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REVIEW ARTICLE

Patients' perspectives on telemedicine in the encounter between healthcare and patients with mental illness: A systematic review

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Abstract
Background and objectives: This systematic review aimed to investigate the experiences and opinions of people with mental illness regarding the role of telemedicine in their treatment.
Methods: To be eligible, studies were required to include people between 18 and 65 years of age with mental illness, defined as depression, anxiety, bipolar disorder, schizophrenia, or personality disorder. It was further required that the patients' experiences of the telehealth solutions were reported. Between April 5, 2020, and June 29, 2020 (renewed November 10, 2021), the CINAHL electronic database was searched. Using the OVID search engine, Embase, MEDLINE, and PsycINFO were likewise searched; gray literature was retrieved from Scopus. The included studies were critically appraised using the CASP checklists.
Results: Seventeen studies were included. Treatment provided via telehealth technology offered people with mental illness insights and skills that helped them cope better in everyday life. The patient—therapist relationship was improved where the parties collaborated. Furthermore, gaining control of one's mental health by using an app and following one's development empowered people with mental illness, leading to greater involvement in treatment.
Conclusions: Engaging people with mental illness in decisions concerning the use of telehealth technology is essential. It is likewise important that both people with mental illness and health professionals have access to help with the implementation of technology, and that telehealth solutions function as a supplement rather than a substitute for face-to-face treatment.

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Introduction

All over the world, the burden of mental illness is growing, with substantial impact on health and human rights, and major social and economic consequences for the individual and for society.[1] Severe mental illnesses, such as schizophrenia, bipolar disorder, anxiety, and depression, are often associated with disability and barriers to treatment.[2] Besides problems with accessing mental healthcare, social isolation and stigma are among the several challenges facing people with severe mental illness.[3,4] To address those barriers, the use of various telehealth technologies, such as e-mail, online programs, and mobile applications (henceforth apps), has increased rapidly.[5] The potential of telehealth for the treatment of people with severe mental illness is demonstrated by positive results regarding medication adherence, symptom severity, cognitive therapy, and hospitalisation length.[6—8] Interventions involving telehealth are numerous and include telephone calling, email correspondence, apps with music or mindfulness exercises, access to symptom records, cognitive therapy programs, and help with structuring daily life and tasks.[9] Most studies of telehealth practices in mental healthcare have included the use of online devices such as private mobile phones or tablets.[8,10] The market potential of telemedicine has shown to be strong, and the implementation is expected to grow the next years.[11] To make a successful implementation, it is crucial that patients find the telehealth solution useful and feel involved in the use of it; thus their experience of the use of telehealth in their everyday life and treatment is important.[12] Although several reviews have explored the effectiveness, costs, and quality of telehealth interventions, frequently reporting positive results,[2,3,5] this review is, to our knowledge, the first to give an overview of the experiences of people with severe mental illness where telehealth is involved. Our aim was therefore to investigate the opinions and experiences of people with mental illness regarding the role of telemedicine in their treatment and give some insight to consider when new telehealth solutions are developed.

Material and methods

The protocol was registered in PROSPERO (ID: CRD42020183000) and due to Covid-19 automatically published exactly as submitted. Findings are reported under the PRISMA Group's Preferred Reporting Items for Systematic review and Meta-Analysis guidelines.[13] The protocol's stated aim was to investigate the experiences and opinions of people with mental illness and healthcare professionals regarding the role of telemedicine. However, we chose to concentrate on the patients' perspectives in order to achieve focused and unambiguous results.

Eligibility criteria

To ensure a focused search process, several inclusion criteria were applied. We searched for studies of any design including reports of mentally ill patients' perspectives on the use of telemedicine in the treatment of their mental illness. The studies were required to include patients diagnosed with mental illness, defined as depression, anxiety, bipolar disorder, schizophrenia, or personality disorder, aged between 18 and 65 years, corresponding to the age span applied in adult psychiatry in Denmark. Only if data were stratified by age did we consider including studies of patients below or above those ages.

Information sources and search strategy

The search strategy was developed using the Population, Exposure, Outcome (PEO) framework and customized for the searched databases and their structures.[14,15] Search terms were divided into three categories: mental illness (population), telehealth (exposure), and user involvement (in treatment) (outcome). The complete search string is shown in the Appendix.

An information specialist was consulted regarding search terms, keywords, and the choice of databases. Between April 5, 2020, and June 29, 2020, the CINAHL electronic database was searched. Using the OVID search engine, Embase, MEDLINE, and PsycINFO were likewise searched; gray literature was retrieved from Scopus. Depending on the database in question, Synonyms, MESH terms, and Thesaurus were customized for each category and combined with the Boolean operator OR. The categories were subsequently combined using AND. The search was renewed in November 2021.

Study selection

The search results were uploaded and stored using Endnote version 9.3, duplicates were removed and the results subsequently imported to the Covidence reference programme (www.covidence.org), where two authors (SJ and BN) independently screened the studies for inclusion. Studies were excluded due to wrong study design (i.e., protocols or opinion papers without data), population, outcomes, or language. Any disagreement among the reviewers concerning the eligibility of studies was resolved by discussion. Studies meeting the inclusion criteria were retrieved for full text analysis.

Data collection process and data items

Data extraction was conducted in a two-stage process. Two independent reviewers (SJ and BN) extracted the following study characteristics: bibliographic information, location, study aim, study design, data collection method, type of intervention, type of e-health technology, inclusion and exclusion criteria, time and place of data collection, sampling strategy, participants' characteristics, and data analysis techniques. Afterwards, results sections and Discussion sections of the included studies were scrutinised to identify their themes. Disagreements were resolved by discussion.

Quality assessment

The included studies were appraised independently by two reviewers (SJ and BN), using the Critical Appraisal Skills Programme (CASP) checklist (2019).[16]

To ensure a rigorous and fair assessment, we considered all italicised prompts listed under each question in the checklist, giving particular emphasis to Question 1 ("Was there a clear statement of the aims of the research?") to

ensure that the aim of the study was in line whit our review, and Question 4 ("Was the recruitment strategy appropriate to the aims of the research?") which became important because of the number of nested study we included, and finally Question 5 ("Was the data collected in a way that addressed the research issue?") which was particularly relevant because we wanted to investigate mental ill patients' experiences with telehealth and thus, a qualitative approach was preferred. In the scoring, 1 point was allocated for *Yes*, 0.5 points for *Can't tell* (unsure) and 0 points for *No*. Disagreements occurred only concerning unclear criteria fulfilment; consensus was reached by discussion.

Data synthesis and interpretation

The study data were extracted electronically and entered into NVivo. To ensure consistent methodology, data extraction was performed by a primary reviewer (SJ) and confirmed by a secondary reviewer (BN).

We employed an inductive approach in which the themes were synthesised from the primary data during discussions among the authors.[17] In the first, purely descriptive stage of the three-stage thematic analysis, we formulated a set of codes[17] that adhered to the studies' own formulations. In the second stage, we identified and described themes across the developed codes.[17] In Stage 3, analytical themes were generated and their relevance for the review question was considered.

Results

Study selection

The database search identified 17,862 titles. Following the exclusion of 3088 duplicates, 14,774 articles were screened based on their titles and abstracts. Of these, 14, 609 studies were deemed irrelevant, leaving 165 studies for full-text reading. The inclusion criteria were met by 17 studies. Figure 1 gives further details.

Study characteristics

Of the 17 studies included, four originated in the United Kingdom,[18–21] four in Denmark,[22–25] two in the United States,[26,27] two in Netherlands,[28,29] two in Norway,[30,31] one in Australia,[32] one in Germany,[33] and one in Sweden,[34] respectively. All studies collected data through qualitative individual interviews. The 281 participants were aged between 18 and 65 years; 117 identified as males, 134 as female; the sex of 30 interviewees was undisclosed.

Most of the studies were thematically structured, using methods that included theoretical template coding,

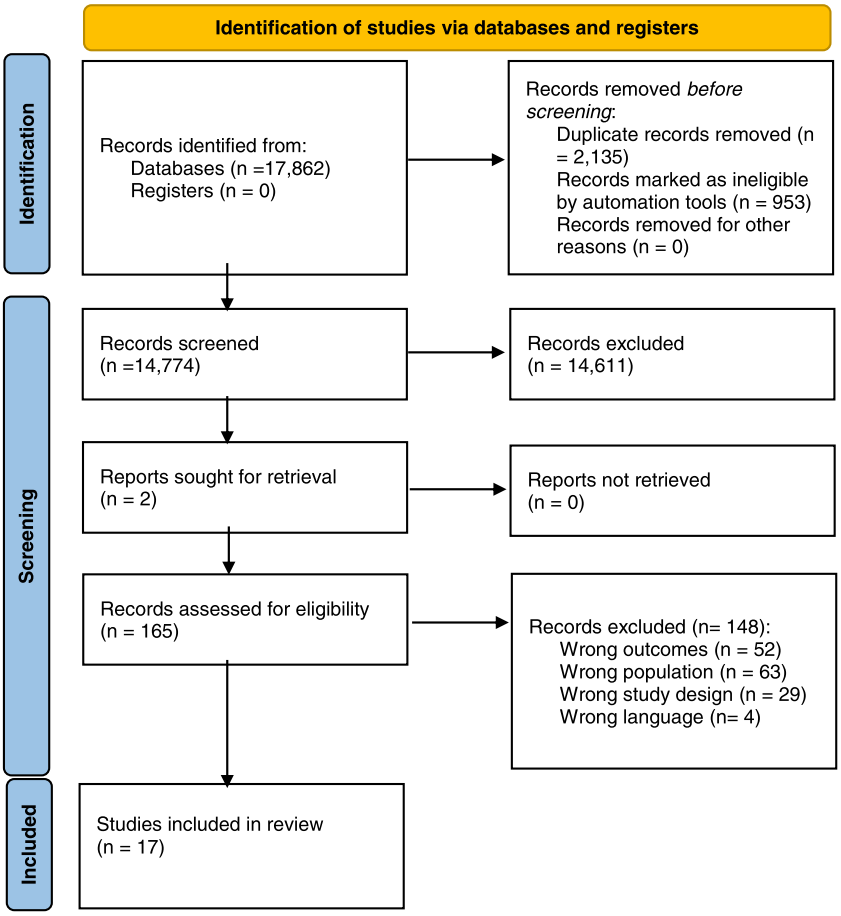

Figure 1 PRISMA flow diagram.[11]

phenomenological analysis, framework analysis, and constructivist grounded theory method.

The telehealth practices applied in the studied programs varied substantially. In two studies the MoodGYM self-help program[30,31] was used to explore the patient's experience of guided internet-based cognitive behavioral therapy with therapist support; one study reported the use of video sessions delivering cognitive processing therapy via Skype technology.[18] Four studies involved apps as an alternative to paper-based records of mood, behavior, sleep patterns, and other parameters as needed[21,22,25,28] and one study compared experiences with the FOCUS and WRAP apps, representing individual and group session therapy, respectively.[26] To explore the value of e-health in a newly transformed mental healthcare setting, Lorenz-Artz et al.[29] investigated the users' experiences of using several e-health tools. Asking the patients to choose a self-care app, Crosby and Bonnington[19] investigated the motivations for their choice. Using the Momentum app, Korsbek and Tønder[23] explored the patient's experience of the app as a consultation tool. Five studies used apps[24,27,32—34] or web-based programs offering behavioral activation programs and various therapy sessions. Finally, a study used short messages (SMS) or apps to investigate the patients' experience of undergoing clinical assessment for psychosis.[20]

Further details of the study characteristics are presented in Table 1.

Quality assessment

The CASP scores for the studies varied between 7 and 10, indicating a range from low quality (below 7.5) to moderate (7.5—9.0) or high quality (9.0—10.0).[35] Negative ratings were typically ascribed to failure to report on the participant—researcher relationship or ethical issues. Details of the quality assessment are presented in Table 2.

Synthesis of results

Twenty-eight codes emerged in Stage 1. Reorganization in Stage 2 reduced the number to five descriptive themes, four of which became analytical themes with identical wordings in Stage 3. The remaining codes were combined into the analytical theme named *Therapy on the users' terms*. A code concerning personal safety was excluded as it had no clear association with the review question.

The resulting five analytical themes were: *Use of telehealth technology, Therapy on the users' terms, The approach — the stance toward the apps, collaboration,* and *Motivation.*

Use of telehealth technology

This analytical theme appeared across all of the studies and was constituted by the following seven codes: Use of telehealth, Support base, Disturbances, Deficiencies, Technical skills, Travel time and Transport.

Exploring the influence of restrictions on or long waiting times for face-to-face consultations, the studies found that users were more inclined to accept telehealth treatment in such situations. It appeared that the use of technology improved compliance by helping the users structure their daily life through reminders to follow the programs at a particular time. Using a smartphone facilitated completing and evaluating tasks compared to writing by hand. Users were less prone to make excuses as the technology appeared to make them feel obliged to comply with their program, although some were challenged to find peace and space for treatment at home. They cited disruptions such as a ringing doorbell, the return of a family member, or finding the designated therapy space occupied. Some users seemed to be motivated to use the apps because they saw this as a way to avoid disturbing the therapist. Numerous users found the apps and websites' ways of using psychoeducation helpful for them to understand their mental illness, and even better if they had an option afterward to discuss it with their therapist. It was generally emphasized that the app had to be user-friendly for the users to continue using it. Many users appreciated the availability of technical support for the setup and stressed the importance of a modular setup enabling the selection of tasks according to the needs of the moment. One study showed that the users appreciated the saving of time and expenses for transport. Several studies found that users value the opportunity to show information about their illness and treatment progress to their relatives. The majority of users indicated that telehealth should be used as a supplement rather than a substitute for face-to-face treatment and that it should be considered whether the treatment provided by the telemedicine solution was suited to the individual.

Therapy on the users' terms

This analytical theme emerged from the following five codes: Therapy on the users' terms, Therapy access time, Discreet, Being on one's own, and Focus on therapy.

Overall, the studies found that telehealth worked well from the users' perspective. Their reasons for the positive assessments included for example adaptability and flexibility and freedom to interrupt treatment for toilet breaks. The apps were considered safe spaces with a soothing effect. In one of the studies, it was shown that receiving therapy in the home helped users stay focused as they saved resources for leaving the house and worrying about the trip to the treatment site. The flexibility offered by online treatment enabled users to pursue their everyday routines. Many appreciated the flexibility, with access to therapy at all times of the day or when most urgent, rather than having to wait for a scheduled treatment session. For some users, it had proved difficult to cope with the abrupt transition from an online session to everyday life, while many embraced the opportunity for social networking and feedback offered by some of the online therapies. Some studies showed that the users could experience a lack of support from a therapist when using telehealth solutions, which made them feel more alone or isolated. The apps had given many participants a sense of independence, needing less help from others. The ubiquity of mobile telephones meant that users could access treatment discreetly, even in public spaces.

Stance toward the apps

Appearing across all the included studies, this analytical theme was mainly formed by five codes: The stance toward

Table 1 Study characteristics.

Author, year of publication and location	Aim	Design/data collection method	Type of technology used	Inclusion	Time and place of interview, and data analysis techniques	Participants' characteristics (sex, age	Results
Ashwick R. et al., (2019) UK	To explore acceptability of delivering of CPT over skype	Qualitative semi-structured interviews	Video-based session of Cognitive Processing Therapy delivered over skype using Combat Stress	- UK veterans - PTSD diagnoses	Telephone interviews Inductive approach to thematic analysis	16 participants Female: 1 Male: 15 Age 27- 58 (mean: 41)	Key themes: Effect of your own environment, the Importance of good therapeutic alliance, Technicalities and practicalities, Personal accountability and Measuring change. Participants felt more comfortable in their own homes, were able to establish a good rapport with the therapist and reported symptom improvements
Austin S.F., Et al. (2020) DK	To identify participants' perspectives on dialectical behavior therapy and the use of a mobile app as a tool to enhance and support the therapy	Qualitative semi-structured interviews	The mobile app was to be used as alternative to the traditional paper journal used in therapy. Not further described	- ICD-10 definition of personality disorder - Able to participate in therapy	Interviews conducted at the psychiatry clinic Thematic analysis	20 participants Female: 19 Male: 1 Age: 25-35	Participants were positive of the integration of technology as a supplement to their clinical treatment. The app was perceived to facilitate and support many of the therapeutic techniques associated with treatment
Bos, F.M. et al. (2020) NL	To explore patients' experiences with intensive long-term ESM monitoring	Qualitative semi-structured interviews	The ESM mentoring app monitor patients mood five times a day and alert them if they need to take care of symptoms	- Diagnosed and currently in treatment for Bipolar disorder - High occurrence of episodes the last year	Interviews conducted at the research facility Thematic analysis	20 participants Female: 16 Male: 4 Age: 20-65	Patients were positive regarding the monitoring, but some felt it was too often they had to interact with the app. Several of them felt that the app helped to realize their own boundaries, so they didn't get to far into an episode before they realized it.
Carpenter-Song, E. et al. (2019) USA	To compare experiences with FOCUS and WRAP	Qualitative Semi-structured interview	WRAP: Sessions follow a sequenced curriculum, and discussion topics. FOCUS: provides daily self-assessments, illness management practice and intervention content	- Diagnosis of schizophrenia, schizoaffective-, bipolar-, or major depressive disorder. - Aged 18 or older	Not described	31 participants FOCUS: 16 Female: 5 Male: 11 WRAP: 15 Female: 6 Male: 9	Mobile health illness self-management interventions were well received and offered an opportunity to learn new illness management skills
Crosby, L. and Bonnington. O. (2020) UK	To improve understanding of the motivations, experiences and lived implications of people using mobile apps to treat and manage their sickness	Qualitative Semi-structured interviews	App for selfcare (self-defined)	- Diagnosed with depression or anxiety - Aged over 18. - Having used an app for selfcare in the past year - Not currently experiencing severe symptoms	Interviews conducted at public locations - mostly cafes or parks Thematic analysis	13 participants Males and females Age: 27-67 (data stratified by age)	Participants' engagement with apps was formed by existing convenient, immediate relations with smartphones which resulted in uncomplicated usage, providing short-term relief during moments emotional distress, but with effects often limited to temporary solutions
Korsbek, L. and Tønder, E. S., (2016) DK	To generate knowledge on the experience of using the application as a part of the treatment consultation	Qualitative Individual semi structured interviews	The app Momentum in conjunction with peer support	- Participants from the main study was chosen, which had a diagnosis of schizophrenia, schizoaffective disorders or affective disorders	Not described Common themes were identified with an inductive method	7 participants Not described	Participants found the app a useful aid to facilitate shared decision making and support the recovery model
Köhne, S. et al. (2020) DE	To explore to what extent patients form a therapeutic relationship to Privio and whether that differ from a working alliance with a human therapist	Qualitative Semi-structured interviews	The app Priovi which is an ST-based interactive tool, designed specifically for borderline patients.	- Primary Borderline personality disorder with a severity above 20 on the borderline personality disorder severity index.	Interviews conducted by telephone or office spaces at the university	9 participants 9 Female Age: 21-53	Patients found it easier to understand the psychoeducation when using Priovi, because they could hear the same thing multiple times. But they felt that Priovi was less flexible, and it was harder to incorporate patient biography.

Table 1 (*Continued*)

Author, year of publication and location	Aim	Design/data collection method	Type of technology used	Inclusion	Time and place of interview, and data analysis techniques	Participants' characteristics (sex, age	Results
Lillevoll, K.R. et al., (2013) N	To explore patients' experiences of helpfulness in guided internet based cognitive behavioral therapy for depression with therapist support	Qualitative Individual open dialogue interview	The internet-based cognitive behavioral therapy MoodGym and brief personal sessions with a therapist	- Beck depression inventory score 10-28	Not described. Phenomenological analysis	14 participants Female: 9 Male: 5 Age: 22-61	Three themes were identified: the active engagement of the patient, the guidance of the therapist, and the content of the treatment program
Lopez, A., (2015) USA	To explore how therapist may vary the method of communication and increase their social presence when treating clients which use recordings of skills, mindfulness, online assessments, and worksheets	Qualitative Semi-structured interviews	Internet-based program, DBT (Intensive Training Program), to learn key concepts and practices related to DBT	- Been a part of DBT treatment in the previous year - Diagnosed with borderline personality disorder	Interviews conducted during open house-training sessions. Theoretical coding method — template coding	7 participants Female: 6 Male: 1 Caucasian Unemployed Age: 19-56	Relationships were maintained regardless of the use of the website, and the relationship was supported and enhanced through various levels of social presence
Lorenz-Artz, K. et al., (2021) NL	To explore the value of e-health in a newly transformed mental healthcare setting	Qualitative Semi-structured interviews	Several e-health tools	- Diagnosed with schizophrenia, bipolar disorder, depression or personality disorder.	Interviews conducted in participants own home or at the mental healthcare facility Thematic analysis	10 participants Not further described.	Improved communication was seen as the mayor benefit of the approach, but none of the participants would be without the face-to-face treatment
Ly, K.H. et al., (2014) S	To develop an understanding of the views and experiences of a smartphone based behavioral activation treatment	Qualitative semi-structured interviews	Smartphone-based behavioral activation	- Suffering from major depression (DSM-IV) - At least an episode in partial remission - Point total ≥ 5 on the 9-item (PHQ-9) - Participated in the previews RCT study.	Telephone interviews Thematic analysis	12 participants Female: 6 Male: 6 Age: 20-59.	The participants experience with the app was formed by availability, assimilation into users' everyday lives and possible motivational qualities
Palmier-Claus, J. E. et al., (2013) UK	To explore patients' understandings and perceptions of mobile phone based clinical assessment for psychosis	Qualitative semi-structured interviews	SMS or software application. Not further described	- Diagnosis of non-affective psychosis (DSM-IV) - Own a mobile phone	Not described. Framework analysis	24 participants Female: 5 Male: 19 Mean age: 33,04	Patients were conscious of the benefits that mobile-based assessment could bring to treatment, and that the technology can be successfully integrated into their everyday routine. It is important to show to patients the personal, as well as theoretical, benefits of the technology
Pedersen, M.K et al., (2020) DK	To gain knowledge of patients' experiences of iCBT treatment in clinical settings	Qualitative semi-structured interviews	The iCBT treatment (Fear Fighter) - an online self-help program with videos, text and cognitive restructuring and exposure exercises.	- Diagnosis of panic disorder or social anxiety disorder	Interviews conducted at the clinic or the participants own home Phenomenological approach with thematic analysis	12 participants Female: 6 Male: 6 Age 21-66 (data stratified by age)	The iCBT treatment was unfavorably compared to the usual face-to-face treatment at the clinic. Despite this, a majority of the interview participants still expressed to have experienced various benefits from the treatment. Some participants did however, experience difficulties putting the materials to practical use.
Riisager L.H.G. et al. (2021) DK	To explore how patients with PTSD experience the use of the app PTSD Help	Qualitative semi-structured interviews	PTSD Help is an app with functionalities as psychoeducation, emotion regulation tools and crisis plan	- Diagnosed with a PTSD - Access to a smartphone	Telephone interviews Thematic analysis	14 participants Female: 8 Male: 6 Age 20-59	The participants overall felt that the app was helpful and informative, but that other treatment together with the app was needed
Steare, T. et al. (2021) UK	To explore the acceptability of MY Journey 3	Qualitative semi-structured interviews	MY Journey is an app to digitally deliver adapted paper-and-pen self-management tools	- Schizophrenia or mood disorder	Interviews conducted in participants' own homes, at EIP service, University of college London or telephone Deductively thematic analysis	21 Participants Female: 5 Male: 16 Mean age: 29,8	Services users successfully engaged in the intervention and reported benefits to medication adherence, lifestyle and felt more in control of their illnesses

Table 1 (*Continued*)

Author, year of publication and location	Aim	Design/data collection method	Type of technology used	Inclusion	Time and place of interview, and data analysis techniques	Participants' characteristics (sex, age	Results
Wilhelmsen, M. et al., (2013) N	To explore motivation as experienced by patients using "blended care"	Qualitative Semi-structured interviews	ICBT program called MoodGYM	- Seeking help from their GP for mild to moderate symptoms of depression - 18-65 age - Access to internet	Interviews conducted in office at the University of Tromsø Phenomenological hermeneutical method	14 participants. Female: 9 Male: 5	Connectedness with the therapist and the participant's ability to identify with the ICBT modules also gave them a sense of relatedness. Improving these motivational aspects may increase patients' persistence with ICBT
Williams, A. et al. (2021) AU	To identify how jointly using the SMARTe-mental health resource in a commu-nity mental health context influenced therapeutic processes and interactions between Sus and MHWs	Qualitative Semi-structured interviews	SMART website designed to self-man-agement and recovery	- Diagnosed with schizophrenia-related disorder, bipolar disor-der, or major depres-sion with psychotic features	Interviews conducted in mental health services or by telephone Constructivist grounded theory method	37 participants Female: 24 Male: 13 Age: 18-64	The jointly use of the website helped the participants keeping their life on track and had a positive influence on the working relationship with mental healthcare worker.

the apps, Managing symptoms, Combining functions, Buy-and-throw-away, and A supplement to therapy. Diversion was a minor theme.

The user's attitude to the use of the apps hinged on their previous experiences; if they had experienced that apps previously were convenient, empowering, and immediately useful, users would feel positive about using it. They enjoyed the easy accessibility of the phone, which provided constant access to treatment. Apps for anxiety and depression treatment were seen as particularly useful tools. The degree to which an app was used was affected by the participant's present state of mind; when they were well, the app would be used less frequently, also how much support they were offered from their therapist to adopt the app. Some users found that when their mood was low, they were unable to cope with the demands the apps placed on them. A study found that although users no longer access a specific app, many did not remove it from their device but kept it in case of relapse. Some users worried that they would be stigmatized if other people should see the app logo on their mobile screen and take this as an indication of mental illness. For most users, the app offered an "instant fix". The telehealth treatment provided insight and skills to cope with difficulties and helped users adopt new coping strategies and identify triggers in their everyday life. The possibility of entering and monitoring their symptoms in a software program enabled the user to realize the progression in their recovery. Some users saw this facility as an improvement in taking paper notes, as it helped them make detailed and discreet notes on the spot. The users tended to find it easy to install and uninstall apps that they had selected themselves. Overall, it was found that users expected the apps to offer instantaneous help.

Collaboration

The collaboration theme was based on eight codes, including collaboration, Experience from previous therapy, Impersonal, It's the same thing, Familiar, Communication, Shared perspectives, and Togetherness.

While some studies showed that apps made users withdraw from face-to-face treatments, others showed that several users had experienced that accessing the programs together with their therapist helped them maintain the essence of their treatment. Many reported that using an app in collaboration with the therapist had a positive impact on their relationship and collaboration. When the collaboration included an app, the users felt more in control as this allowed them to prepare for the consultation. Some studies showed that apps could have the effect of the user withdrawing from treatment elements involving face-to-face contact. The users experienced having more control when apps were integrated. In general, collaboration with the therapist was perceived as essential to the success of treatment, as this helped the users understand some of the difficult information given in the programs or apps. Some of the studies showed that many users felt a need to know the therapist in advance to be motivated for treatment. Meeting the same therapist throughout the treatment was essential to providing users with a sense of familiarity. While the users reported no major difference in their experience of face-to-face therapy and online therapy, they emphasized the

Table 2 Quality assessment.

Author, location, and year of publication	Clear statement of aim	Qualitative methodology appropriate	Research design appropriate	Recruitment strategy appropriate	Data collection addressed research issue	Researcher/ participant relationship adequately considered	Ethical issues taken into consideration	Data analysis sufficiently rigorous	Clear statement of findings	Valuable research	Score
Ashwick, R. et al., UK (2019)	Yes	Yes	Can't tell	Yes	Yes	Yes	Yes	Yes	Yes	Yes	9,5
Austin S.F. et al. DK (2020)	Yes	Yes	Yes	Can't tell	Yes	No	Yes	Can't tell	No	Yes	7
Bos, F. M. et al. NL (2020)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Carpenter-Song, E. et al. US (2019)	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	9
Crosby, L. and Bonnington. O. UK (2020)	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	9
Korsbek, L. and Tønder, E. S. DK (2016)	Yes	Yes	Yes	Yes	Yes	No	No	Can't tell	Yes	Yes	7,5
Köhne, S. et al. D (2020)	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	9
Lillevoll, K.R. et al. N (2013)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Can't tell	9,5
Lorenz-Artz, K. et al. NL (2021)	Yes	Yes	Yes	Yes	Can't tell	No	Yes	Yes	Yes	Yes	8,5
Lopez, A. US. (2014)	Yes	Yes	Yes	Yes	Can't tell	No	No	Yes	Yes	Yes	7,5
Ly, K.H. et al. S (2014)	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	8
Palmier-Claus, J. E. et al. UK (2013)	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	9
Pedersen, M.K. et al. DK (2020)	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	9
Riisager, L.H.G. et al DK (2021)	Yes	Yes	Yes	Can't tell	Yes	No	Yes	Yes	Yes	Yes	8,5
Stear, T. et al. UK (2021)	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	9
Wilhemsen, M. et al. N (2013)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10
Williams, A. et al. AU (2021)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	10

importance of visual contact with their therapist. Being able to read their body language gave them a sense of a normal treatment session. Some users reported a lack of deeper emotions with the telehealth technology, compared to face-to-face sessions. However, there was substantial variation in the degree of satisfaction with the contact with the therapist afforded by the technology. While some patients had been quite satisfied, others had come to realize that they longed to return to conventional face-to-face therapy forms. Several studies found a strong correlation between user satisfaction and their sense of having the therapist's full attention. Group therapy was experienced as a positive element by some users, while others cited it as their reason for abandoning treatment. Among the advantages of apps, users mentioned the improved communication between clinicians and service users and the opportunity for the therapist to follow treatment progress by monitoring their use of the program.

Motivation

The motivation theme derived from a single code that appeared in all but one of the studies.

The users were empowered by the feeling of control over their mental health conferred by the apps. Being able to track their improvement led to stronger engagement in their treatment. The user's motivation to use a specific app and collaboration with their therapist was associated; a therapist who shared their reactions and communicated positively about the app reinforced the users' motivation and commitment to treatment. As telehealth practices require more independence compared with face-to-face practices, users may have been more prone to postpone or cancel appointments with the therapist. Conversely, using an app could strengthen the sense of responsibility for improving their health. For some, the motivation declined as the treatment progressed, while for others it increased as they got a better grasp of the program.

Discussion

The studies examined here have demonstrated that telehealth treatment provides users with insights and skills to cope with their difficulties and helps them acquire new coping strategies in their everyday life. Furthermore, we found that telehealth should supplement rather than substitute face-to-face treatment. The studies generally showed that collaboration in using apps has a positive impact on the patient-therapist relationship. Users feel in better control of their mental health and appreciate the opportunity to track improvements when apps form part of the collaboration, leading to greater involvement in their treatment. Moreover, the ubiquity of mobile telephones in public spaces allows them to access treatment discreetly.

Several of the included studies indicate that users see the flexibility of telehealth technology as a gain, for example the easy access to treatment and its round-the-clock availability. This corroborates the review of Wehman et al., which has shown that flexibility is an important cue for users to accept telehealth treatment despite the absence of face-to-face meetings.[36]

The reviewed studies also show that users appreciate having time to reflect on new information and being in control of telehealth sessions, the importance of which Richards et al. have already established.[37] By findings by both Richards et al. and Lopez,[37,38] we found that the inclusion of telehealth made users' experience of their treatment more accessible.

Wehmann et al. found no association between the use of telehealth technology and higher ratings of treatment effects, a result which is corroborated by our findings that users' experience treatment involving telehealth technology improves their connection with the health professional and strengthens their sense of being in control of their treatment. The included patients felt more connected to the health professionals when they experienced visual contact or at least had met the health professionals before interacting in the program.[34]

Comparing the experiences of introducing telehealth with and without an introduction to the interface, we show that when users feel listened to and guided in the use, their motivation to continue their telehealth treatment is reinforced, whereas they tend to discontinue their treatment when such help is absent. Apolinàrio-Hagen found significantly higher treatment completion rates when guidance was offered.[39]

Overall, this review supports the findings of previous studies that patients with mental illness generally experience telehealth practices as useful, provided they are offered as adjunctive to rather than the dominant medium of treatment.

This review was designed and reported following the recommendations of the PRISMA statement. A thorough search of multiple databases was conducted. Despite the rigorous search, screening, and analysis process, we acknowledge the existence of some limitations of this study. Our review was challenged by the COVID-19 pandemic in that the protocol was automatically submitted to the PROSPERO register and published without changes. We abandoned our initial aim to explore both patients' and health professionals' perspectives on telehealth when we realized that this was too broad an aim. This change of focus to the patient perspective was the sole deviation from the protocol.

It may have influenced our results that some of the studies included in this review were nested within randomized controlled trials. This is so mainly because our qualitative analyses are based on data that were not necessarily collected for purposes similar to ours. Another reason is that only five of the 17 studies described the researcher—participant relationship.

This review attempted to assure credibility in terms of internal validity by showing which codes were used to form the specific themes in the result section and by using two independent reviewers in the process, where disagreements were solved by discussion. Furthermore, the reviews' dependability (or reliability) sought to be assured by providing a complete search string in the appendix and also which questions during a quality assessment, the reviewer chose to give particular interest.

The broad definition of telehealth applied in the studies presented another challenge, as our review covers a range of telehealth solutions, such as apps, video consultation, and computer-based group treatment. As we focused on the

users' experience of telehealth, we do not consider this a major limitation.

Conclusions

In conclusion, our review has demonstrated the importance of including the patients in the decision to apply telehealth. If this approach is chosen, it is essential that both users and health professionals have access to help in implementing the telehealth solution, so patients feel confident using it. In addition, our review offers an overview of the current literature on the experiences of people with severe mental illness concerning telehealth practices.

Ethical considerations

The authors declare that the review is conducted while paying attention to all perspectives of original studies and that they have conducted the review ethically. According to Danish law, no ethical approval is demanded for this type of research project.

Funding

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Conflicts of interest

None declared.

Appendix - Searches

Search in Cinahl

1. TI ((Severe N/2 mental N/2 illness*) or "Chronic Mental Illness*" or "Chronic Psychosis" or (mental N/2 disease*) or (mental N/2 illness*) or (Mental* N/2 Disorder*) or (Psychiatric N/2 Disease*) or (Psychiatric N/2 Illness*) or (Psychiatric N/2 Patient*) or (Psychiatric N/2 Disorder*) or (Psychiatric N/2 Diagnos*) or "Behavio?r* Disorder*" or "Severe Mental Disorder*" or (Mental* N/2 Ill*) or "Mood disorder*" or "Affective Disorder*" or (mental health N/2 service) or "mental health" or "Bipolar disorder*" or "Neurotic disorder*" or "Depressive disorder*" or "Dysthymic disorder*" or Depression or "Seasonal affective disorder" or Anxiety or Panic or Schizophrenia or "Paranoid disorder*" or Psychosis or schizo* or Psychotic* or Psychos* or (Depression N/2 Emotion) or "generalized Anxiety Disorder*" or (mixed mania N/2 depression) or "personality disorder*" or "Schizoaffective Disorder*") OR AB ((Severe N/2 mental N/2 illness*) or "Chronic Mental Illness*" or "Chronic Psychosis" or (mental N/2 disease*) or (mental N/2 illness*) or (Mental* N/2 Disorder*) or (Psychiatric N/2 Disease*) or (Psychiatric N/2 Illness*) or (Psychiatric N/2 Patient*) or (Psychiatric N/2 Disorder*) or (Psychiatric N/2 Diagnos*) or "Behavio?r* Disorder*" or "Severe Mental Disorder*" or (Mental* N/2 Ill*) or "Mood disorder*" or "Affective Disorder*" or (mental health N/2 service) or "mental health" or "Bipolar disorder*" or "Neurotic disorder*" or "Depressive disorder*" or "Dysthymic disorder*" or Depression or "Seasonal affective disorder" or Anxiety or Panic or Schizophrenia or "Paranoid disorder*" or Psychosis or schizo* or Psychotic* or Psychos* or (Depression N/2 Emotion) or "generalized Anxiety Disorder*" or (mixed mania N/2 depression) or "personality disorder*" or "Schizoaffective Disorder*")
2. TI ("Negotiat*" or "treatment option*" or "professional-patient relation*" or "Professional-Client Relation*" or "Decision making" or "social participation" or consultation or encounter or participation or acceptance or attitude or (attitude N/2 mental illness) or "relational encounter" or "social support" or (Support N/2 Psychosocial) or (User N/2 (involv* or particpat*or contribut* or engag*)) or (Consumer N/2 (involv* or participat* or contribut* or engag*)) or "Involv* user*" or (Engag* N/2 (user* or consumer*)) or "User-centered" or Human-centered or "Interpersonal Relation*" or "Community Participation" or "Patient-Cent* Care" or "Therapeutic Alliance" or involvement or empowerment or (Patient* N/2 (satisfac* or Participation Rate* or Activati* or engag* or expect* or involv* or empowerment or participat*)) or (Client* N/2 (Satisfac* or Attitude* or Participat*)) Or competency OR "mental competency") OR AB ("Negotiat*" or "treatment option*" or "professional-patient relation*" or "Professional-Client Relation*" or "Decision making" or "social participation" or consultation or encounter or participation or acceptance or attitude or (attitude N/2 mental illness) or "relational encounter" or "social support" or (Support N/2 Psychosocial) or (User N/2 (involv* or particpat*or contribut* or engag*)) or (Consumer N/2 (involv* or participat* or contribut* or engag*)) or "Involv* user*" or (Engag* N/2 (user* or consumer*)) or "User-centered" or Human-centered or "Interpersonal Relation*" or "Community Participation" or "Patient-Cent* Care" or "Therapeutic Alliance" or involvement or empowerment or (Patient* N/2 (satisfac* or Participation Rate* or Activati* or engag* or expect* or involv* or empowerment or participat*)) or (Client* N/2 (Satisfac* or Attitude* or Participat*)) Or competency OR "mental competency")
3. TI (Teleconsultation* or "Internet Intervention*" or "Online Intervention*" or "web-based intervention*" or "internet based intervention*" or "Remote consultation" or "text message" or SMS or "mobile technology" or "mobile device*" or "cellular phone*" or "mobile app*" or smartphon* or "mobile phon*" or "handheld computer" or m-health or e-health or (Electronic N/2 Health Services) or Telehealth or Telemedicine or Telerehabilitation or Telepsychiatry or (online N/2 therapy) or "Cell Phone" or microcomputer or telecommunication or "personal digital assistant" or "tele N/2 consultation" or telecommunication* or "tele N/2 medicine" or tele-

medicine or telemedical or telecare or ehealth or “remote car*” or (hospital N/2 home) or “Mobile health” or (Medical N/2 informatics N/2 application*) or eintervention*) OR AB (Teleconsultation* or “Internet Intervention*” or “Online Intervention*” or “web-based intervention*” or “internet based intervention*” or “Remote consultation” or “text message” or SMS or “mobile technology” or “mobile device*” or “cellular phone*” or “mobile app*” or smartphon* or “mobile phon*” or “handheld computer” or m-health or e-health or (Electronic N/2 Health Services) or Telehealth or Telemedicine or Telerehabilitation or Telepsychiatry or (online N/2 therapy) or “Cell Phone” or microcomputer or telecommunication or “personal digital assistant” or “tele N/2 consultation” or telecommunication* or “tele N/2 medicine” or tele-medicine or telemedical or telecare or ehealth or “remote car*” or (hospital N/2 home) or “Mobile health” or (Medical N/2 informatics N/2 application*) or eintervention*)

4. TI (S60 AND S61 AND S62) OR AB (S60 AND S61 AND S62)

Search in Scopus

1. TITLE-ABS-KEY (teleconsultation* OR "Internet Intervention*" OR "Online Intervention*" OR "web-based intervention*" OR "internet based intervention*" OR "Remote consultation" OR "text message" OR sms OR "mobile technology" OR "mobile device*" OR "cellular phone*" OR "mobile app*" OR smartphon* OR "mobile phon*" OR "handheld computer" OR m-health OR e-health OR "Electronic N/2 Health Services" OR telehealth OR telemedicine OR telerehabilitation OR telepsychiatry OR (online N/2 therapy) OR "Cell Phone" OR microcomputer OR telecommunication OR "personal digital assistant" OR (tele N/2 consultation) OR telecommunication* OR "tele N/2 medicine" OR tele-medicine OR telemedical OR telecare OR ehealth OR "remote car*" OR (hospital N/2 home) OR "Mobile health" OR (medical N/2 informatics N/2 application*) OR eintervention*)
2. TITLE-ABS-KEY ((severe N/2 mental N/2 illness*) OR "Chronic Mental Illness*" OR "Chronic Psychosis" OR (mental N/2 disease*) OR (mental N/2 illness*) OR (mental* N/2 disorder*) OR (psychiatric N/2 disease*) OR (psychiatric N/2 illness*) OR (psychiatric N/2 patient*) OR (psychiatric N/2 disorder*) OR (psychiatric N/2 diagnos*) OR "Behavio?r* Disorder*" OR "Severe Mental Disorder*" OR (mental* N/2 ill*) OR "Mood disorder*" OR "Affective Disorder*" OR "mental health N/2 service" OR "mental health" OR "Bipolar disorder*" OR "Neurotic disorder*" OR "Depressive disorder*" OR "Dysthymic disorder*" OR depression OR "Seasonal affective disorder" OR anxiety OR panic OR schizophrenia OR "Paranoid disorder*" OR psychosis OR schizo* OR psychotic* OR psychos* OR (depression N/2 emotion) OR "generalized Anxiety Disorder*" OR "mixed mania N/2 depression" OR "personality disorder*" OR "Schizoaffective Disorder*")
3. TITLE-ABS-KEY ("Negotiat*" or "treatment option*" or "professional-patient relation*" or "Professional-Client Relation*" or "Decision making" or "social participation" or consultation or encounter or participation or acceptance or attitude or (attitude N/2 mental illness) or "relational encounter" or "social support" or (Support N/2 Psychosocial) or (User N/2 involv*) or (User N/2 particpat*) or (User N/2 contribut*) or (User N/2 engag*) or (Consumer N/2 involv*) or (Consumer N/2 participat*) or (Consumer N/2 contribut*) or (Consumer N/2 engag*) or "Involv* user*" or (Engag* N/2 user*) or (Engag* N/2 consumer*) or "User-centered" or Human-centered or "Interpersonal Relation*" or "Community Participation" or "Patient-Cent* Care" or "Therapeutic Alliance" or involvement or empowerment or (Patient* N/2 satisfac*) or (Patient* N/2 Participation Rate*) or (Patient* N/2 Activati*) or (Patient* N/2 engag*) or (Patient* N/2 expect*) or (Patient* N/2 involv*) or (Patient* N/2 empowerment) or (Patient* N/2 participat*) or (Client* N/2 Satisfac*) or (Client* N/2 Attitude*) or Participat*) Or competency OR "mental competency")
4. 1 AND 2 And 3

Search in MedLine, PsycInfo and Embase

Number	Word/words
1.	severe mental illness.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
2.	mental illness.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
3.	mental disorders.mp. or Mental Disorders/
4.	Psychiatric Disease*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
5.	Psychiatric Illness*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
6.	Psychiatric Disorder*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
7.	Psychiatric Diagnosis.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
8.	Behavior Disorders.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
9.	Severe Mental Disorder*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
10.	Mentally Ill*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
11.	Mood disorder*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
12.	"Neurotic disorder*".mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
13.	"Depressive disorder*".mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
14.	"Dysthymic disorder*".mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
15.	Depression.mp. or Depression/

16. Seasonal affective disorder.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
17. "Bipolar disorder".mp. or Bipolar Disorder/
18. Anxiety/ or Anxiety.mp. or Anxiety Disorders/
19. Anxiety disorders.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
20. Panic disorder*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
21. Schizophrenia, Paranoid/ or Schizophrenia, Catatonic/ or Schizophrenia/ or Schizophrenia, Disorganized/ or Schizophrenia.mp.
22. Paranoid disorders.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
23. Schizo*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
24. Psychotic*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
25. Psychos*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
26. personality disorder.mp. or Personality Disorders/
27. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26
28. intervention.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
29. support.mp.
30. user involvement.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
31. relational encounter.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
32. attitude.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
33. acceptance.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
34. participation.mp. or exp *Patient Participation/ or exp *Social Participation/
35. encounter.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
36. consultation.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
37. social participation.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
38. patient participation.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
39. patient empowerment.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
40. patient involvement.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
41. patient engagement.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
42. Patient Participation Rate*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
43. Patient Activation.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
44. Decision making.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
45. Professional patient relations.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
46. treatment options.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
47. patient expect*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
48. Negotiate*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
49. Patient satisfaction.mp. or Patient Satisfaction/
50. Internet-Based Intervention.mp. or Internet-Based Intervention/
51. Telemedicine.mp. or exp *Telemedicine/
52. Telehealth.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
53. digital.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
54. e-health.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
55. m-health.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
56. handheld computer.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
57. mobile phone.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
58. smartphone.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
59. mobile application.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
60. mobile app.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
61. cellular phone.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
62. mobile device.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
63. mobile technology.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
64. SMS.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
65. text message.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
66. Remote Consultation/ or Remote consultation*.mp.
67. Teleconsultation.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]

68. Online Intervention*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
69. Web-based Intervention*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
70. Internet Intervention*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
71. Teleconsultation*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
72. 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47 or 48 or 49
73. 50 or 51 or 52 or 53 or 54 or 55 or 56 or 57 or 58 or 59 or 60 or 61 or 62 or 63 or 64 or 65 or 66 or 67 or 68 or 69 or 70 or 71
74. 27 and 72 and 73
75. 3 or 15 or 17 or 18 or 21 or 26
76. ((Severe adj3 mental adj3 illness*) or Chronic Mental Illness* or Chronic Psychosis or (mental adj3 disease*) or (mental adj3 illness*) or (Mental* adj3 Disorder*) or (Psychiatric adj3 Disease*) or (Psychiatric adj3 Illness*) or (Psychiatric adj3 Patient*) or (Psychiatric adj3 Disorder*) or (Psychiatric adj3 Diagnos*) or Behavio?r* Disorder or Severe Mental Disorder* or (Mental* adj3 Ill*) or Mood disorder* or Affective Disorder* or (mental health adj3 service) or mental health or Bipolar disorder* or Neurotic disorder* or Depressive disorder* or Dysthymic disorder* or Depression or Seasonal affective disorder or Anxiety or Panic or Schizophrenia or Paranoid disorder* or Psychosis or schizo* or Psychotic*or Psychos* or (Depression adj3 Emotion) or generalized Anxiety Disorder or (mixed mania adj3 depression) or personality disorder* or Schizoaffective Disorder*).mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
77. 75 or 76
78. 34 or 49
79. (Negotiat* or treatment option* or professional-patient relation* or Professional-Client Relation* or Decision making or social participation or consultation or encounter or participation or acceptance or attitude or (attitude adj3 mental illness) or relational encounter or social support or (Support adj3 Psychosocial) or (User adj3 (involv* or particpat*or contribut* or engag*)) or (Consumer adj3 (involv* or participat* or contribut* or engag*)) or Involv* user* or (Engag* adj3 (user* or consumer*)) or User-centered or Human-centered or Interpersonal Relations or Community Participation or Patient-Cent* Care or Therapeutic Alliance or involvement or empowerment or (Patient* adj3 (satisfac* or Participation Rate* or Activati* or engag* or expect* or involv* or empowerment or participat*)) or (Client* adj3 (Satisfac* or Attitude* or Participat*)) or competency or mental competency).mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
80. 78 or 79
81. 50 or 51 or 66
82. (Teleconsultation* or Internet Intervention* or Online Intervention* or web-based intervention* or internet based intervention* or Remote consultation or text message or SMS or mobile technology or mobile device* or cellular phone* or mobile app* or smartphon* or mobile phon* or handheld computer or m-health or e-health or (Electronic adj3 Health Services) or Telehealth or Telemedicine or Telerehabilitation or Telepsychiatry or (online adj3 therapy) or Cell Phone or microcomputer or telecommunication or personal digital assistant or tele consultation or telecommunication* or tele medicine or tele-medicine or telemedical or telecare or ehealth or remote car* or (hospital adj3 home) or Mobile health or (Medical adj3 informatics adj3 application*) or eintervention*).mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
83. 81 or 82
84. 77 and 80 and 83
85. 84 use medall
86. mental disease.mp. or exp *mental disease/
87. severe mental illness.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
88. mental illness.mp.
89. Mental Disorder*.mp.
90. Psychiatric Disease.mp.
91. Psychiatric Illness*.mp.
92. Psychiatric Disorder*.mp.
93. Psychiatric Diagnosis.mp. or psychiatric diagnosis/
94. Behavior Disorder.mp. or exp *behavior disorder/
95. Severe Mental Disorder.mp.
96. Mentally Ill*.mp.
97. mood disorder/ or Mood disorder*.mp.
98. mental health service.mp. or exp *mental health service/
99. mental health.mp. or mental health/
100. exp *bipolar disorder/ or Bipolar disorder*.mp.
101. Neurotic disorder*.mp.
102. Depressive disorder*.mp.
103. Dysthymic disorder*.mp.
104. exp *masked depression/ or exp *depression/ or exp *long term depression/ or Depression.mp.
105. masked depression.mp. or masked depression/
106. chronic depression.mp. or exp *chronic depression/
107. bipolar depression.mp. or exp *bipolar depression/
108. long term depression.mp.
109. Seasonal affective disorder.mp. or exp *seasonal affective disorder/
110. Anxiety.mp. or exp *anxiety/
111. exp *anxiety disorder/ or Anxiety disorder*.mp.
112. Panic disorder.mp.
113. exp *panic/ or Panic.mp.
114. Schizophrenia.mp. or exp *schizophrenia/
115. Paranoid Schizophrenia.mp. or exp *paranoid schizophrenia/
116. Acute Schizophrenia.mp.
117. Paranoid disorder*.mp.
118. Psychosis.mp. or psychosis/
119. Acute Psychosis.mp. or exp *acute psychosis/

120. Schizo*.mp
121. Psychotic*.mp.
122. Psychos*.mp.
123. Atypical Depression.mp. or atypical depression/
124. Depression Emotion.mp.
125. Major Depression.mp. or exp *major depression/
126. Recurrent Depression.mp.
127. Treatment Resistant Depression.mp. or exp *treatment resistant depression/
128. generalized Anxiety Disorder.mp. or exp *generalized anxiety disorder/
129. Anxiety Disorders.mp. or exp *anxiety disorder/
130. Performance Anxiety.mp. or exp *performance anxiety/
131. Anxiety Management.mp.
132. Social Anxiety.mp.
133. Schizophrenia, Paranoid.mp. or paranoid schizophrenia/
134. Schizophrenia, Catatonic.mp. or exp *catatonic schizophrenia/
135. Schizophrenia, Disorganized.mp.
136. (mixed anxiety and depression).mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
137. agitated depression.mp. or exp *agitated depression/
138. minor depression.mp. or exp *minor depression/
139. chronic depression.mp. or exp *chronic depression/
140. (mixed mania and depression).mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
141. anticipatory anxiety.mp. or anticipatory anxiety/
142. anxiety neurosis.mp. or exp *anxiety neurosis/
143. personality disorder.mp. or exp *personality disorder/
144. Histrionic Personality Disorder.mp. or exp *histrionic personality disorder/
145. exp *passive aggressive personality disorder/ or Passive-Aggressive Personality Disorder.mp.
146. Dependent Personality Disorder.mp. or exp *dependent personality disorder/
147. exp *multiple personality/ or Multiple-Personality Disorder*.mp.
148. Borderline Personality Disorder.mp. or exp *borderline state/
149. Avoidant Personality Disorder.mp. or exp *avoidant personality disorder/
150. Narcissistic Personality Disorder*.mp.
151. Schizotypal Personality Disorder.mp. or exp *schizotypal personality disorder/
152. Compulsive Personality Disorder.mp. or exp *compulsive personality disorder/
153. Antisocial Personality Disorder.mp. or exp *antisocial personality disorder/
154. Schizoaffective Disorder.mp. or exp *schizoaffective psychosis/
155. manic depressive psychosis.mp.
156. 86 or 87 or 88 or 89 or 90 or 91 or 92 or 93 or 94 or 95 or 96 or 97 or 98 or 99 or 100 or 101 or 102 or 103 or 104 or 105 or 106 or 107 or 108 or 109 or 110 or 111 or 112 or 113 or 114 or 115 or 116 or 117 or 118 or 119 or 120 or 121 or 122 or 123 or 124 or 125 or 126 or 127 or 128 or 129 or 130 or 131 or 132 or 133 or 134 or 135 or 136 or 137 or 138 or 139 or 140 or 141 or 142 or 143 or 144 or 145 or 146 or 147 or 148 or 149 or 150 or 151 or 152 or 153 or 154 or 155
157. Patient satisfaction.mp. or exp *patient satisfaction/
158. Negotiate*.mp.
159. patient expect*.mp.
160. treatment options.mp.
161. professional-patient relations.mp. or exp *professional-patient relationship/
162. Decision making.mp. or exp *decision making/
163. Patient Activation.mp.
164. Patient Participation Rate*.mp.
165. patient engagement.mp.
166. patient involvement.mp.
167. patient empowerment.mp.
168. exp *patient participation/ or patient participation*.mp.
169. social participation.mp. or exp *social participation/
170. consultation.mp. or exp *consultation/
171. encounter.mp.
172. participation.mp.
173. acceptance.mp.
174. attitude.mp. or attitude/ or attitude to mental illness/
175. attitude to mental illness.mp.
176. relational encounter.mp.
177. support.mp. or exp *social support/
178. social support.mp.
179. intervention.mp.
180. Client Participation.mp.
181. User involv*.mp.
182. User contribut*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
183. User engag*.mp.
184. Consumer involv*.mp.
185. Consumer participat*.mp.
186. Consumer contribut*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
187. Consumer engag*.mp.
188. Involv* user*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
189. Involv* consumer*.mp.
190. Engag* user*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
191. Engag* consumer*.mp.
192. User-centered.mp.
193. Human-centered.mp.
194. Interpersonal Relations.mp.
195. Community Participation.mp. or community participation/
196. Patient-Centered Care.mp.
197. 157 or 158 or 159 or 160 or 161 or 162 or 163 or 164 or 165 or 166 or 167 or 168 or 169 or 170 or 171 or 172 or 173 or 174 or 175 or 176 or 177 or 178 or 179 or 180 or 181 or 182 or 183 or 184 or 185 or 186 or 187 or 188 or 189 or 190 or 191 or 192 or 193 or 194 or 195 or 196

198. teleconsultation/ or Teleconsultation*.mp.
199. Internet Intervention*.mp.
200. Online Intervention*.mp.
201. web-based intervention*.mp. or exp *web-based intervention/
202. internet based intervention*.mp.
203. Remote consultation.mp.
204. text messaging/ or text message.mp.
205. SMS.mp.
206. mobile technology.mp.
207. mobile device.mp.
208. cellular phone.mp.
209. exp *mobile application/ or mobile app*.mp.
210. smartphone.mp. or smartphone/ or microcomputer/
211. mobile phone.mp. or exp *telephone/ or exp *mobile phone/
212. handheld computer.mp.
213. m-health.mp.
214. e-health.mp.
215. Telehealth.mp. or telehealth/
216. Telemedicine.mp. or exp *telemedicine/
217. Telerehabilitation.mp. or telerehabilitation/
218. Telepsychiatry.mp. or exp *telepsychiatry/
219. online therapy.mp.
220. Cell Phone.mp.
221. microcomputer.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
222. telecommunication.mp. or exp *telecommunication/
223. personal digital assistant.mp. or exp *personal digital assistant/
224. 198 or 199 or 200 or 201 or 202 or 203 or 204 or 205 or 206 or 207 or 208 or 209 or 210 or 211 or 212 or 213 or 214 or 215 or 216 or 217 or 218 or 219 or 220 or 221 or 222 or 22
225. 156 and 197 and 224
226. 86 or 93 or 94 or 97 or 98 or 99 or 100 or 104 or 105 or 107 or 109 or 110 or 111 or 113 or 114 or 115 or 118 or 119 or 123 or 125 or 127 or 128 or 129 or 130 or 133 or 134 or 137 or 138 or 139 or 141 or 142 or 143 or 144 or 145 or 146 or 147 or 148 or 149 or 151 or 152 or 153 or 154
227. ((Severe adj3 mental adj3 illness*) or Chronic Mental Illness* or Chronic Psychosis or (mental adj3 disease*) or (mental adj3 illness*) or (Mental* adj3 Disorder*) or (Psychiatric adj3 Disease*) or (Psychiatric adj3 Illness*) or (Psychiatric adj3 Patient*) or (Psychiatric adj3 Disorder*) or (Psychiatric adj3 Diagnos*) or Behavio?r* Disorder or Severe Mental Disorder* or (Mental* adj3 Ill*) or Mood disorder* or Affective Disorder* or (mental health adj3 service) or mental health or Bipolar disorder* or Neurotic disorder* or Depressive disorder* or Dysthymic disorder* or Depression or Seasonal affective disorder or Anxiety or Panic or Schizophrenia or Paranoid disorder* or Psychosis or schizo* or Psychotic*or Psychos* or (Depression adj3 Emotion) or generalized Anxiety Disorder or (mixed mania adj3 depression) or personality disorder* or Schizoaffective Disorder*).mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
228. 226 or 227
229. 157 or 161 or 162 or 168 or 169 or 170 or 174 or 177 or 195
230. (Negotiat* or treatment option* or professional-patient relation* or Professional-Client Relation* or Decision making or social participation or consultation or encounter or participation or acceptance or attitude or (attitude adj3 mental illness) or relational encounter or social support or (Support adj3 Psychosocial) or (User adj3 (involv* or particpat*or contribut* or engag*)) or (Consumer adj3 (involv* or participat* or contribut* or engag*)) or Involv* user* or (Engag* adj3 (user* or consumer*)) or User-centered or Human-centered or Interpersonal Relations or Community Participation or Patient-Cent* Care or Therapeutic Alliance or involvement or empowerment or (Patient* adj3 (satisfac* or Participation Rate* or Activati* or engag* or expect* or involv* or empowerment or participat*)) or (Client* adj3 (Satisfac* or Attitude* or Participat*)) or competency or mental competency).mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
231. 229 or 230
232. 198 or 204 or 209 or 210 or 211 or 215 or 216 or 217 or 218 or 222 or 223
233. (Teleconsultation* or Internet Intervention* or Online Intervention* or web-based intervention* or internet based intervention* or Remote consultation or text message or SMS or mobile technology or mobile device* or cellular phone* or mobile app* or smartphon* or mobile phon* or handheld computer or m-health or e-health or (Electronic adj3 Health Services) or Telehealth or Telemedicine or Telerehabilitation or Telepsychiatry or (online adj3 therapy) or Cell Phone or microcomputer or telecommunication or personal digital assistant or tele consultation or telecommunication* or tele medicine or tele-medicine or telemedical or telecare or ehealth or remote car* or (hospital adj3 home) or Mobile health or (Medical adj3 informatics adj3 application*) or eintervention*).mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
234. 232 or 233
235. 228 and 231 and 234
236. 235 use emczd
237. severe mental illness.mp.
238. Chronic Mental Illness.mp. or exp *Chronic Mental Illness/
239. Chronic Psychosis.mp. or exp *Chronic Psychosis/
240. mental disease.mp.
241. mental illness.mp.
242. exp *Mental Disorders/ or Mental Disorder*.mp.
243. Psychiatric Disease.mp.
244. Psychiatric Illness*.mp.
245. Psychiatric Patients.mp. or exp *Psychiatric Patients/
246. Psychiatric Disorder*.mp.

247. Psychiatric Diagnosis.mp.
248. Behavior Disorder.mp. or exp *Behavior Disorders/
249. Severe Mental Disorder.mp.
250. Mentally Ill*.mp.
251. Mood disorder*.mp.
252. exp *Affective Disorders/ or Affective Disorder*.mp.
253. mental health service.mp. or exp *Mental Health Services/
254. mental health.mp. or exp *Mental Health/
255. exp *Bipolar Disorder/ or Bipolar disorder*.mp.
256. Neurotic disorder*.mp.
257. Depressive disorder*.mp.
258. exp *Dysthymic Disorder/ or Dysthymic disorder*.mp.
259. Depression.mp.
260. masked depression.mp.
261. chronic depression.mp.
262. exp *Bipolar Disorder/ or bipolar depression.mp.
263. long term depression.mp.
264. Seasonal affective disorder.mp. or exp *Seasonal Affective Disorder/
265. exp *Anxiety/ or Anxiety.mp.
266. exp *Anxiety Disorders/ or Anxiety disorder*.mp.
267. exp Panic Disorder/ or Panic disorder*.mp.
268. exp *Panic/
269. exp *Schizophrenia/ or Schizophrenia.mp.
270. Paranoid Schizophrenia.mp. or exp *Paranoid Schizophrenia/
271. Acute Schizophrenia.mp. or exp *Acute Schizophrenia/
272. Paranoid disorder*.mp.
273. exp *Psychosis/ or Psychosis.mp.
274. Acute Psychosis.mp. or exp *Acute Psychosis/
275. Schizo*.mp.
276. Psychotic*.mp.
277. Psychos*.mp.
278. exp *Atypical Depression/ or Atypical Depression.mp.
279. Depression Emotion.mp. or exp "Depression (Emotion)"/
280. Major Depression.mp. or exp *Major Depression/
281. exp *Recurrent Depression/ or Recurrent Depression.mp.
282. exp *Treatment Resistant Depression/ or Treatment Resistant Depression.mp.
283. exp *Generalized Anxiety Disorder/ or generalized Anxiety Disorder.mp.
284. Anxiety Disorders.mp. or exp *Anxiety Disorders/
285. Performance Anxiety.mp. or exp *Performance Anxiety/
286. Anxiety Management.mp. or exp *Anxiety Management/
287. Social Anxiety.mp. or exp *Social Anxiety/
288. Schizophrenia, Paranoid.mp.
289. exp Catatonic Schizophrenia/ or Schizophrenia, Catatonic.mp.
290. exp *"Schizophrenia (Disorganized Type)"/ or Schizophrenia, Disorganized.mp.
291. (mixed anxiety and depression).mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
292. agitated depression.mp.
293. minor depression.mp.
294. chronic depression.mp.
295. (mixed mania and depression).mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
296. anticipatory anxiety.mp.
297. anxiety neurosis.mp.
298. exp *Personality Disorders/ or personality disorder*.mp.
299. Histrionic Personality Disorder.mp. or exp *Histrionic Personality Disorder/
300. exp *Passive Aggressive Personality Disorder/ or Passive-Aggressive Personality Disorder.mp.
301. Dependent Personality Disorder.mp. or exp *Dependent Personality Disorder/
302. Multiple-Personality Disorder*.mp.
303. Borderline Personality Disorder.mp. or exp *Borderline Personality Disorder/
304. exp *Avoidant Personality Disorder/ or Avoidant Personality Disorder.mp.
305. exp *Schizoid Personality Disorder/ or Schizoid Personality Disorder.mp.
306. Narcissistic Personality Disorder.mp. or exp *Narcissistic Personality Disorder/
307. Schizotypal Personality Disorder.mp. or exp *Schizotypal Personality Disorder/
308. Compulsive Personality Disorder.mp. or exp Obsessive Compulsive Personality Disorder/
309. Antisocial Personality Disorder.mp. or exp *Antisocial Personality Disorder/
310. Schizoaffective Disorder.mp. or exp *Schizoaffective Disorder/
311. manic depressive psychosis.mp.
312. 237 or 238 or 239 or 240 or 241 or 242 or 243 or 244 or 245 or 246 or 247 or 248 or 249 or 250 or 251 or 252 or 253 or 254 or 255 or 256 or 257 or 258 or 259 or 260 or 261 or 262 or 263 or 264 or 265 or 266 or 267 or 268 or 269 or 270 or 271 or 272 or 273 or 274 or 275 or 276 or 277 or 278 or 279 or 280 or 281 or 282 or 283 or 284 or 285 or 286 or 287 or 288 or 289 or 290 or 291 or 292 or 293 or 294 or 295 or 296 or 297 or 298 or 299 or 300 or 301 or 302 or 303 or 304 or 305 or 306 or 307 or 308 or 309 or 310 or 311
313. Patient satisfaction.mp.
314. Client Satisfaction.mp. or exp *Client Satisfaction/
315. exp *Negotiation/ or Negotiate*.mp.
316. patient expect*.mp.
317. exp *Client Attitudes/ or Client Attitude*.mp.
318. treatment options.mp.
319. professional-patient relations.mp.
320. Decision making.mp. or exp *Decision Making/
321. Patient Activation.mp.
322. Patient Participation Rate*.mp.
323. patient engagement.mp.
324. patient involvement.mp.
325. patient empowerment.mp.
326. patient participation*.mp.
327. social participation.mp.
328. consultation.mp.
329. encounter.mp.
330. exp *Participation/ or participation.mp.

331. acceptance.mp.
332. attitude.mp.
333. attitude to mental illness.mp.
334. relational encounter.mp.
335. support.mp.
336. social support.mp. or exp *Social Support/
337. intervention.mp. or exp *Intervention/
338. Client Participation.mp. or exp *Client Participation/
339. User involv*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
340. User particpat*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
341. User contribut*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
342. User engag*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
343. Consumer involv*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
344. Consumer participat*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
345. Consumer contribut*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
346. Consumer engag*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
347. Involv* user*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
348. Involv* consumer*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
349. Engag* user*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
350. Engag* consumer*.mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
351. User-centered.mp.
352. Human-centered.mp.
353. exp *Interpersonal Relationships/ or Interpersonal Relations.mp.
354. Community Participation.mp.
355. Patient-Centered Care.mp.
356. Therapeutic Alliance.mp. or exp *Therapeutic Alliance/
357. involvement.mp. or exp *Involvement/
358. exp *Empowerment/
359. 313 or 314 or 315 or 316 or 317 or 318 or 319 or 320 or 321 or 322 or 323 or 324 or 325 or 326 or 327 or 328 or 329 or 330 or 331 or 332 or 333 or 334 or 335 or 336 or 337 or 338 or 339 or 341 or 342 or 343 or 344 or 345 or 346 or 347 or 348 or 349 or 350 or 351 or 352 or 353 or 354 or 355 or 356 or 357 or 358
360. exp *Teleconsultation/ or Teleconsultation*.mp.
361. Internet Intervention*.mp.
362. Online Intervention*.mp.
363. web-based intervention*.mp.
364. internet based intervention*.mp.
365. Remote consultation.mp.
366. text message.mp.
367. SMS.mp.
368. exp *Mobile Technology/ or mobile technology.mp.
369. exp *Mobile Devices/ or mobile device.mp.
370. cellular phone.mp.
371. exp *Mobile Applications/ or mobile app*.mp.
372. exp *Smartphones/ or smartphone.mp.
373. mobile phone.mp. or exp *Mobile Phones/
374. handheld computer.mp.
375. m-health.mp.
376. e-health.mp.
377. exp *Electronic Health Services/ or Electronic Health Services.mp.
378. Telehealth.mp.
379. Telemedicine.mp. or exp *Telemedicine/
380. Telerehabilitation.mp. or exp *Telerehabilitation/
381. Telepsychiatry.mp. or exp *Telepsychiatry/
382. online therapy.mp. or exp *Online Therapy/
383. Cell Phone.mp.
384. microcomputer.mp. or exp *Microcomputers/
385. telecommunication.mp.
386. personal digital assistant.mp.
387. 360 or 361 or 362 or 363 or 364 or 365 or 366 or 367 or 368 or 369 or 370 or 371 or 372 or 373 or 374 or 375 or 376 or 377 or 378 or 379 or 380 or 381 or 382 or 383 or 384 or 385 or 386
388. 312 and 359 and 387
389. 238 or 239 or 242 or 245 or 248 or 252 or 253 or 254 or 255 or 258 or 262 or 264 or 265 or 266 or 267 or 268 or 269 or 270 or 271 or 273 or 274 or 278 or 279 or 280 or 281 or 282 or 283 or 284 or 285 or 286 or 287 or 289 or 290 or 298 or 299 or 300 or 301 or 303 or 304 or 305 or 306 or 307 or 308 or 309 or 310
390. ((Severe adj3 mental adj3 illness*) or Chronic Mental Illness* or Chronic Psychosis or (mental adj3 disease*) or (mental adj3 illness*) or (Mental* adj3 Disorder*) or (Psychiatric adj3 Disease*) or (Psychiatric adj3 Illness*) or (Psychiatric adj3 Patient*) or (Psychiatric adj3 Disorder*) or (Psychiatric adj3 Diagnos*) or Behavio?r* Disorder or Severe Mental Disorder* or (Mental* adj3 Ill*) or Mood disorder* or Affective Disorder* or (mental health adj3 service) or mental health or Bipolar disorder* or Neurotic disorder* or Depressive disorder* or Dysthymic disorder* or Depression or Seasonal affective disorder or Anxiety or Panic or Schizophrenia or Paranoid disorder* or Psychosis or schizo* or Psychotic*or Psychos* or (Depression adj3 Emotion) or generalized Anxiety Disorder or (mixed mania adj3 depression) or personality disorder* or Schizoaffective Disorder*).mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
391. 389 or 390
392. 314 or 315 or 317 or 320 or 330 or 336 or 338 or 353 or 356 or 357 or 358
393. (Negotiat* or treatment option* or professional-patient relation* or Professional-Client Relation* or Decision making or social participation or consultation or encounter or participation or acceptance or attitude or (attitude adj3 mental illness) or relational encounter or social support or (Support adj3

	Psychosocial) or (User adj3 (involv* or particpat*or contribut* or engag*)) or (Consumer adj3 (involv* or participat* or contribut* or engag*)) or Involv* user* or (Engag* adj3 (user* or consumer*)) or User-centered or Human-centered or Interpersonal Relations or Community Participation or Patient-Cent* Care or Therapeutic Alliance or involvement or empowerment or (Patient* adj3 (satisfac* or Participation Rate* or Activati* or engag* or expect* or involv* or empowerment or participat*)) or (Client* adj3 (Satisfac* or Attitude* or Participat*)) or competency or mental competency).mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
394.	392 or 393
395.	(Teleconsultation* or Internet Intervention* or Online Intervention* or web-based intervention* or internet based intervention* or Remote consultation or text message or SMS or mobile technology or mobile device* or cellular phone* or mobile app* or smartphon* or mobile phon* or handheld computer or m-health or e-health or (Electronic adj3 Health Services) or Telehealth or Telemedicine or Telerehabilitation or Telepsychiatry or (online adj3 therapy) or Cell Phone or microcomputer or telecommunication or personal digital assistant or tele consultation or telecommunication* or tele medicine or tele-medicine or telemedical or telecare or ehealth or remote car* or (hospital adj3 home) or Mobile health or (Medical adj3 informatics adj3 application*) or eintervention*).mp. [mp=ti, ab, ot, nm, hw, fx, kf, ox, px, rx, ui, sy, tn, dm, mf, dv, kw, dq, tc, id, tm, mh]
396.	360 or 368 or 369 or 371 or 372 or 373 or 377 or 379 or 380 or 381 or 382 or 384
397.	395 or 396
398.	391 and 394 and 397
399.	398 use psyh
400.	85 or 236 or 399
401.	limit 400 to yr="1860 - 2013"
402.	limit 400 to yr="2013 - 2016"
403.	400 not (401 or 402)
404.	remove duplicates from 401
405.	remove duplicates from 402
406.	remove duplicates from 403
407.	404 or 405 or 406

Reference

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