present analysis, including the focus group which we counted as one source. Table 2 provides an index of each main theme's representativeness. Here, we have split the focus group to display representativeness within the group. Additionally, the distribution of quotes presented in Section 3 are: Patients = 12 (Anna 4, Marie 4, Inga 2, and Ole 2) and Clinicians = 5 (Marta 2, Karen 1, Sofie 1, and Ruth 1). Participants were given pseudonyms to secure anonymity.

2.5 | Data analysis

All the empirical data were structured and analyzed with QSR Internationals' NVivo suite (*NVivo qualitative data analysis Software*, 2018) functioning as a database in accordance with case-study methodology (Yin, 2014). We employed Saldaña's advice for first and second cycle coding of qualitative data (Saldaña, 2015). Clinicians' and patients' transcripts were coded within the same coding frame.

First, we classified and assigned attributes to the data with typical setting and context codes. Second, we performed holistic coding of the interviews to obtain a general idea of the content. Third, the detailed inductive coding process used a stepwise-deductive inductive method (SDI; Tjora, 2017). This six-step incremental method shares similarities with grounded theory, but it differs in its openness to abductive reasoning in developing categories and theory. It also replaces theoretical sampling with iterative deductive validation tests through the process from generating and preparing raw data to developing categories or theories. The coding technique corresponds to open coding in grounded theory or eclectic coding in Saldaña's strategy (2015). In the first step of the analysis, we performed in-vivo coding of the empirical data. As SDI generates a large amount of codes, we merged, sorted, and reused codes during this process. Second, we grouped codes by thematic similarities. Third, we developed categories by abductive inference, or according to thematic similarities and the frequency of coded sources. Moving toward higher analytical levels, we applied the SDI validation test to check internal validity and consistency. We also applied a matrix coding query to search for relationships between categories. To count as a category, at least two sources had to be coded. In total, the categories were based on 50 coded sources. Here, one interview or one field note counted as one source. The process of developing categories and theming them was the result of writing, discussing, and refinement that was conducted outside NVivo. Therefore, the exact frequency of which various categories are represented in the sample is no longer available. To convey the categories better, we present them as extended thematic statements (themes) in Section 3.

TABLE 2 Number of coded sources on main themes

Themes and coded sources	Leaders	OP-clinicians	IP-clinicians	OP-patients	IP-patients	Field notes
A. Patients use of clinical feedback for enhanced awareness and insight	0	3	0	4	0	0
B. Patients work to make clinical feedback a communication mode	1	3	0	6	3	1
C. Patients and clinicians negotiate clinical feedback as a way to influence treatment	2	9	7	5	4	9
D. Feedback necessitates an interactive sense-making effort	1	13	8	6	3	17

Note: Interviews and follow-up interviews with the same clinician count as two sources.

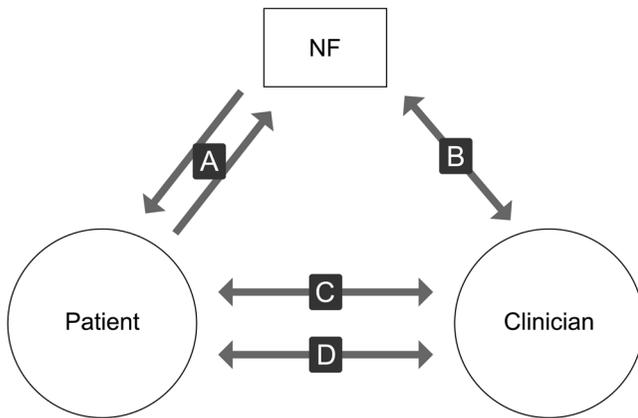Abbreviations: IP, inpatient unit; OP, outpatient unit.

FIGURE 1 Illustration of the relationships between the themes. NF, Norse Feedback

The second and last author served as critical auditors (Hill, 2012) in the analyses, including reading the data materials and reviewing the data analyses for consistency and rigor. The critical auditor role was performed in an analytic seminar after the first author had completed coding and preliminary analyses.

2.6 | Ethics and data security

Participation was based on fully informed and written consent. No identifiable information about the participants was available to anyone other than the first author. Participants could withdraw from participating in the study at any time before publication. The data were stored on a secure institutional server and anonymized. Only the first author had access to the participants' IDs. The project was outside the purview of the Norwegian law on research ethics and medical research, but followed the ethical standards laid down by the National Committee for Research Ethics (2016) in the Social Sciences and the Humanities (2016). NSD Data Protection Services approved the project.

3 | RESULTS

Through the analyses, we identified four categories or themes: (A) patients' use of clinical feedback for enhanced awareness and insight; (B) patients work to make clinical feedback a communication mode; (C) patients and clinicians negotiate clinical feedback as a way to influence treatment; and (D) clinical feedback necessitates an interactive sense-making effort. All the main themes had subthemes, except Theme A.

The themes seem to reflect different but intertwined relationships. Theme A reflects a relationship between the patient and the feedback system, whereas B reflects a relationship between patient and therapist via the feedback system. Themes C and D reflect ongoing relational processes between the therapist and patient in the context of the current CFS. Figure 1 provides an illustration of the relationships between the themes. Variations within each of the core themes are described in detail in the following sections.

3.1 | Patients' use of clinical feedback measures for enhanced awareness and insight

Anna described how using the tool helped her understand herself better, whereas she had been confused about herself before. "Before I was just: 'Yes, how are you?' It was chaos, but now it is like: even if it becomes affected by which mood I am in, … I, anyway, have to think it through; so, how has my week actually been." She experienced that

the process brought order out of the chaos and made it easier to express herself to her therapist. The consciousness-raising also calmed some patients and made them ready to work with themselves in therapy. Moreover, they felt reassured that their therapist possessed everything they needed to know. Two quotes from Marie and Inga illustrate this.

Clinicians reported some patients were either passive or acted indifferently towards clinical feedback. Moreover, the clinicians reported some patients were tired of completing forms, some just wanted to sit down and talk, some did not comment on the report, and others struggled to pinpoint what they missed in the session. These varied clinician experiences indicated mixed levels of patient engagement. However, the patients who were interviewed appreciated providing clinical feedback. By reflecting on the statements in the feedback system, some patients became more self-aware and more attentive to their feelings in their everyday lives. For example, one patient explained that it made her stop and think about the recent week, and that it made her more conscious of how she had been. She not only became more retrospectively aware, but also more attentive to where she was heading. Over time she noticed that her score patterns were heading toward the lower end of the scale, making her more attentive to improvements.

> It happens that if I have not done Norse and go straight into the appointment, this puts me in another mode. I am not that ready to start working on my issues.
> I feel calmer because she [the therapist] knows everything I have thought through beforehand.

3.2 | Patients work to make clinical feedback a communication mode

Patients experienced clinical feedback as a potential means of communication. Thus, it became important to them that their thoughts and feelings were reported correctly.

The person-specific adaptation provided them with both positive and negative experiences. A sense of burden was experienced when asked to communicate idiosyncratic pains and struggles through a standardized response format. On the other hand, being asked unexpected questions could constructively trigger new emotional experiences. Two subthemes describe these experiences of tension.

3.2.1 | The struggles of making unfit options fit

The interviews provided an understanding of the instrument from the patients' perspectives. Participants reflected on NF's content validity and questioned the relevance of some of the statements and answer options.

After the initial administration of the system, NF's computer-adaptive algorithms presented fewer statements that were more relevant, because NF learned from the respondent's profile. This adaptation continued from session to session, aiming towards more relevance. All in all, patients felt the presented statements were in accordance with their expressive needs, but they felt that some questions were problematic, some were missing, and some were irrelevant. For example, sometimes the CFS repeatedly presented items about obsessive thoughts to patients who did not have this problem. Others felt formerly relevant items were missing. For example, some patients wished they had more questions about aspects of substance addiction. Others missed items that focused on positive life experiences that could influence sessions, as described by Ole: "One would rather talk about that [positive experiences] to feel better when... one is finished with the session and gets back home, and have it better, so to speak, instead of just ending with negativity."

When discussing relevance, patients also commented on the format of the questions. Patients said they felt their thoughts and feelings should be correctly reported, meaning that that the feedback report should mirror what they wanted to communicate. This consideration became important due to the system's built-in person-specific adaptation, which made some statements appear while others did not. Three patients said that it was especially during the first

completions of the form that unexpected questions appeared, which made them wonder why that happened. Later, the questions fit their expectations better, but completing the form sometimes became repetitive. Correct reporting was important because they regarded the clinicians' feedback report as providing key insights into their mental state. This became a concern when they perceived that relevant statements and scales did not match. For example, Marie viewed the scale as a vertical "ladder" where seven was an upper step that represented a very positive score. This caused an emotional challenge in allowing oneself to "climb to the top of the scale," thus, resulting in a score pattern at the lower end. Viewing the scale as a ladder did not reflect her inner picture of being in or out of balance.

Other patients had similar experiences. For example, assigning a neutral, not too good, or not too bad rating, or placing "on average" on the scale sometimes felt difficult. Although they struggled to pinpoint the actual short-coming of the one-to-seven format, they, nevertheless, felt a mismatch when rating some statements, indicating that responding to the scales was a burdensome effort at meaning-making to get it right. Every statement also left the patients with a choice not to answer. This choice combined the categories "not relevant" and "do not know." Patients viewed those statements as meaning different things, and they sometimes felt they were sending the wrong message when they selected them. Ole argued that accuracy and relevance was important because:

> the more accurate it is, the better it is to use it [NF], and it becomes easier to find out what to talk about, because then the answers that the therapist gets are correct, and they can look at it, and yes, it becomes easier to find those things that we should talk about.

Some terms and phrases created tension between feelings and reason, and challenged patients on which basis to interpret the statements. For example, the phrase "I feel worthless" challenged the difference between what one patient *felt* and what she *knew* to be true in light of reason. She knew that she had a value for her surroundings and a place in society, but her feelings told her something else. Some patients discussed with their therapist how to interpret statements they regarded as difficult to answer.

3.2.2 | Experiencing clinical feedback as a trigger for new thoughts and feelings

Sometimes the built-in dynamics of the CFS reordered statements that brought disparate domains closer. For example, Anna reacted to the phrase "I feel worthless," and in the new context it appeared, which triggered new thoughts: "especially when I get 'I am worthless' followed by a question about suicide, I become like... (sighs)." Presented with this unexpected combination, this patient found it difficult to let go of the thoughts it created. Marie could not give feedback, except during consultation, because of the emotional processes it initiated: "If I am to recognize a feeling inside I do not know what I will find out, and it is unsafe for me to feel how I am if I do not have a safe haven to go to afterwards." In contrast, Anna said that more positively formulated statements challenged her because she was not happy: "In a way I think that I have to... that I feel pressure on me to be happy."

In sum, the experiences reported under this theme emphasized that giving a report of one's mental health and well-being to communicate to a therapist was emotionally and formally challenging. The CFS seems not only to record patient experiences, but also spurs them to some extent. Despite this, patients worked and engaged actively to express themselves, underscoring their sense of a feedback system as a process of interpersonal communication.

3.3 | Patients and clinicians negotiate clinical feedback as a way to influence treatment

Enabling clinical feedback as a tool to enhance service-user involvement required that both the therapist and patient allowed it to have that function. In the interviews, all the clinicians welcomed service-user empowerment, in principle, and the patients viewed clinical feedback as a useful tool for addressing issues that were important to them.

However, our data suggest that a CFS, by itself, cannot achieve a shift toward service-user empowerment and that realizing such potential depends on participants' active negotiations during sessions. In the following section, we discuss two themes that describe related processes.

3.3.1 | A way to notify on important issue

Patients regarded clinical feedback as a way to communicate their condition and thoughts unaffected by their therapist's opinions. They especially thought delicate issues, such as patient-therapist relationship issues, were easier to communicate through the feedback screen than face-to-face. Even if the patients had a good relationship and trusted their therapists, they were reluctant to express dissatisfaction, as described by Inga: "It is difficult, anyway, I think. It is probably scary to tick off too, but maybe it is easier than to confront someone with their challenges, because no one... we do not like confrontations, no people, I think." Offering criticisms on questions prompted by the tool allowed for honesty, Marie explained: "It is much easier because it is a question you get, something you have to take a stand on, and then it is allowed. On the tablet it is, in a way, allowed to feel it, but to say it face to face, that I would never have done."

Allowing unaffected expressions also gave some patients a sense of being taken seriously. They felt more included in decisions related to their treatment.

3.3.2 | Therapists in the dual roles of gatekeeper and helper

None of the clinicians was opposed to the policy of strengthening patients' influence on treatment, and most regarded NF as a tool to enhance this. However, letting patients use the tool did not necessarily assure their influence. In the end, one therapist decided this: "Then, how can you make sure that patients have influence through what they fill out? In a way, that is my responsibility." Not all shared Marta's view on this. One therapist found it difficult to prioritize clinical feedback in therapy processes that were straightforward and predictable.

Assuring the patients' influence through clinical feedback involves therapists being policy gatekeepers. Even if the institution offered clinical feedback to patients, there was no guarantee that therapists would read their patients' feedback. Milieu therapists on the inpatient units introduced clinical feedback to the patients and collected the measures for interdisciplinary use. They stated that during the first months of using the tool they felt it was a problem when therapists neglected the feedback report, as Karen described:

> I do not know how many times I said it, and I keep repeating that it is disrespectful to have the patients sit there and answer all those questions when no one picks them up. What is the point? One patient told me just before he was discharged that he could not see the point of Norse because he did not get any feedback.

The interviewed inpatients were not aware of the feedback systems' policy link. They thought completing it was something they were supposed to do to help the therapist.

Therapists could also act as a gatekeeper on the distribution end. Some outpatient therapists' were aware of their influence on patients' motivation to use clinical feedback, as described by Marta:

> It is said that we are obliged to use Norse with all patients, but that it is voluntary for the patients. Then, I know very well that I can introduce it in such a way that the patient says no, or I can introduce it in such a way that it is almost impossible for the patient to say no.

Sofie thought that clinical feedback was a joint effort to enact new practices unfamiliar to some: "to dare look at yourself in relation to the patient, and the patient in relation to you. I do not know, but I think for some this can touch another nerve in a way, and that it is unfamiliar, quite simply." This therapist asked for patients' views on the feedback report and acknowledged when patients expressed any dissatisfaction, understanding how difficult this can be.

3.4 | Feedback necessitates an interactive sense-making effort

There was no established or uniform way of managing the feedback report. Some clinicians discussed the report with their patients, some just read the report, and others considered how to use the report from session to session. According to clinicians, not all patients showed interest in viewing or discussing the feedback report. Some patients regarded it as a tool for the clinician and they did not have any special needs or thoughts about it. For some patients and clinicians, it acted as a reminder of important topics to deal with and made starting a relevant conversation easier.

In general, most clinicians found the visual feedback report, both graphs and smileys, to be intuitive and easy to understand at a glance. Often the feedback report correlated with therapists' general impressions. They could recognize their patient, and within a short time, they often knew what to focus on in the session. Attention was especially oriented towards two factors: changes on the graphs over time, and whether something stood out. Some clinicians then consulted the detailed feedback report containing scores on each statement to clarify any discrepancy.

However, sometimes there was a mismatch between clinical observation and the feedback report, and we found mixed views about what constituted a valid feedback report. When the report and their impression matched, clinicians often viewed the report as a realistic picture of the patient's profile. This meant that the visual report, for example, showed graphs and icons within the expected color zone, or it confirmed something the therapist already knew. When some therapists experienced a mismatch between their clinical impressions and the feedback report, the causes were often ascribed to external sources; for example, patients' motives, misunderstandings, or features of the tool itself. One inpatient clinician worried that some patients only showed their polite side through the feedback, or that some answered strategically.

The clinicians agreed that interpreting the different indicators and graphs could be done in many ways, whether in dialogue with patients or not, but interpretation became a source of uncertainty. Some suspected their interpretations were too simple. Others, such as Ruth, expressed confusion about the meaning behind the scores: "It could be that there is a lot of information in the clinical subscales, but for now it does not give me any more information. […] I check the answers and see that there is a high score on the graph, but what does it mean? What have they answered?" Though they acknowledged that no right answer existed, they missed having education about interpreting the scores; for example, education about how to relate different indicators. Some placed this source of uncertainty on the scores' lack of correspondence to standardized explanations. They were used to therapeutic methods that combined manuals with compatible screening tools, standardized ways of interpreting scores, and suggested strategies to address issues. Others were skeptical of combining clinical feedback with manuals, which they thought would only lead to increased workloads.

A few therapists and patients also experienced that just looking at patients' improvements on the feedback report could have a therapeutic effect, by giving hope or reaffirming that therapy helps. Inga explained: "In a way, it is good for me to see that 'oh, I had a very difficult time then, and now I am better.' To see that I have benefitted from it, to see that it works, so yes I think that has been good."

3.4.1 | Dialogue kick-starter

Some therapists' invited patients' views about the feedback report. Patients often recognized themselves in the graphs, meaning that the reports represented their own experiences. The dialogue then concentrated on negotiating what

patients intended to communicate, and the visual feedback reports' representation of it. The negotiation gave the therapists a feeling of patients' response styles, which was helpful for interpreting further reports. When therapists sometimes needed to negotiate interpretation, patients regarded this as an indication of the importance of the therapists knowing their patients before drawing conclusions. The patients also regarded therapeutic focus on the discrepancies as a natural part of the session, as these might indicate important issues to address. Patients valued clinicians' use of the feedback report because it made sessions more efficient by opening the dialogue more to the point. In the words of Anna: "Often when you enter a session you do not always know where to begin, and then what you have filled out can be a good starting point." One patient said there were many things that she now felt that she did not need to repeat, which saved time. Therapists also regarded the feedback report as a dialogue starter that focused the session. Many therapists thought of it as a type of radar that detected several issues that otherwise would stay hidden; for example, issues that patients found difficult to address in a session, and issues that therapists would never think of exploring. Therapists also valued that clinical feedback tracked progress and that this could prevent therapy from going off-track. In that respect, both patients and therapists found it easier to actualize the relationship between patients and therapists when using clinical feedback.

Both patients and therapists regarded clinical feedback as especially important in the early phase of therapy when one needs to build trust.

4 | DISCUSSION

The results of this study showed the potential of a person-adaptive CFS to be valuable for therapy when both therapists and patients regarded it as meaningful. The first theme described how patients experienced increased self- and emotional awareness. Challenged by the clinical feedback tools' statements, patients became attentive to personal meaning. Feedback gave structure to thoughts and feelings and prepared them for therapy. This underscores the personal significance and evocative potential of self-reports. The second theme described how patients worked and actively engaged in expressing themselves, emphasizing their sense of the feedback system as interpersonal communication. It was important for patients that the reified version established through feedback mirrored their communication needs, which they sometimes felt was troublesome because of unsuitable response options. The third theme emphasized clinicians' power to define the clinical feedbacks' meaning in the clinical encounter. The fourth theme described how the resulting effect and function of feedback was an ongoing clinical encounter process, in which meaning could be negotiated interactively.

Happell (2008) asked whether routine outcome monitoring provided meaningful information or was only a bureaucratic exercise. The results of the present study address this question by exploring clinical utility in ordinary settings. From the patient perspective, experiences converged around clinical feedback evoking important thoughts, feelings, and insights, and creating a strong incentive to communicate about themselves to their therapist. Solstad et al. (2019) summarized this potential in meta-themes describing how patients needed to be empowered through feedback to contribute to enhanced collaborative practice. De Jong et al. (2012) reported that therapists differ in the degree to which they are open to feedback and that the degree of openness was associated with patient outcomes. Our results showed that therapists are, indeed, gatekeepers, and lack of interest in clinical feedback might result in it being an administrative rather than a clinical tool. The relative asymmetry of the patient-therapist relationship makes constructive processes dependent on the therapist's willingness, competence, security, and interest in exploring and allowing the clinical potentials exemplified by the first two themes. The mutual trust between clinicians and patients, work environment, hierarchies and authority in the workplace, and access to training are all contexts that influence how openly therapists enter as participants in collaborative efforts with patients to negotiate the meaning of patient feedback. We would argue it is insufficient to conceptualize a therapist's openness to feedback as a personal characteristic of the therapist.

To state the obvious, a CFS in and of itself does not improve therapeutic processes—any effect, positive or negative, depends on how the involved people translate the system into practice. Timmermans and Berg (2003), in

a comprehensive critique of standardization in healthcare, underscored how any implemented technology necessarily changes meaning when moved from its implementation plan into ongoing practice. As context, clinicians in the study described multiple issues that follow clinical feedback implementation; for example, how practicing clinical feedback collides with competing demands, and that some tasks prevail whether clinicians find them useful or not. The results of the present study show how clinical feedback can be negotiated into a meaningful experience by clinicians and patients that find space for practicing it, despite systemic challenges.

When studying the implementation of clinical feedback, it would, thus, be worthwhile to move beyond focusing on barriers to accepting clinical feedback as a predefined static object, to understanding what meaning it achieves for the different stakeholders.

4.1 | Implications

It seems that personalized clinical feedback has the potential to contribute constructive processes to therapy. This is underscored by both patients' and therapists' experiences in this study. At best, it may provide a clinical tool for communication and focusing therapy. However, we recommend awareness about how computer-adaptive measures may prompt unanticipated statements that, from the patients' perspective, create unfortunate circumstances.

What is evident from our study is that some patients put much effort into completing these measures to inform their therapists and that this effort also evoked emotional and cognitive processes that may benefit the therapeutic process. Additionally, although NF uses algorithms to personalize the measures, patients still felt that some statements were missing, irrelevant, or problematic, which suggest that some degree of personalization or adaptation to individual needs is lost when working to find a middle ground between individualized or standardized measures. Therefore, therapists should be advised to always read patients' feedback reports and invite patients to discuss them. In contrast, collecting patients' feedback always has the risk of being defined as something extraneous to therapy, such as collecting information for administrative purposes rather than patient-centered processes. Future endeavors to implement clinical feedback in clinical settings might benefit from recognizing this distinction, by asking "How can we best build safety into using feedback as a clinical skill?" rather than "How can we overcome barriers to uptake?" Considering the effort that patients put into communicating through feedback, quality of use should be paramount. Qualitative research is useful for developing knowledge about stakeholder processes. Furthermore, as evident from the variety of experiences in the themes of this study, future implementation efforts and research might benefit from building on the work of Timmermans and Bergs (2003), and the contextual understanding of stakeholders.

4.2 | Limitations

This was a qualitative study of patients' and clinicians' situated experiences with one particular CFS in a single-payer, public Norwegian specialist healthcare system. This setting is characterized by co-workers with a fairly high educational level and a relatively high degree of trust by the public. When considering the generalizability or transferability of the results to different settings, this context should be taken into account. Similar to all qualitative studies, our aim was primarily to explore and generate hypotheses and to stimulate conceptual discussion and situated knowledge. To allow the reader information to evaluate the transferability and relevance of the results, we have tried to present the context, the data collection and data analysis procedures, and the results transparently, using participants' quotes to illustrate points. However, lack of interrater reliability tests may represent a potential limitation.

To explore the conceptualization of measures further in routine care as clinical skills, similar studies need to be conducted in different contexts with different clinical feedback tools.

AUTHOR CONTRIBUTIONS

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APPENDIX A

TABLE A1 Case description

Activity	Site A	Site B
Norse implementation start-up	Autumn 16	Autumn 15
Interviews and field study	Autumn 16–summer 17	Winter 17–summer 17
Interviews (N)	21	10
Field studies (N)	10	11
Field study content	Training sessions, morning reports, ad-hoc meetings, dialogue groups	
Steering group observations	2	
Archival data	N = 16, steering group meeting summaries, project plans, funding application, steering group presentations	

INTERVIEW GUIDE FOR PATIENTS

- How was Norse introduced to you?
  – Cues: information, communication, expectations, training, thoughts about feedback, other forms
- How do you use Norse?
  – Cues: questions, influence, holism, complexity, time
- What happens with the feedback report?
  – Clues: interpretation, utility, plan
- If you have seen the feedback report, how does it compare to your own understanding of yourself?
  – Clues: challenging of self-understanding, correspondence with your therapist's understanding
- What is your experience of how your therapist understands Norse?
- What is your impression of how therapists assess the utility of Norse?

INTERVIEW GUIDE FOR CLINICIANS
Part one: The implementation

- Could you talk about your background at the clinic?
- Do you remember when you first heard about NORSE and what you thought about it?
- How did you experience the implementation process?
  – Clues: information, expectations, training, resources, scale
- What is your experience of how colleagues experienced the implementation
- Were there other projects or major changes going on parallel with the NORSE implementation?
- What is your experience of how the patients experienced the implementation?
- Is NORSE part of collaborative work?

Part two: The everyday use of NORSE

- Could you talk about how you use NORSE in treatment?
  - Clues: therapy integration, time, utility, treatment plan, correspondence with clinical impressions, validity, implementation goals vs. experience.
- What is your impression of how your colleagues experience the use of NORSE in treatment?
- What is your impression of how patients experience the use of NORSE?