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Feasibility of a pragmatic allocation guideline for a further processing decision after qualified withdrawal

Master of Science in Health Sciences

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This thesis was compiled at the University Medical Center Hamburg-Eppendorf regarding the project "Placement matching of alcohol-dependent patients based on a standardized admission assessment: rationale and design of a randomized controlled trial" (funding code 01GY1114) of the research group addiction and rehabilitation in the institute of medical psychology.

Inhalt

Content of figures

Content of tables

Abstract

Introduction

Alcohol dependence is an important public health topic due to a high prevalence, mortality rate and health economic costs. To remain those patients abstinent to decrease the high rates and costs an optimal allocation of treatments was shown to be supportive in the USA and Netherlands. Therefore the feasibility of an assessment-based pragmatic allocation guideline (matching guidelines) will be investigated in the setting of German qualified withdrawal and compared to previous study results. The assessment providing the information for the matching guidelines is the Measurements in the Addictions for Triage and Evaluation (MATE). A RCT by Buchholz et al. 2014 with a feedback-interview as an intervention served as the basis for this thesis. Matching guidelines, MATE and feedback-interview build a process for decision-making regarding the referral for further treatment.

Methods

For the purpose of investigating the feasibility of the matching guidelines this was done quantitatively and qualitatively. The quantitative analysis was done by comparing several recommendation steps within intervention and control group which were given during the study. Therefore the overall concordance was calculated as well as Cohen's Kappa for proving the level of agreement. The qualitative analysis was done with a qualitative content analysis. Therefore statements of a focus group discussion regarding the feasibility of the matching guidelines were analyzed.

Results

The results regarding the concordance of the given recommendations ranged from 28-87% and comparisons of the intervention and control group revealed no big differences. In comparison to other studies the referral rate of 48.4% could not be achieved (28%). However statements of the focus group exhibited promising results for a possible implementation of the matching guidelines as well as for the MATE and the feedback-interview.

Discussion

In contrary to the referral rate not achieved, statements within the focus group discussion demonstrated a possible implementation of the matching guidelines as a referral in Germany. Furthermore, a complementary implementation study was mentioned to be necessary proving the feasibility of an implementation.

1. Introduction

1.1 Background

Alcohol dependence and abuse are public health topics of high relevance in Germany. This can be stated due to the prevalence rates in 2012 of 3.4% (1.770 million) for dependence and 3.1% (1.610 million) for abuse (Pabst, Kraus, Gomes de Matos, & Piontek, 2013). However, this differentiation will be reversed by summarizing both disorders as substance use disorder and categorizing the severity regarding the classification system of the diagnostic and statistical manual of mental disorders (DSM 5) (Deutsche Hauptstelle für Suchtfragen e.V., 2013, p.10). This problem occurs more frequently in males (4.7-4.8%) than in females (1.5-2.0%) (Pabst et al., 2013). Furthermore in Germany alcohol dependence and abuse cause an estimated 74.000 deaths per annum (Gaertner, Freyer-Adam, Meyer, & John, 2012) and the economic costs, including direct and indirect costs, amounted to an estimated 26.7 billion Euros per year. Direct costs for example include the costs for in- and outpatient treatment, ambulance service and health reporting system costs. Indirect costs include mortality-loss, invalidity, early retirement, and production losses through rehabilitation (Adams & Effertz, 2011).

Therefore, treatments of substance use disorders are primarily abstinent-oriented with the goal of helping affected persons to deal with their disease. A possible treatment chain may include an addiction-advice, followed by detoxification and finally a withdrawal. The qualified withdrawal is one of the most common treatments in Germany. It includes a physical detoxification, which is arranged actively, including somatic well founded diagnostic and treatment of withdrawal symptoms and differentiated physical co-morbidity. Furthermore, additionally therapeutic activities are essential elements of qualified withdrawal treatment, to strengthen the motivation for treatment regarding the access to further therapy, abstinence and changes in the behavior and lifestyle (Mann, 2002). The usual three weeks of qualified withdrawal treatment could lead to a lower recidivism rate, demonstrated by the increase of abstinence rates from 33% to 48% (Loeber, Kiefer, Wagner, Mann, & Croissant, 2009). Nonetheless, it was also shown, that qualified in- or outpatient withdrawal alone did not to help patients to remain abstinent. This was demonstrated by a 44.3% high relapse rate of patients after two months in accordance with the withdrawal treatment.

However the qualified withdrawal was proven to prepare patients for further treatment steps (Loeber et al., 2009).

Therefore, the referral to further treatment after qualified treatment is important. In Germany different treatment options for patients with alcohol use disorders after qualified withdrawal are ensured, which is embedded in the social codebook under §27 SGB V (Mann, 2002). Examples for such treatment options are outpatient advisory, out- and inpatient treatment, long term care and rehabilitation (Deutsche Hauptstelle für Suchtfragen e. V., 2010, pp. 3–4). However, decision-making structures do not occur in a systematic way and depend largely on regional variations, clinical judgment and the patients' preferences (Friedrichs, Kraus, Berner, Schippers, Broekman, Rist, …, & Buchholz 2013). The referral rate to further treatments following the qualified withdrawal ranges between 11% and 30% in Germany. Those rates were estimated by four different modes of calculation[1] and the calculation with the highest referral rate was 30.5% (Weithmann und Hoffmann, 2006).

Placement matching guidelines are a support to simplify the allocation of patients with history of substance abuse to further treatment. The American Society of Addiction Medicine (ASAM) compiled to be most popular and pioneer guidelines for placement criteria guidelines are. The guidelines aim to find an optimal matching between entities of patients/diagnosis and treatment mode/intensity by the means of a multidimensional rating system (Schulte, Schäfer, & Reimer, 2003). A study by Kosanke et al. (2002) has shown, that the allocation of patients to treatments matching their needs, analyzed by standardized patient placement criteria, improves the effectiveness and cost-effectiveness of treatment (Kosanke, Magura, Staines, Foote, & Deluca, 2002). Moreover the use of placement matching guidelines as mentioned above has been proven to support addiction treatment decisions for further treatments in other countries like the United States (Kosanke et al., 2002; Magura, Staines, Kosanke, Rosenblum, Foote, DeLuca, & Bali, 2003; Turner,

[1] In general 28 out of 105 patients started an inpatient withdrawal treatment after three, six and nine months of qualified withdrawal completion. Additionally estimated four participants, not fulfilling inclusion criteria, were added to the analysis. This calculation leads to a total referral rate of 30.5%, which was stated to be an outstanding referral rate, concerning other present data (Weithmann & Hoffmann, 2006).

Turner, Reif, Gutowski, & Gastfriend, 1999) and the Netherlands (Merkx, Schippers, Koeter, Vujik, Oudejans, DeVries, van den Brink, 2007; Merkx, Schippers, Koeter, Vujik,Oudejans, Stam, & van den Brink, 2011). In these countries matching guidelines have been successfully implemented. Although in Germany matching guidelines are currently not used, the implementation of those was discussed (Buchholz, Rist, Küfner, & Kraus, 2009). Afterwards the placement matching guidelines recently developed by (Merkx et al., 2007) in the Netherlands, were adapted in Germany for a pilot study (Friedrichs et al., 2013).

The Measurements in the Addictions for Triage and Evaluation (MATE) (Schippers, Broekman, Buchholz, & Cox, 2011) is an assessment instrument that was developed to provide information for the placement matching guidelines in substance abuse treatment (Appendix 3). Buchholz et al in 2009 strived for an application and therefore a study was established. The MATE was translated and psychometrically evaluated in Germany according to the dimensionality, interrater-reliability construct validity and application. The study revealed good results in every aspect except the interrater-reliability, which was satisfactory for the standardized module of the MATE, however poor for the semi-standardized modules in general (Buchholz et al., 2009).

In a subsequent study (MATE-LOC; LOC= Levels of Care) the adapted matching guidelines from the Netherlands were used to allocate alcohol dependent patients to a possible best fitting substance abuse treatment after qualified withdrawal. Hence, the MATE was used to collect necessary information for the guidelines in form of an interview. The guidelines use four dimensions, which are calculated using scores with the support of the MATE-interview and, using the placement matching guidelines, an optimum of four LOCs can be suggested for each individual patient. The four LOCs are as follows: LOC1: Outpatient advice, LOC2: Outpatient treatment, LOC3: Day/Residential treatment and LOC4: Care. For the purpose of this study further assessments, such as the Client Sociodemographic and Service Receipt Inventory (CSSRI-EU) and the EQ-5D-5L were used additionally (Buchholz, Friedrichs, Berner, König, Konnopka, Kraus, …, & Röhrig, 2014). The placement matching guidelines, MATE, CSSRI-EU as well as the EQ-5D-5L will be explained further more detailed in the methods part of this thesis (2.2 Instruments).

Since the German and Dutch health care systems differ largely in their structure, the feasibility of the matching guidelines and the MATE needs to be tested and evaluated in the

German context. Results from two pilot studies showed, that the matching guidelines can be applied into the German qualified withdrawal treatment, although they needed some adjustment (Friedrichs et al., 2013; Röhrig, Buchholz, Wahl, & Berner, 2013). In a controlled trial associated to the study of Friedrichs et al. (2013) these matching guidelines have been used with the MATE providing the information for its algorithm (Buchholz et al., 2014). An intervention in form of a feedback-interview conducted by the respective research assistants, following the recommendations of matching guidelines and the clinical team, was the major adjustment. The reason for this intervention was to accomplish a consensual decision for further treatment with the patients based on the recommendation of the MATE and therapeutic team (Buchholz et al., 2014). The Shared-Decision-Making (Charles, Gafni, & Whelan, 1997) combined with Motivational-Interviewing (Miller, 1983) served as the instrument. Local researchers used this intervention to target an amicable decision, including the patients for further treatment referral. The efficacy of this approach regarding treatment outcome will be evaluated in purpose of this study (Buchholz et al., 2014).

Based on this study feasibility of the matching guidelines will be tested by analyzing the collected data quantitatively and a discussion within a focus group about feasibility in a qualitative way. The thesis will be structured as follows: First of all the feasibility will be defined and some results of further feasibility studies will be presented for the matching guidelines, the MATE which delivers the needful information and the feedback-interview. The methodological part demonstrates the used assessments during the study of matching guidelines, MATE, and two other used assessments within the MATE-interview. Furthermore, the procedure of the RCT will be described, which reveals the overall relevant information for this thesis. At the end of this part the statistical and qualitative content analysis will be explained. Finally after the presentation of the results these will be discussed and an outlook for further investigations as well as a conclusion will be drawn.

1.2. Feasibility

As it was described before, the main focus lies in investigating the feasibility of the matching guidelines. Moreover the MATE as the information providing assessment and the feedback-interview as intervention will also be examined. Therefore the following paragraph will be dealing with former feasibility studies of the adapted instruments.

1.2.1 Definition of feasibility

According to Bowen et al. (2009), feasibility studies can provide hints for further research if an intervention is appropriate for further investigation. Additionally, feasibility addresses eight areas, namely: acceptability, demand, implementation, practicality, adaption, integration, expansion, and limited-efficacy testing (Bowen, Kreuter, Spring, Linnan, Weiner, Bakken, …, & Fabrizio, 2009). Every aspect except the limited-efficacy testing will be covered by this master-thesis.

It is important to state that feasibility studies do not evaluate the outcome. The suggested adequate sample size and power size calculation for randomized controlled trials (Arain, Campbell, Cooper, & Lancaster, 2010) was applied for the MATE-LOC study of which the guideline is tested on its feasibility (Buchholz et al., 2014).

The following paragraphs will show results of former studies investigating the feasibility of the matching guidelines and the MATE-interview as the assessment providing information for these guidelines.

1.2.2 Feasibility on assessment based placement treatment matching allocation guidelines

As it was stated before, placement matching criteria can be a helpful tool to allocate patients regarding their needs to further treatment. As it is for the ASAM criteria, feasibility has been proven by 88% (n=~247) of the participants allocated to treatment and 72% (n=~178) of those matched between ASAM-recommended to actual LOCs (Kosanke et al., 2002).

Matching guidelines were developed in the Netherlands based on these ASAM criteria (Merkx et al., 2007). The Dutch version of assessment based matching guidelines using the Addiction Severity Index (ASI) is manual-based for treatment matching and referral comprising an algorithm based on the stepped-care concept of the four LOCs. Findings of this study demonstrated feasibility in allocating patients with alcohol use disorders to the appropriate levels of care with the help of guidelines for assessment and placement process in routine care. The mentioned feasibility was investigated by comparing the recommended with the actual LOCs and the evaluation of reasons for observed differences. Results show that 48.4% of the 1765 patients could be allocated to further treatment based on the algorithm of the guidelines. This concordance was even increased to 60.8% including cases

where the admission counsellor disagreed on the algorithm-suggested LOC and referred those to a treatment considered to be more appropriate (Merkx et al., 2007).

The adaption of this guidelines into the German substance abuse treatment system by Friedrichs et al. (2013) was investigated by an expert discussion using Delphi-technique, which is an iterative multistage process, to transform opinions into group consensus (Hasson, Keeney, & McKenna, 2000). After a consensus-conference the discussed results were implemented with an adoption of the Dutch matching guidelines after qualified withdrawal (Friedrichs et al., 2013).

Moreover, the feasibility of these adapted guidelines was investigated by a pilot study in a clinical context. These guidelines were complemented by multiple assessments, namely the Abstinence Self-Efficacy Scale (ASSE-G), the German version of the Structured Clinical Interview for the DSM IV, Axis II (SCID-II), the German version of Composite International Diagnostic Interview (CIDI, lifetime version), the MATE, and the CSSRI-EU. Furthermore, it was compared whether they contain matches or mismatches between the recommendations of the assessments and the actual treatment. The results evinced feasibility of the placement matching guidelines using the LOC-classification. Everyone out of the 54 participants could be allocated to a LOC based on the calculations of the MATE. However 13 of the 31 participants (~42%) reached for follow-up received exactly the treatment as recommended by the matching guidelines (Röhrig et al., 2013).

1.2.3 Feasibility of the MATE

This part will show results of feasibility of the MATE-interview, which is the assessment providing the information for the matching guidelines in this study context.

In 2010 Schippers et al. investigated the feasibility of the MATE in the Netherlands. This was done by (1) recording number of missing data, (2) number of patients with missing or incomplete data, (3) time required for admission and (4) satisfaction of the counselors. By analyzing the data it turned out that data was missed by 15% of the participants and therefore 5% of all the scores could not be calculated. The results show furthermore that the MATE required 45 minutes to 1 hour and the acceptance of it as an admission assessment was at 60% in Dutch regional addiction service organizations (Schippers, Broekman, Buchholz, Koeter, & van den Brink, 2010).

However, the German version of the MATE was investigated by its reliability, validity and applicability by Buchholz et al. (2009) who examined the interrater-reliability by comparing a primary interview with a second interview. The latter was conducted one week later, with the same patient but with a different interviewer. Additionally to the capture of the concurrent validity of the MATE ICF Core Set and Need for Care (MATE-ICN), coefficients like severity of addiction and desire/craving were tested. Similar to the Dutch study, applicability was tested due to the duration of the interview; an evaluation was made concerning the usage and adequacy of the interview by the interviewers and a further evaluation was done regarding the secure estimation of the MATE-ICN items. Overall the feasibility as well as the dimensionality and concurrent validity of the German version were described as comparable to results of the Dutch version. Interrater-reliability was satisfactory for the standardized parts, but for some semi-structured parts this was not acceptable. Conclusions of this results show that the MATE is a good alternative to other used assessments in the field of addiction. The MATE was developed for treatment allocation and evaluation and is adjusted for those in most aspects. However individual treatment aims and indications can be derived (Buchholz et al., 2009).

1.3 Hypothesis and Research question

The hypothesis in this thesis is as follows: The decision process including matching guidelines, MATE and feedback-interview is feasible in routine care to help stakeholders with the allocation of treatment for patients with alcohol dependence after qualified withdrawal. Feasibility refers the acceptance of the approach (i.e. is the procedure being accepted by clinical team and do they value it as useful in routine care) and to the concordance of the decisions suggested by the matching guidelines with existing decision rules (i.e. with the therapists' recommendation or referral decisions at the end of treatment). Furthermore, the focus group-statements on possible barriers for, and potential benefits from an implementation of the assessment based matching guidelines should illustrate the feasibility of the process in routine care. Additionally, the decision process will be investigated quantitatively by checking the overall concordance of the several recommendations given during the withdrawal treatment until discharge.

2. Methods

2.1. Trial objectives and research questions

The main objective is to evaluate the feasibility of the placement matching approach. Therefore, hypotheses are divided into two aspects. The first two hypotheses refer to the quantitative aspect of feasibility including the concordance of the various recommendations during the study procedure and are as follows:

> H1: The concordance of matching guidelines recommendation to LOCs with the actual LOC entered in equal or more than 48.4% of the cases.
>
> H2: The concordance of matching guidelines recommendation with the treatment actually done at T1 is significantly higher in the intervention group (IG) than in the control group (CG).

The third Hypothesis is regarding to the qualitative approach of feasibility including the focus group discussion with the research assistants is as follows:

> H3: The decision process of the guidelines, the MATE and the feedback interview will be accepted by the clinic teams in clinical practice.

The following research questions are referring to feasibility and especially to a subcategory of acceptance regarding the MATE, the matching guidelines and the feedback-interview as well as all combined as the decision approach:

> R1: How do the clinical staff and research assistants evaluate the application of the MATE?
>
> R2: How do the clinical staff and research assistants evaluate the application of the matching guideline?
>
> R3: How do the clinical staff and research assistants evaluate the application of the feedback-interview?
>
> R4: How do the clinical staff and research assistants evaluate the application of the decision process including the matching guideline, the MATE and the feedback-interview?

R5: According to the clinical staff and research assistants, where could the process be implemented, regarding clinical settings?

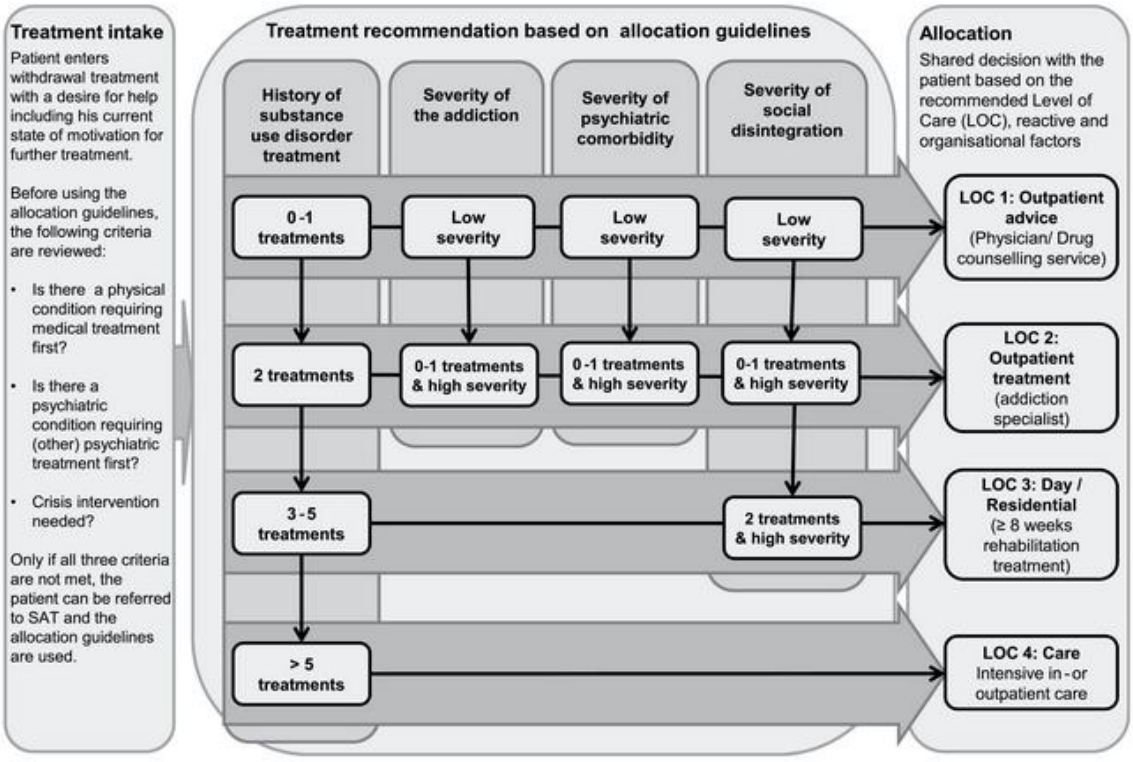
2.2 Instruments

2.2.1 Matching guidelines

The original matching guidelines developed in the Netherlands were constructed to allocate patients to further treatment based on their needs, which was done with and adjusting assessment calculating scores out of the responded questions (see 3.2.2 MATE). Subsequently an algorithm combined these scores and gave a suggestion to a LOC (Merkx et al., 2007).

As described in part 1.2.2 Feasibility on assessment-based placement treatment matching allocation guidelines, Friedrichs et al. (2013) investigated the adaption of these guidelines in Germany and revealed interesting results. Treatment offerings were categorized into the LOCs, relevant indication-criteria were identified and the Dutch allocation guidelines was adapted into the German substance abuse treatment system (Friedrichs et al., 2013). The following figure presents the adapted guidelines, which were included in the RCT by Buchholz et al. in 2014 (Figure 1).

Figure 1 Adapted allocation guidelines for referral decisions after detoxifications



(Buchholz et al., 2014)

2.2.2 Measurements in the Addictions for Triage and Evaluation (MATE)

The semi-structured MATE assessment was performed as a face to face interview and took about 45 minutes. It was generally used with a computer-assisted version. The MATE contains 10 modules:

1. Substance use (past 30 days and person`s lifetime)
2. Indicators for psychiatric or medical consultation
3. History of treatment for substance use disorders
4. Substance dependence and abuse
5. Physical complaints
6. Personality
7. Activities and participation; care and support (MATE-ICN)
8. Environmental factors influencing recovery (MATE-ICN)

Q1. Craving

Q2. Depression, anxiety, and stress

These modules can produce 20 sum scores. These scores are divided into four dimension scores namely: (1) Addiction severity, (2) severity of psychiatric co-morbidity, (3) severity of social disintegration, and (4) history of treatment for a substance-use disorder. Referring to these four scores a recommendation to one of the four LOCs of the formerly described matching guidelines can be made. Acceptance of psychometric properties and the feasibility for use in routine care and research setting of the MATE was tested in the Netherlands as well as in Germany (Buchholz et al., 2009; Schippers et al., 2010). As it was described previously the MATE serve as an assessment for providing the information for the matching guidelines.

During the follow-up (t1) the MATE-outcomes were used for the purpose of treatment evaluation. This assessment is a shortened version of the MATE and was conducted via telephone (Buchholz et al., 2014).

During the study the interview was conducted with the CSSRI-EU and the EQ-5D in addition to the MATE. Both assessments are being explained in the next paragraphs.

2.2.3 Client Sociodemographic and Service Receipt Inventory (CSSRI-EU)

The CSSRI-EU is an assessment to evaluate cost-effectiveness analyses on national and international level. It is divided into five categories: (1) sociodemographic data including age, sex, family status, school and vocational education; (2) living situation of the partici

pants including lifestyle, type of living and changes in accommodation during observation; (3) occupation and income including employment status, occupation, days of disability, type and extent of social support; (4) use of utility services including residential, inpatient, outpatient and complementary care, police and judiciary contacts; and (5) medication including type and name of medication, dose, number and size of pharmaceutical packing picked up at pharmacy. The use of the CSSRI-EU is proven practicable and the questions are well understandable for participants. An interview takes about 20 minutes (Roick, Kilian, Matschinger, Bernert, Mory, & Angermeyer, 2001). This assessment was integrated into the MATE-interview for the purpose of the health economic outcome for the RCT by Buchholz et al (2014).

2.2.4 EQ-5D-5L

The EQ-5D-5L is a generic instrument to describe and expose the health-related quality of life. It contains five dimensions: (1) mobility, (2) self-care, (3) general activities, (4) pain/physical complaints and (5) anxiety/depression (Greiner & Claes, 2007, p. 406). Possible answers are divided into 5 scales ranging from 1 no problems to 5 heavy problems (van Reenen & Janssen, 2015). With the help of these answers a five-digit number is generated to establish the person`s self-reported state of health. Additionally a visual analogue scale called EQ-VAS is used to measure the self-reported overall health state on a scale from 0 (worst imaginable health state) to 100 (best imaginable health state). Validity and acceptance of the EQ-5D has been examined for alcohol dependent-patients (Günther, Roick, Angermeyer, & König, 2007).

2.2.5 Focus group discussion guide

The questions for the focus group discussions with the research assistants were developed previously and were divided into two parts[2]:

1) Matching guidelines as part of the study
   - Study conduct:
     - How was the study accepted at your ward?
     - How did the cooperation with the team work out?
     - How were the assessment-instruments accepted- by you and the patient?
     - How did you experience the documentation effort?

[2] The original German questions can be found in Appendix 1

- How plausible were the decisions of the matching guidelines?
    - Understandability
    - Adequacy
    - Concordance with the team
- How did the feedback-interview proceed with regard to making a decision for further treatment?
- How did you feel about the feedback-interview in general?
- What kinds of reasons are imaginable for the low rate of recommended/initiated treatment?
    - Study-conduct/ organization?
    - Patients have decided for another treatment after the intervention?
    - Other influences during the remaining hospital stay?
- Did the training prepare you adequately for conducting the study?
    - Local organization of the study
    - Conducting the assessments
    - Conducting the feedback-interview

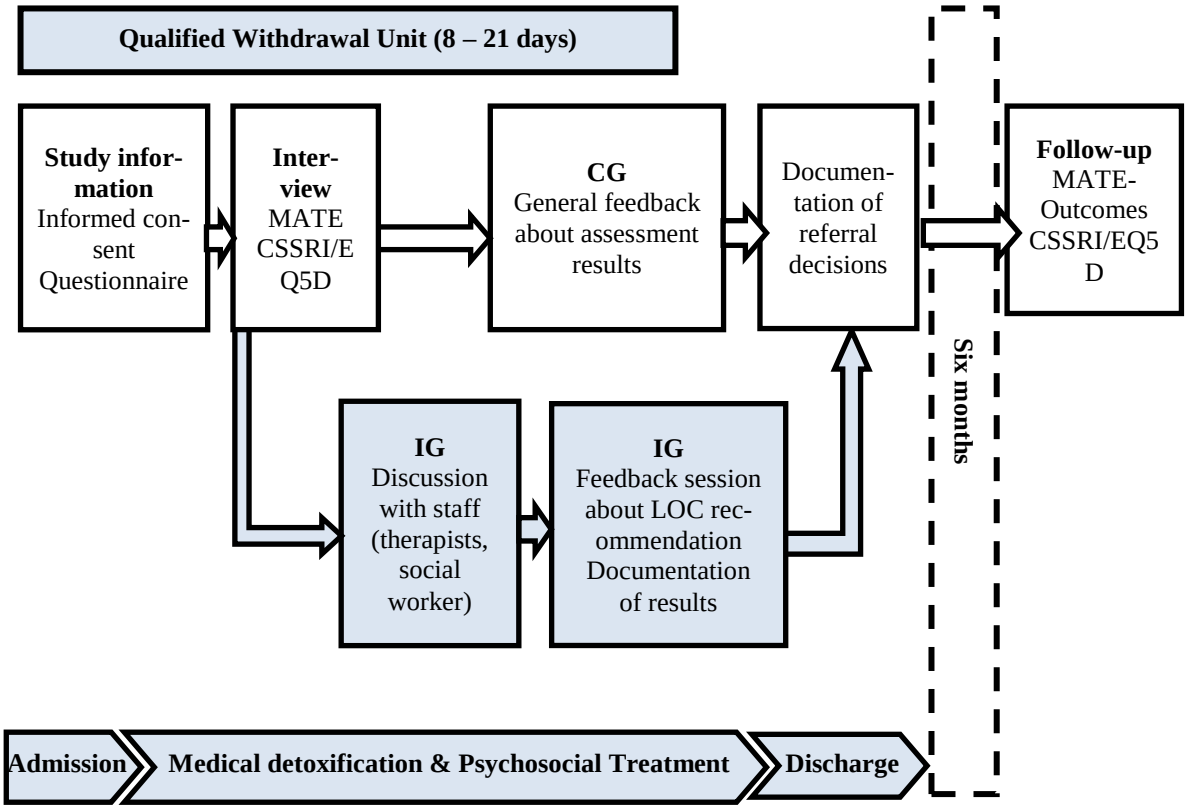
2) Matching guidelines-implementation without the study
    - Which conditions are necessary for the implementation of the matching guidelines?
    - Which barriers/worries may exist in the team?
    - Which positive effects may appear regarding the clinical team and the whole procedure at the ward?
    - How could the patients accept the matching guidelines?

2.3 Study procedure RCT (quantitative data collection)

Patients of four different qualified withdrawal units of cooperating clinics in Hamburg, Essen, Freiburg and Münster were asked to take part in the study directly after admission. The actual assessment was scheduled after the withdrawal symptoms of the patients decreased. After the patients signed an informed consent, they would have been asked to complete a questionnaire before beginning the first assessment, including the MATE, CSSRI-EU, and EQ-5D. The basic condition was the scheduling of withdrawal symptoms at a minimum level, judged by the medical staff. After that the computer-assisted MATE

randomly assigned the participants either to the IG or CG which would have been communicated only to the local research assistants. For patients of the IG intervention in form of a feedback session, including the methods of Motivational Interviewing and Shared Decision Making and a feedback about the LOC recommendation as well as a documentation of results was performed. Before conducting the MATE-interview and the feedback session, research assistants got an extensive training within two days. Patients of the CG received a general feedback about the assessment results. Finally with the termination of the withdrawal treatment, every decision and arrangements concerning further treatment was documented for both groups. Six months after the qualified withdrawal, a follow-up interview was conducted by two research assistants in Hamburg with the MATE-Outcome, the CSSRI-EU and the EQ-5D. The follow up included patients of both groups, the IG and the CG, to evaluate the primary outcomes of the study, which were alcohol consumption and health care costs (Buchholz et al., 2014). These were conducted via telephone by the research assistants located in Hamburg and took about 30 minutes. The data was entered simultaneously into a computerized version of the assessments. The following flowchart visualizes the study procedure (Figure 2).

Figure 2 Flowchart of patient progress through the qualified withdrawal unit and study procedure



(Buchholz et al., 2014)

2.4 Focus group discussion (qualitative data collection)

Qualitative data was gained from focus group discussions with the research assistants. One focus group discussion took place at an official appointment and the other was conducted via telephone-conference. The intention of a focus group is to collect data from experts of the substance abuse treatment and their thought, attitude and feelings about the feasibility of the matching guidelines and the decision-making process (Gläser & Laudel, 2010, pp. 11–12). The discussion at the official appointment included a presentation of preliminary results, an actual case report and a discussion of the presented results. Although the discussion via telephone did not include the presentation of preliminary results, the questions were structured in the same way. This interview guideline is described as an essential part of the focus group discussion (Gläser & Laudel, 2010, p. 111).

The presentation of the preliminary results on the first occasion contained the current status of included participants and follow-ups, positive and negative aspects of data collection, dropouts, declinations, sociodemographic data, motivation for treatment of the patients, attitude towards decisions about treatments, patients' wish for further treatment and concordances of different treatment recommendations during the study. The second part dealt with possible implementation of the allocation guidelines and the MATE at the qualified withdrawal including necessary conditions for implementation, barriers and worries, positive effects for the team and ward as well as the acceptance by the patients. Additionally, results of this part were documented on a flip chart.

Every focus group discussion was audio-taped and transcribed by the rules of clean, read or smooth verbatim transcription (Philipp Mayring, 2014, p. 45) using the software F4 transcript by Dresing and Pehl (2013). Furthermore, for the purpose of data quality both interviews were recorded in handwriting by an attendant student.

2.5 Statistical analysis

The scientific interest was the investigation of the different recommendations given at different time-points during the qualified withdrawal. Therefore analysis took place by examining the concordance of the different recommendations. To differentiate between the several recommendation steps, every advice given during the process was investigated individually. The different recommendation steps are the proposal of the matching guidelines with the help of the MATE, the therapeutic team, the feedback-interview with patients of

the IG, the referral at discharge and the actual treatment done at the time-point of follow-up six months after discharge. This was done by using the software of IBM SPSS Statistics 21. The concordance of these consecutive recommendations was analyzed. Furthermore the MATE was compared to the feedback-interview, discharge and follow-up to give an overview of the concordance of the MATE to the different recommendations:

- MATE vs. therapeutic team
- Therapeutic team vs. feedback-interview
- Feedback-interview vs. discharge
- Discharge vs. follow-up
- MATE vs. feedback
- MATE vs. discharge
- MATE vs. follow-up

The latter comparisons of MATE vs. discharge as well as MATE vs. follow-up were also analyzed for the CG. These concordances were analyzed by doing crosstabs stepwise for each recommendation pair. To further investigate the inter-rater reliability, Cohen's Kappa (Cohen, 1960) was calculated to demonstrate the quality of concordance. Overall concordance was demonstrated by analyzing every matching of recommendations within the two groups. The calculated Cohen's Kappa was used to interpret and test the sustainability of concordance's agreements. Therefore the level of agreements by Landis and Koch (1977) will be used which are as follows: κ<0= poor agreement, κ 0-0.20= slight agreement, κ 0.21-0.40= fair agreement, κ 0.41-0.60= moderate agreement, κ 0.61-0.80= substantial agreement, and κ 0.81-1.00= (almost) perfect agreement (Landis & Koch, 1977).

2.6 Qualitative data analysis

The description of the qualitative data analysis will be divided into the parts of transcription and qualitative content analysis.

2.6.1 Transcription

The transcription was done by the clean read or smooth verbatim transcription recommended by Mayring (2014). For the purpose of investigating the feasibility in a setting of a focus group discussion only essential statements were transcribed out of the audio-recorded discussion. This means the focus was on the content of the discussion. However

firstly a rough transcription was carried out, where every spoken word was transcribed. Laughter, speech pauses, verbiages or other non-content relevant statements were deleted as a second step. Thirdly, sentence-structure or spelling mistakes were corrected for purpose of better understanding and readability. Moreover time-markers were inserted after a person's statement. For the purpose of anonymity, participants of the focus-group were encoded as a P for participant, followed by a serial number. Hints to the participants' origin, such as persons working in the concerning clinic and the name or location of the clinic were anonymized as well.

2.6.2 Qualitative Content Analysis

The data analysis of this study refers to Cresswell's data analysis spiral (Cresswell, 2013, p. 183). Therefore, after the data was collected they were saved as audiotape-files for transcription. Hereafter the transcribed text was read once again and comments were noted in a text-file. The actual analysis, meaning description, classification and interpretation of the data (Cresswell, 2013, pp. 183–187) was conducted by the pragmatic qualitative content analysis (QCA) (Mayring, 2010; 2014). The overall aim of QCA is to systematically characterize the meaning of the material systemically (Schreier, 2012, p. 3). Moreover, the main principle of the QCA is to extract the results out of the text with a subsequent analysis and interpretation of these results (Gläser & Laudel, 2010, pp. 199–204). Mayring suggests to apply a three step analysis including summarizing, explicating and structuring of the data (Mayring, 2010, p. 114).

The main part of the QCA for this focus group discussion was executed by structuring, involving the inductive category formation and explication. Structuring was done by filtering the pre-determined structure of the focus group interview guidelines out of the material by formal aspects based on the presented results in the discussion, as well as aspects concerning relevant content or specified types of the presentation for the research questions. Therefore the allocation of text material to the categories was clear (Mayring, 2010, p. 92). At first the set of categories was determined deductively on the basis of the interview guidelines for the focus group. While passing through the text, passages or sentences were then allocated to the appropriate category. Subsequently a sample of a text passage was cited and allocated to the category to demonstrate the feature of a category. After that coding rules were developed if difficulties in the allocation of passages to categories occurred (Mayring, 2014, p. 95). The allocation was done with the support of the software

MAXQDA. Furthermore allocated statements were paraphrased in a consistent level of language only concentrating on the content. Hereafter every paraphrase that fell under the level of a beforehand settled abstraction was generalized. Paraphrases lying over the level of abstraction were left out. Hence coextensive paraphrases were omitted. The last step of the summarizing process was to condense the coextensive paraphrases as well as echoing those with a new statement (Mayring, 2014, p. 96). Regarding the procedure of summarizing and analyzing the results of allocation, the final category system and list of codes were imported from MAXQDA into Microsoft Excel 2010. Deductive categories were structured in a nominal category system, because the categories did not show ordinal characteristics (Mayring, 2014, p. 98).

Additionally the inductive category formation was conducted while structuring the material. The inductive character is justified in the summarizing of the categories directly out of the transcribed material. Whenever a text passage did not fit to a pre-defined category, new categories were constructed inductively and the text passage was allocated to those. When new passages were found, it was decided whether they fitted with the constructed category or a new category had to be developed. The new categories were characterized as a completely new or a sub-category of already established categories. When 10% to 50% was worked through and no new categories could be found, the whole category system was revised. In the case of any changes to the category system, the whole material had been worked through from the beginning (Mayring, 2014, p. 81). The suggestion of building ten to thirty categories by Mayring 2014, p. 81 could not be considered. Only four subcategory and three new categories could inductively be developed. After completing the analysis, the category system was interpreted with regard to the aims of analysis (Mayring, 2014, p. 82).

The explication was done within the structuring process by searching for additional comments within the given material, to explicate possible questionable text passages (Mayring, 2010, p. 85). Mayring explains: “The object of this analysis is to provide additional material on individual doubtful text components (terms, sentences…) with a view to increasing understanding, explaining, interpreting, the particular passages of text” (Mayring, 2014, p. 64) . This was done to help systemizing the search for explication material (Mayring, 2010, pp. 85–86). At first the additional interpreted material was determined and the close context as the direct reference in the text was analyzed. Then paraphrases of the text passages

were developed as described in the process of summarizing beforehand. Finally clarifying statements were allocated to the cloudy text passage of the matching category (Mayring, 2014, pp. 90–91). In case of negative results, new explanation material was determined and analysis of context was passed through once again (Mayring, 2010, p. 86).

After finishing the phases of Cresswell's data analysis spiral, data is visualized (Cresswell, 2013, pp. 187–188) by the following table (Table 1), showing the developed category system. Arial printed categories are the ones developed deductively and those underlined are the new constructed categories:

Table 1 Category system with sub-categories

Main Category	Sub-category	Category No.
Acceptance of the MATE by	Research assistants	1
	Patients	2
	Team	3
Acceptance of the study by	Research assistants	4
	Patients	5
	Team	6
Cooperation of the clinical team with the research assistants	Good cooperation	7
	Difficulties in cooperation	8
Documentation effort	-	9
Plausibility of the matching guidelines	-	10
Proceeding of decisions for further treatment in feedback-interview	-	11
Feelings about feedback-interview in general	-	12
Opinions about preparation of the training for	Locally organization of the study	13
	Performance of the assessments	14
Thinkable reasons for low rate of recommended or initiated treatments at discharge	-	15
Suggestions for conditions with an implementation of	Matching guidelines	16
	MATE	17
	Feedback-interview	18
	Decision-making process	19
Possible barriers and worries with an the implementation of	Matching guidelines	20
	MATE	21
	Matching guidelines in combination with MATE	22
Possible positive effects and additional values of the decision-making process for	Patients	23
	Team (Procedure at the ward)	24
Possible implementation settings for matching guidelines	-	25
Possible improvements of acceptance by patients regarding the matching guidelines	-	26
Limitations within the study	-	27
Biases for the study-results	-	28

3. Results

Results will be presented separately for the quantitative and the qualitative data. At first the concordance of different treatment recommendations, then the study population of the focus group and the results out of the discussions will be presented.

3.1. Concordance of different treatment recommendations

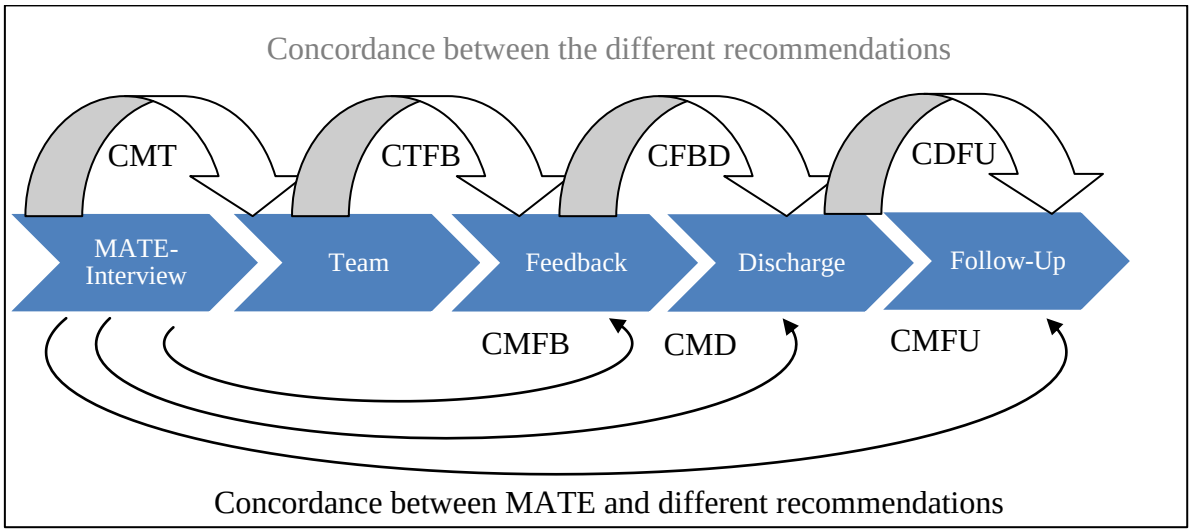
The following tables demonstrate the concordance of the different recommendations given by the MATE (matching guidelines in combination with MATE), the therapeutic team, at the feedback session and discharge in the intervention group. Numbers in bold type show the most occurring recommendation by the following recommendation within one LOC by the further recommendation. Concordance is understood to mean that the previous recommended LOC is the same as the LOC by the following recommendation. These are visualized in the tables with a blue background. Not concordant frequencies of recommended LOCs are represented either by an over- or under-recommendation. Over-recommendation is characterized by a higher LOC of the following recommendation and under-recommendation is characterized by a lower LOC of the following recommendation. Cohen's Kappa and the overall concordance are described below the respective tables.

Concordance will be presented in the way of how recommendations were given to the IG or CG within the clinical trial. After that MATE is the reference point for the following concordance. The presented percentages within the recommended LOCs refer to the total population of the respective comparisons of recommendations.

3.1.1 Concordance of different treatment recommendations in the IG

At first the concordance of the different recommendations in the IG was analyzed. The procedure of given recommendations during the clinical trial is illustrated in the following figure. The upper bigger arrows represent the concordance within the different recommendations during the clinical trial whereas the lower arrows represent the analyzed concordances with the recommendation of the MATE-interview. Figure 3 demonstrates the pathway of recommendations given to the patients during the study. Every concordance between two recommendations will be named by a C for concordance and the initial letter of the recommendation. Feedback (FB) and Follow-Up (FU) are exceptions and will be named by the initial with an extra letter.

Figure 3 Concordance of different recommendations in the IG



As it is shown for the comparison of the recommendations by the MATE and the clinical team (Table 2), the percentage of concordances within the same LOCs is higher than the over- or under-recommendations, except for the MATE recommendation of LOC1. In this case the team also recommended a LOC2 in 47% of the cases. The overall concordance of 59% demonstrates an interrater-reliability of Kappa=.41.

Table 2 Concordance between recommendations by MATE and by therapeutic team (IG)

MATE/Team CMT	LOC1	LOC2	LOC3	LOC4	Total
LOC1	**7 (6%)**	**7 (6%)**	1 (1%)	0	15
LOC2	1 (1%)	**23 (19%)**	11 (9%)	0	35
LOC3	0	13 (11%)	**27 (22%)**	2 (2%)	42
LOC4	0	4 (2%)	11 (9%)	**14 (12%)**	29
Total	8	47	50	16	121

Kappa=.41; Concordance=59%

The concordance of the recommendations between the clinical team and the feedback-interview (Table 3) also illustrates a higher concordance within the similar LOCs. Over- and under-recommendations occur less, which is shown by a accordance of 87% with a Kappa of .80. Further in this analysis 13 missings occurred of which 11 patients did not

exhibit a recommendation of the feedback-interview and are therefore not considered in this analysis.

Table 3 Concordance between recommendations by therapeutic team and at feedback session (IG)

Team/Feedback CTFB	LOC1	LOC2	LOC3	LOC4	Total
LOC1	**7 (6%)**	0	0	0	7
LOC2	1 (1%)	**43 (40%)**	1 (1%)	0	45
LOC3	1 (1%)	8 (7%)	**31 (29%)**	0	40
LOC4	0	0	3 (3%)	**13 (12%)**	16
Total	9	51	35	13	108

Kappa=.80; Concordance=87%

For the concordance between recommendation of the feedback-interview and the recommended and initiated treatment at discharge (Table 4) results show an overall concordance of 68% For 22 patients there is no data for this analysis of which 11 did not exhibit a recommendation of the feedback-interview and 8 had neither a recommended nor an initiated treatment recommendation at discharge. The accordance is demonstrated by a Kappa of .49.

Table 4 Concordance between recommendations at feedback session and recommended or initiated treatment at discharge (IG)

Feedback/Discharge CFBD	LOC1	LOC2	LOC3	LOC4	Total
LOC1	2 (2%)	**5 (5%)**	1 (1%)	0	8
LOC2	5 (5%)	**36 (35%)**	7 (7%)	1 (1%)	49
LOC3	1 (3%)	8 (8%)	**23 (23%)**	1 (1%)	33
LOC4	1 (1%)	2 (2%)	1 (1%)	**8 (8%)**	12
Total	9	51	32	10	102

Kappa= .49; Concordance=68%

Results for the concordance of recommended or initiated treatments at discharge and the actual treatment done by the patients after six months (Table 5) demonstrate no concordance within LOC1. The highest concordance is shown within the LOC3 with 25%, followed by LOC2 with 19% and LOC4 with 5%. Overall concordance is 49% with a Kappa of .26. For eight persons the documentation of the discharge was missing and for 26 patients there was no information about the treatment done at T1. Therefore those are left out for the purpose of analysis.

Table 5 Concordance between recommended or initiated treatment at discharge and actual treatment at follow-up (IG)

Discharge/T1 CDFU	LOC1	LOC2	LOC3	LOC4	Total
LOC1	0	0	**3 (5%)**	0	3
LOC2	6 (10%)	**11 (19%)**	4 (7%)	4 (7%)	25
LOC3	3 (5%)	5 (8%)	**15 (25%)**	2 (3%)	25
LOC4	0	2 (3%)	1 (2%)	**3 (5%)**	6
Total	9	18	23	9	59

Kappa= .26; Concordance= 49%

As it is for the comparison of the recommendation by the MATE and out of the feedback-interview (Table 6), the concordance is higher in the similar LOCs than in the over- or under-recommendations. One exception is for the LOC1 recommendation by the MATE. Here in the feedback-interview the recommendation of LOC2 shows the same amount of recommendations as for LOC1. In this analysis 14 missings occurred in which again 11 received no decision at the feedback-interview. The overall concordance is 54% with a Kappa of .36

Table 6 Concordance between recommendations by MATE and at feedback-interview (IG)

MATE/Feedback CMFB	LOC1	LOC2	LOC3	LOC4	Total
LOC1	**6 (6%)**	**6 (6%)**	1 (1%)	0	13
LOC2	2 (2%)	**22 (20%)**	8 (7%)	0	32
LOC3	0	17 (16%)	**19 (17%)**	1 (1%)	37
LOC4	1 (1%)	7 (6%)	7 (6%)	**12 (11%)**	27
Total	9	52	35	13	109

Kappa= .36, Concordance=54%

Results of the comparison between the recommendations of the MATE and the recommended or initiated treatment at discharge (Table 6) demonstrate that in LOC2, LOC3 and LOC4 the concordance within the similar LOCs is higher than in the over- and under-recommendation. On the other hand LOC1 presents a lower concordance within the similar LOC and a five per cent higher amount for LOC2. Again eight patients show no documentation at discharge and the accordance of 45% demonstrates a Kappa of .23.

Table 7 Concordance between recommendations by MATE and recommended or initiated treatments at discharge (IG)

MATE/Discharge CMD	LOC1	LOC2	LOC3	LOC4	Total
LOC1	3 (3%)	**9 (8%)**	2 (2%)	0	14
LOC2	2 (2%)	**20 (17%)**	10 (9%)	0	32
LOC3	5 (4%)	17 (15%)	**19 (17%)**	1 (1%)	42
LOC4	0	9 (8%)	8 (7%)	**10 (9%)**	27
Total	10	55	39	11	115

Kappa= .23; Concordance=45%

Further the concordance of the recommendation by the MATE and the actual treatment done during the follow-up was investigated. In LOC3 the recommendation demonstrates the highest concordance within this LOC with 17%. As it is for LOC2 and LOC4 in those

cases the most patients were doing a treatment of LOC3 after six months. There is no information available for 26 patients out of the follow-up interview. The overall concordance is 28% with a Kappa of -.01.

Table 8 Concordance between recommendation by MATE and the actual treatment at follow-up (IG)

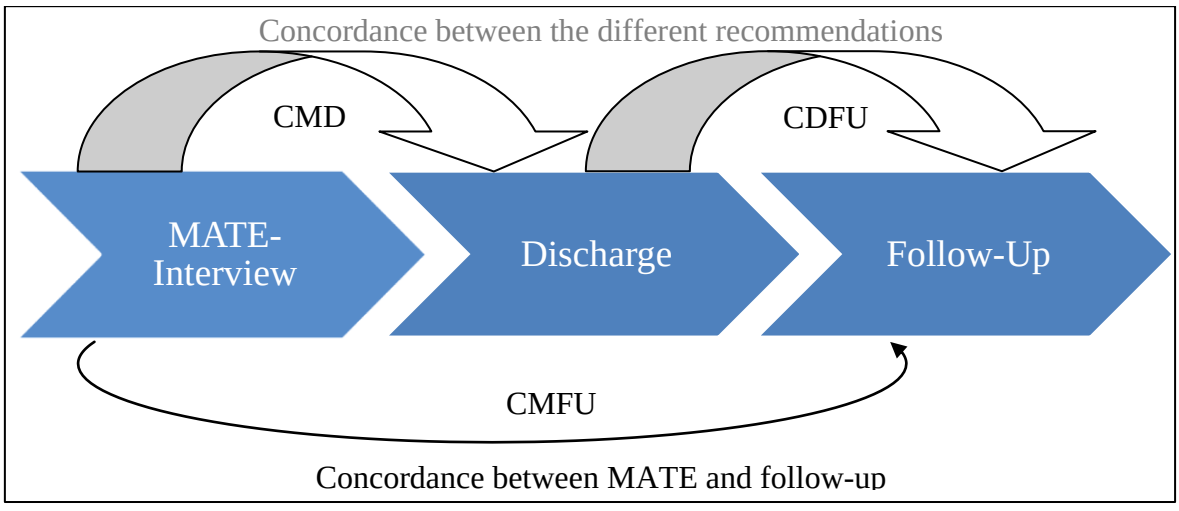
MATE/T1 CMFU	LOC1	LOC2	LOC3	LOC4	Total
LOC1	**2 (3%)**	**2 (3%)**	1 (2%)	1 (2%)	6
LOC2	2 (3%)	3 (5%)	**6 (10%)**	1 (2%)	12
LOC3	4 (7%)	**9 (15%)**	**10 (17%)**	5 (8%)	28
LOC4	2 (3%)	4 (7%)	**6 (10%)**	2 (3%)	14
Total	10	18	23	9	60

Kappa= - .01; Concordance=28%

3.1.2 Concordance of different treatment recommendations in the CG

As beforehand now the concordance of the different recommendations in the CG was analyzed as well. The procedure of the recommendations given to the CG is illustrated below (Figure 4). Further the structure is the same as described for Figure 3.

Figure 4 Concordance of different recommendations in the IG



It is demonstrated that the concordance in the CG between the MATE recommendation and the recommended or initiated treatment at discharge (Table 9) is only higher within LOC2. Further in every LOC recommended by the MATE the treatment recommended or

initiated at discharge is higher in LOC2. Ten patients were missings because those recommendations or initiations were not documented at discharge. The overall accordance of 39% demonstrates a Kappa of .16.

Table 9 Concordance between recommendation by MATE and recommended or initiated treatments at discharge (CG)

MATE/Discharge CMD	LOC1	LOC2	LOC3	LOC4	Total
LOC1	7 (6%)	**9 (8%)**	5 (4%)	0	21
LOC2	3 (3%)	**22 (19%)**	13 (11%)	0	38
LOC3	5 (4%)	**17 (15%)**	10 (9%)	2 (2%)	34
LOC4	6 (5%)	**9 (8%)**	2 (2%)	7 (6%)	24
Total	21	57	30	9	117

Kappa= .16; Concordance=39%

Results of concordance, between decision for treatment at discharge and the actual treatment done after six months (Table 10), demonstrate no concordance within LOC4, 3% within LOC1 and 20% within LOC3 as well as 25% within LOC2. Once more the accordance is 48% with a Kappa of .23. In 10 cases no documentation of discharge and in 14 cases no information about LOC at T1 was present.

Table 10 Concordance between recommended or initiated treatment at discharge and actual treatment at follow-up (CG)

Discharge/T1 CDFU	LOC1	LOC2	LOC3	LOC4	Total
LOC1	2 (3%)	2 (3%)	**5 (8%)**	1 (2%)	10
LOC2	4 (6%)	**16 (25%)**	10 (16%)	3 (5%)	33
LOC3	2 (3%)	3 (5%)	**13 (20%)**	1 (2%)	19
LOC4	**1 (2%)**	**1 (2%)**	0	0	2
Total	9	22	28	5	64

Kappa= .23; Concordance=48%

Additionally the comparison of the recommendation by MATE and the actual treatment done during the follow up (Table 11) was investigated for the CG as well. None of the recommended LOC shows the highest amount of concordance with the actual treatment done during follow-up. In the LOC1 and LOC2 an over-recommendation is demonstrated and in the cases of LOC3 and LOC4 an under-recommendation is demonstrated. It is obvious that the most patients were doing a treatment of the LOC3, except in the recommended LOC3 by the MATE. There is no information available for 14 patients of the CG. The overall concordance is 28% with a Kappa of -.03.

Table 11 Concordance between recommendation by MATE and the actual treatment at follow-up (CG)

MATE/T1 CMFU	LOC1	LOC2	LOC3	LOC4	Total
LOC1	3 (4%)	4 (6%)	**5 (8%)**	0	12
LOC2	2 (3%)	8 (12%)	**14 (21%)**	1 (2%)	25
LOC3	2 (3%)	**9 (13%)**	7 (10%)	3 (5%)	21
LOC4	2 (3%)	2 (3%)	**4 (6%)**	1 (2%)	9
Total	9	23	30	5	67

Kappa= -.03; Concordance=28%

3.1.3 Comparison between the concordance of IG and CG

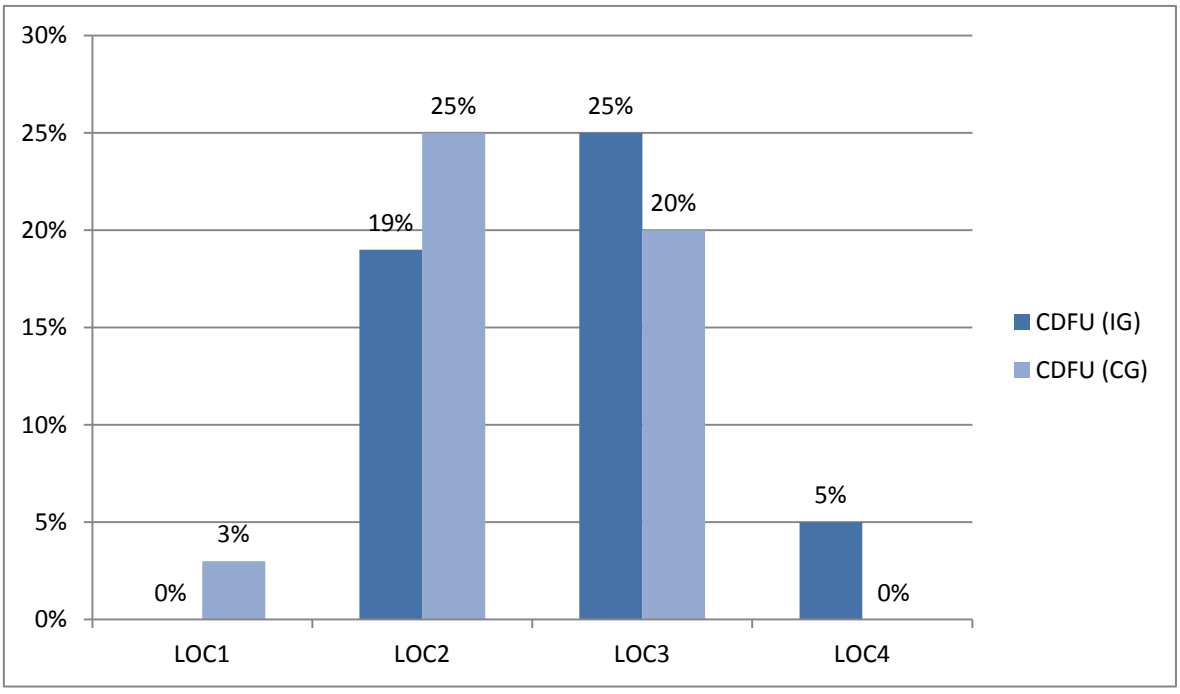
The following table (Table 12) illustrates the overall concordance and its interrater-reliability for each analysis recommendation pair within both groups. Results show that in every case except concordance of MATE and discharge (CDFU) the concordance in the CG is higher than in the IG, but for the level of agreement these are higher for the IG in each comparable case. Within the IG, concordance decreases within the consecutive recommendations after the comparison of team and feedback recommendations (CTFB). The concordance of the recommended and initiated treatments at discharge and the follow-up (CDFU) is higher as it is for MATE and discharge (CMD) in the IG but lower in the CG. Finally the concordance of MATE and follow-up (CMFU) demonstrates the lowest concordance within both groups.

Table 12 Comparison of IG and CG concordances

Concordance of Recommendations	within IG	within CG
MATE vs. Team — CMT	59%; Kappa= .41	---
Team vs. Feedback — CTFB	87%; Kappa= .80	---
Feedback vs. Discharge — CFBD	68%; Kappa= .49	---
Discharge vs. Follow-up — CDFU	49%; Kappa= .26	39%; Kappa= .16
MATE vs. Feedback — CMFB	54 %; Kappa= .36	---
MATE vs. Discharge — CMD	45%; Kappa= .23	48%; Kappa= .23
MATE vs. Follow-up — CMFU	28%; Kappa= -.01	28%; Kappa= -.03

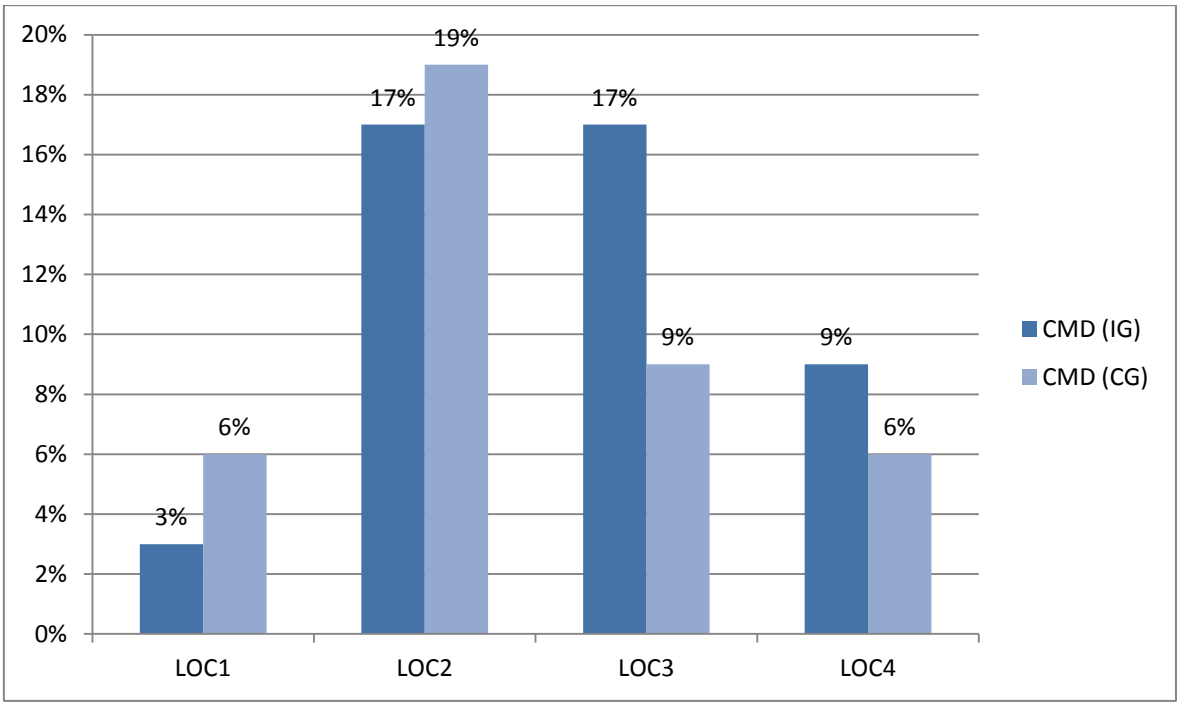
As presented in figure 5 the concordance within the LOCs recommended at discharge and done after follow-up is higher for the CG except for LOC3 and LOC4. In the IG no recommendation for a treatment of LOC1 was given out of the MATE and in the CG no recommendation was given for a treatment of LOC4. The overall concordance within the IG is 49% and therefore higher than in the CG 39%. As well the level of agreement is .10 higher in the IG than in the CG.

Figure 5 Concordance Discharge/Follow-Up



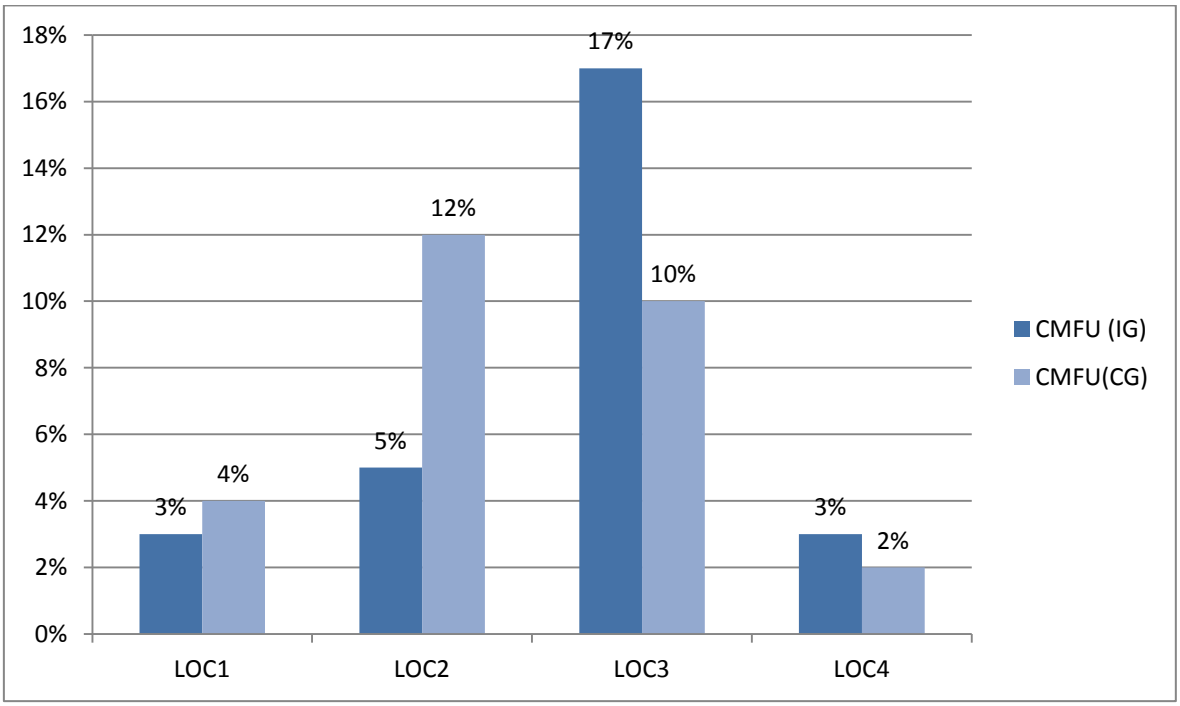
The overall higher concordance of treatments recommended out of MATE and at discharge in the IG is shown in the next figure (Figure 6). The recommendations for LOC2, LOC3 and LOC4 in the IG demonstrate a higher concordance than in the CG. Only the recommendation for LOC1 presents a higher concordance in the CG. Overall concordance is 3% higher in the IG (48%) than CG (45%) but the level of agreement is the same with .23.

Figure 6 Concordance MATE/Discharge



As it is presented in the two figures before the concordance of the recommendations out of the MATE and treatments done at follow-up are demonstrated. The IG exhibits a higher concordance in LOC3 and LOC4 and the CG in LOC1 and LOC2. The overall concordance of the both groups is the same with 28% with both showing poor level of agreement.

Figure 7 Concordance MATE-Follow-Up



3.2. Study population of the focus group

The focus group consisted of the research assistants of two cooperating clinics (n=2), ward social workers from the clinic in Hamburg (n=2), responsible persons for the data management (n=2) and the responsible persons of the project (n=2) as well as a student apprentice (n=1) and a student assistant (n=1). The senior physician of the ward in Hamburg participated in the second part of the discussion (n=1) which resulted in eleven participants (n=11). The focus group discussion via telephone was conducted with two research assistants not attending at the actual discussion, a student apprentice and one responsible person of the project (n=4). So this made a study population of 13 because the student apprentice and the principal investigator took part in both sessions. Valuable statements concerning the feasibility were made by ten of the whole population.

3.3. Description of results from the qualitative data analysis

This section will deal with the estimations, opinions and experiences by the research assistants and attendees during the clinical trial discussed in the focus group. So only the focus group participants' point of view will be described. Results will be presented in the way of how the discussion proceeded which is demonstrated in the category system of table 1.

16 categories of which 12 were deduced from the focus group interview-guidelines and 3 were developed inductively as well as 19 sub-categories were analyzed. The analysis revealed 113 inductive codes and 12 sub-codes. For every section a table with the relevant categories and codes is presented.

3.3.1 Acceptance of MATE by research assistants, patients and clinical team

This description of results demonstrates the acceptance of the MATE-interview during the study procedure by the research assistants and patients from the research assistants' point of view. Furthermore the perceived acceptance of the clinical was investigated regarding an implementation of the MATE in combination with the matching guidelines in routine care. To give a better overview the acceptance was divided into three categories. First the acceptance of the MATE by the research assistants will be covered, followed by the perception of patients' acceptance and of the clinical team.

Table 13 Acceptance of MATE by research assistants, patients and clinical team

Category	Sub-category
Acceptance of MATE by	Research assistants
	Patients
	Team

3.3.1.1 Acceptance of the MATE by research assistants

First of all the acceptance of the MATE in combination with the matching guidelines by the research assistants will be demonstrated.

Table 14 Acceptance of MATE by the research assistants

Sub-category	Code
Acceptance of MATE by the research assistants	1. Feedback to the team in conspicuities of patients within the interview
	2. Interview experienced as comfortable

The acceptance was reflected by two research assistants who gave feedback to the team in conspicuities of patients, which emerged from the MATE-interview. The following statement shows an acceptance of the research assistant, because this person really dealt with the interview and gave feedback in conspicuities of some patients.

„(…) wenn z.B. unserem Studienmitarbeiter,(…) was aufgefallen ist habe ich da immer schon die Rückmeldung bekommen (…).“ (Projekttreffen_1: P2 #00:24:23-6#)

An additional hint of acceptance was stated by another research assistant who told that the interview was experienced as comfortable. In the beginning the interview took very long, which was due to a lack of expertise, but after the research assistant worked a few times with the assessment, he/she got some routine. The first part of the interview with closed questions built a good warm up for the following questions concerning personal issues of the patients, which was perceived as comfortable for the patients, too.

“(...) mein erstes Interview hat drei Stunden gedauert. Das lag aber sicherlich auch an meiner fehlenden Expertise. Ich fand es aber hinterher sehr angenehm, dass auch wenn es dann Patienten waren, die ich wirklich dann noch gar nicht kannte und die auch selber wenig Ideen hatten, was passiert da jetzt mit mir, dass man erst mal sagen konnte wir starten jetzt erst mal mit einer Reihe von geschlossenen Fragen. Das war irgendwie so ganz nett um erst mal reinzukommen, (…) und dann im zweiten Teil (…) dürfen sie auch Dinge erzählen, die sie jetzt auf dem Herzen haben. Das fand ich irgendwie sehr gut, (…), dass man erst mal miteinander warm wird und dass man auch so erklärt worum geht es und dann im zweiten Teil auch Zeit hat für Sachen zum Besprechen. Und dann haben die Interviews auch nicht mehr so lange gedauert,(…).” (Projekttreffen_1: P1 # 00:21:49-3#)

3.3.1.2 Acceptance of the MATE by patients

This section shows the acceptance of the MATE by the patients.

Table 15 Acceptance of the MATE by the patients

Sub-category	**Code**
Acceptance of the MATE by the patients	1. MATE interview was too exhausting
	2. Too much appointments during the treatment
	3. Examination-environment influenced responses
	4. Difficulties in understanding the questions
	5. Perceived acceptance because patients could talk about their personal life.
	6. Addiction anamnesis and MATE-ICN were found to be good

Three attendees described, that the MATE-interview was too exhausting for the patients. Mentioned reasons for that were, the interview took too long and the time-point of conduct directly after the physical withdrawal was too early.

„(...) und weil wir (…), die Gespräche oft auch recht früh schon gemacht haben, gab es so einige Patienten, gerade die, die körperlich nicht ganz so gut zurechtkamen, für die das Ganze recht anstrengend war. (…)." (Projekttreffen_3: P11 #00:03:11-9#)

The interview combined with other appointments during the treatment were also too much for the patients.

"Ja aber die Patienten, denen ist oftmals alles zu viel. (…).Es läuft denn oftmals alles zu einer Zeit. Dann haben sie Sport und dann läuft eine andere Einheit, (…)." Projekttreffen_1: P3 #00:18:27-3#)

Further the examination-environment could have an influence on the patients' responses during the interview.

" (…) die waren auch aufgeregt, mit Tonbandgerät. Also diese Untersuchungssituation hat da glaube ich maßgeblich auch Einfluss genommen." (Projekttreffen_3: P11 #00:12:13-5#)

Some of the patients in two wards had difficulties in understanding the MATE questions. In one of these clinics the fourth module, which deals with addiction criteria, was challenging. The questions had to be read again by the research assistant and particularly word by word for a better understanding.

„Als dann, (…), die Suchtkriterien abgefragt wurden, da hatten viele Patienten ein bisschen Schwierigkeiten. Die haben die Fragen nicht so gut verstanden. Ich musste häufiger (…) wortwörtlich vorlesen." (Projekttreffen_3: P11 #00:09:40-9#)

In general the patients of three clinics actually seemed to like the interview because they could talk about their problems and personal life.

"(…)Wie läuft es denn mit Partner mit Wohnung mit den ganzen Sachen (…). Das werden die in einem Aufnahmegespräch alles nicht gefragt und dann sind die auch echt teilweise froh, das erzählen zu können (…)." (Projekttreffen_1: P1 #00:23:33-6#)

In one of those clinics the addiction anamnesis and the MATE-ICN in particular were found to be good.

"Ja also erst mal die Suchtanamnese, das fanden die immer klasse. Da war es immer schwieriger eher, die zu begrenzen, das war also alles klar und deutlich." (Projekttreffen_3: P11 #00:09:40-9#)

"Und bei dem MATE-ICN?" (Projekttreffen_3: P7 #00:09:56-6#)

"Die fanden die Patienten glaube ich gut. (...)." (Projekttreffen_3: P11 #00:10:20-5#)

3.3.1.3 Acceptance of MATE by clinical team

At least the acceptance of the MATE in combination with the matching guidelines will be presented for the clinical team.

Table 16 Acceptance of MATE by the clinical team

Sub-category	**Code**
Acceptance of MATE by the clinical team	1. Request for a supportive assessment in decision-making

One statement was made which regards to the request of a supportive assessment for decision-making especially in emphasizing that decision. Additionally a good diagnostic was requested, because this is done rarely in the actual routine care. In this context the MATE-interview was not valued alone but in combination with the matching guidelines as one assessment.

"Da hatte ich den Eindruck, dass zwischendurch auch nochmal gesagt wurde, wir würden uns das eigentlich wünschen, da eine gute Diagnostik zu haben, die uns auch unterstützt. Da das wenig gemacht wird, wenn die z.B. Anträge schreiben und das auch gesagt wurde, eigentlich wäre es schön etwas zu haben womit man z.B. in eine Langzeittherapie oder mal eine ambulante Betreuung unterstützt, womit man das abgesehen vom subjektiven Eindruck noch etwas unterstreichen kann." (Projekttreffen_3: P12 #00:07:53-0#)

3.3.2 Acceptance of the study

In this section the aspect regarding the acceptance of the procedure in the context of the clinical study will be examined. As beforehand the three points of view of the research assistant, patients and team will be described by the attendees of the focus group.

Table 17 Acceptance of the study by the research assistants, patients and clinical team

Category	Sub-category
Acceptance of the study by the	Research assistants
	Patients
	Team

3.3.2.1 Acceptance of the study by the research assistant

First of all the research assistants' acceptance of the study will be described.

Table 18 Acceptance of the study by the research assistants

Sub-category	Code
Acceptance of the study by the research assistants	1. Study went well after some start-up difficulties
	2. Sustainable relationship building with the patients during the study was supportive

One statement regarding the acceptance of the study by a research assistant was that after some start-up difficulties the study went well.

"*(...). Ich hatte am Anfang so ein bisschen Startschwierigkeiten, weil ich selber gucken musste, wie komme ich rein in die Studie. Aber als das dann lief war es auch sehr gut (...).*" *(Projekttreffen_1: P1 #00:13:05-5#)*

The building of a relationship with the patients was another good argument for this participant. This relationship was supportive for patients who had been treated after the qualified withdrawal by this research assistant and it supported patient-caregiver-relationship sustainably, which was perceived as a stronger bonding by the research assistant in the later interactions with the patients.

"(...), dass ich einige der Patienten auch ambulant dann weitergesehen habe, (...) und ich habe irgendwie den Eindruck, dass das irgendwie ein guter Start war. (...) Da ist eine ganz andere Bindung entstanden. (...)." (Projekttreffen_1: P1 #00:13:05-5#)

3.3.2.2 Acceptance of the study by the patients

This section deals with the acceptance of the study by the participating patients.

Table 19 Acceptance of the study by the patients

Sub-category	Code
Acceptance of the study by the patients	1.Increased commitment due to recruitment by ward psychologist
	2. Generally good acceptance
	3. Participation because of interest in scientific improvement
	4. Benefit of the study
	5. No acceptance demonstrated by missing appointments

This sub-category comprises of four different statements. The first one referred to the acceptance and commitment of patients participating in the study. These were higher if the ward-psychologist had been involved in the recruiting process of patients before and patients knew him/her.

"(...), dass es sehr gut ist wenn (...) der/die Stationspsychologe/-in, da auch bei der Rekrutierung mit dabei ist. Also das man da eben einfach vorher schon Kontakt zu dem Patienten hat durch die Visiten usw. und die einen kennen und wenn man dann mit einem Anliegen kommt, nämlich eine Studie durchführen zu wollen, dann ist glaube ich nochmal so die Akzeptanz größer, (...)" (Projekttreffen_1: P2 #00:10:04-7#)

But also in general the commitment of participating in the study was high which was reported by one research assistant. One further impression was that the study went down well with the patients who were addressed.

"(...) bei den Patienten hatte ich das Gefühl ist es ganz gut angekommen. (...)." (Projekttreffen_3: P11 #00:03:11-9#)

In two cases some of the patients did not even want their reward for participating in the study, but were happy to help for scientific purposes or even enjoyed being in that study.

"Ganz viele, die auch in der Katamnese sagen, nein, Geld brauch ich nicht. (...) Also die machen aus Spaß an der Studie teil und hoffen, dass das für weitere Patienten was bringt. Das ist eine schöne Motivation. (...)" (Projekttreffen_1: P1 #00:41:14-3#)

However in one ward the study was reported to be accepted by the patients because they benefited from the time and care from the research assistant during the time of the study.

"(…), dass das irgendwie auch gut gelaufen ist mit den Patienten, also dass die, die ich angesprochen habe, haben da glaube ich schon sehr von profitiert, allein weil ich mir Zeit genommen habe mich mit denen überhaupt zu beschäftigen." (Projekttreffen_1: P1 #00:13:05-5#)

But there were also statement by a participant that the acceptance did not seem to be high in some cases, which was demonstrated by some of the patients missing the appointments.

"(...), die haben dann die Termine verpennt. Da ist dann diejenige Person, die das durchführt, immer nur am Suchen. (…)." (Projekttreffen_1: P3 #00:17:09-9#)

3.3.2.3 Acceptance of the study by the team

Finally the acceptance of the study by the clinical team will be illustrated.

Table 20 Acceptance of the study by the clinical team

Sub-category	**Code**
Acceptance of the study by the clinical team	1. Commitment by the team during the study
	2. Feedback session was seen as supportive in "difficult" patients
	3. Reservations of the nurses
	4. Threat of being replaced (initial reservations) of social workers
	5. No integration into routine care
	6. No commitment by the social workers
	7. Study have to show a positive effect to be accepted by the team

In one clinic the study was in general accepted by the clinical team which is underlined by the commitment of the team supporting this study.

"(...) Also ich kann nur sagen, dass die Studie auf unseren Stationen oder auf unserer Station gut aufgenommen wurde. Also das da auch eine große Bereitschaft war, das zu unterstützen. (…) (Projekttreffen_1: P2 #00:10:04-7#)

In one location the clinical staff was glad because especially the feedback session helped to raise the motivation in patients who were described as difficult.

”(…) *Bei den etwas schwierigeren Patienten fanden die das ganz gut, dass da nochmal so ein Motivationsgespräch stattfindet.“ (Projekttreffen_3: P11 #00:06:51-8#)*

The recommendation of the matching guidelines in some cases was divergent to recommendations, especially those given by the nurses. This found expression in reservations from the beginning. In two clinics this perceived threat was reported.

“(…) Es wurde eine stationäre Entwöhnung angedacht für den Patienten, weil das musste sein und die Studie hat nachher etwas ganz anderes ausgespuckt. Also das war so ein bisschen, wo die Schwestern gesagt haben, was arbeiten wir denn jetzt hier, die Studie sagt was ganz anderes. Also da gab es auch große Vorbehalte von Anfang an.“ (Projekttreffen_1: P3 #00:13:59-7#)

Further in one clinic some initial reservations of the social workers to the study existed, because the staff felt threatened if the matching guidelines would take away the tasks of decision making and providing information for further treatments to the patients from the professionals.

”*(…) ich habe mit unserer Sozialarbeiterin auch direkt gesprochen. Es gab so am Anfang Vorbehalte überhaupt gegenüber der Studie, weil so die Sorge war, wenn eine Studie die Entscheidung und Aufklärung irgendwie machen kann, was mach ich denn dann noch, also jetzt mal überspitzt gesagt.(...).“ (Projekttreffen_1: P1 #00:13:05-5#)*

Besides two statements were made, describing the study as not being integrated into routine care. One research assistant even had the impression he/she had to work around routine care.

“(…) Aber es war halt wie eine Studie, die neben dem Versorgungsalltag läuft. (Projekttreffen_2: P5 #00:23:50-2#)

In the same clinic the social workers could not accept the new process of decision making. They did not stick to agreements and held on their old strategy, so the study was not integrated in their routine care.

"(...) mit den Sozialarbeitern war das so ein bisschen schwierig. Die konnten das nicht so gut annehmen und konnten sich da nicht so gut an die Absprachen halten. Die haben halt so ihr altes Spiel weiterlaufen lassen und konnten das nicht so gut integrieren in ihren Tagesrhythmus." (Projekttreffen_3: P11 #00:03:49-2#)

However the team needs to see a positive change to support and accept a study or project, which was observed by one attendee.

"Und da muss ein Projekt wirklich schon für die direkt, sofort eine Veränderung bringen, eine positive Veränderung, damit die das mit unterstützen." (Projekttreffen_3: P12 #00:16:10-3#)

3.3.3 Cooperation of the clinical team with the research assistants

In this section the perceived cooperation of the clinical team with the research assistants will be described. This category is divided into three codes, namely good cooperation, difficulties in the cooperation and no cooperation.

Table 21 Cooperation of the clinical team with the research assistants

Category	**Sub-category**
Cooperation of the clinical team with the research assistants	Good cooperation
	Difficulties in the cooperation

In general the cooperation of the clinical team with the research assistants was evaluated as good in two locations.

Table 22 Good cooperation

Sub-category	**Code**
Good cooperation	1. Willingness of assistant doctors to cooperate
	2. Feedback with the team
	3. "Nice" communication with treating therapists

One attendant of these locations stated cooperation during the study with and the willingness to cooperate by the clinical team. At the third ward only parts of the team, namely assistant doctors, cooperated with the research assistants.

“ (…) Ich habe mir die Assistenzärzte/-innen oft auf meine Seite geholt und denen das erklärt und die haben dann auch schon mal Patienten für mich angesprochen. (…).“ (Projekttreffen_1: P1 #00:13:05-5#)

A good cooperation was also reported because occurring problems of and anomalies with patients were discussed with the clinical team.

”(…) hat SM2 mit dir Kontakt gehabt und hat er/sie da auch irgendwie was weiter ins Team geführt, was so bei verschiedenen Patienten aufgefallen ist, wenn er/sie Probleme hier hatten oder extreme Probleme da.“(Projektteffen_1: P6 #00:23:54-1#)

”*Doch das hat SM2 gemacht (…)ich nehme ja auch ab und an Patienten und dann haben wir schon gesprochen, was das Beste wäre. (...).“ (Projekttreffen_1: P3 #00:24:04-4#)*

The communication with the treating therapist was also possible and described as “nice”.

“Es gab glaube ich ein oder zwei Fälle wo ich (...) auf Wunsch des Patienten mit dem behandelnden Therapeuten gesprochen habe und dann war das schon auch nett,(…)“ (Projekttreffen_1: P1 #00:23:33-6#)

Table 23 Difficulties in the cooperation

Sub-category	**Code**
Difficulties in the cooperation	1. No feedback by the social workers
	2. Difficulties in the communication
	3. Cooperation with one difficult personality was tried to deny
	4. Lack of interest in study implementation
	5. No possible integration of the study into routine care

But there were also difficulties reported by the research assistants of one of the generally cooperative clinics regarding the cooperation with the social workers. In the feedback sessions, the social workers did not make use of commenting on the recommendations.

“(...) ich habe das ausschließlich mit unseren Therapeuten dann besprochen und den Sozialarbeitern/-innen eben immer die Möglichkeit gegeben, sich dazu zu äußern, was sie aber nie getan haben.“ (Projekttreffen_3: P11 #00:14:02-2#)

Another difficulty was in the e-mail communication. E-mails concerning the topic of MATE were ignored by the social workers.

"Genau sie haben auch, (...), die Mails nicht gelesen, wenn ich dann mal was geschrieben hatte zu dem Patienten, weil ich dem/der einen Sozialarbeiter/-in dann irgendwann mal was ganz anderes geschrieben hatte und er/sie dann hinterher sich entschuldigte, er/sie hätte meine Mail nicht gelesen. Das lag wohl daran, er/sie dachte es wäre wieder was für MATE." (Projekttreffen_3: P11 #00:04:09-5#)

In one case the cooperation with the head of social workers even was tried to deny because of the difficult personality by the person.

"(…) *also ich habe schon mal einen ambulanten Patienten gehabt, wo klar war wenn die sozialarbeiterische Betreuung regulär erfüllt wird, dann geschieht das durch ihn/sie. Daraufhin habe ich gezielt bei jemand anders einen Termin gesucht." (Projekttreffen_3: P12 #00:04:44-0#)*

A lack of interest in a implementation of the study was also reported.

"(...) aber die haben auch kein Interesse daran gehabt, das wirklich zu implementieren.(...)" (Projekttreffen_3: P12 #00:14:59-1#)

Further the recommended decisions regarding to the study assessments were no topic in the doctor's visit, because this could not be integrated due to time constraints.

"Also ne, wir haben das in der Visite eigentlich gar nicht besprochen, weil sich das zeitlich nicht hat integrieren lassen bei unserem Aufnahmen.(...)" (Projekttreffen_3: P11 #00:14:02-2#)

So in a nutshell the cooperation in general went well except for one clinic. Here some difficulties occurred in the communication with the social workers. Actually one person of the social worker team was avoided, because it was impossible to work with him/her. In setting appointments the research assistants had to adapt to the time-plan done by the clinical team. In one un-cooperative clinic the social workers and therapist did not make use of their possibility to comment on any guidelines grounded recommendation.

3.3.4 Documentation effort

Another discussed topic of the focus group was the effort of the accruing documentation during the study, like completing and copying of documents regarding the study.

Table 24 Documentation effort

Category	Code
Documentation effort	1. Appropriate effort
	2. Documentation produced ex post
	3. Delayed submission of documents

Feedback about the documentation effort in general was observed as appropriate, except the copying.

"(...) insgesamt war das jetzt nicht unmenschlich. Also das Nervigste war glaube ich die ganzen Sachen durch den Kopierer zu jagen. Aber ansonsten ging das." (Projekttreffen_1: P1 #00:25:45-7#)

However the documentation was not done continuously, but afterwards several documents were produced ex post at one go.

" (...) das habe ich immer so gemacht, wenn dann mal Zeit war und ich hatte mal einen halben Tag, dass ich das dann alles hinterher gehauen habe. (...) also ich habe es mir ja so gelegt wie es mir passte, von daher fand ich das jetzt nicht unangenehm, (...) (Projekttreffen_1: P1 #00:25:12-7#)

In one case some difficulties occurred regarding the documentation. The copied documents were not delivered completely to the persons responsible for data management.

"Und da weiß ich aus Klinik1, dass es da nochmal stellenweise Schwierigkeiten gab, oder? Also wenn SM2 das kopiert hat oder so, dass das nicht alles vollständig kam, (...)" (Projekttreffen_1: P6 #00:25:56-1#)

3.3.5 Plausibility of the matching guidelines

In the following paragraph the plausibility of the matching guidelines will be presented concerning understandability, adequacy and communicability.

Table 25 Plausibility of the matching guidelines

Category	Code
Plausibility of the matching guidelines	1. Good understandability, plausibility and adequacy
	2. Communicable recommendations to the patients and plausible classifications
	3. Good concordance between matching guidelines and clinical team recommendations
	4. Discrepancies in the recommendations by matching guidelines and the clinical team

The statements of two research assistants demonstrate a generally good understandability, plausibility and adequacy of the matching guidelines.

"Also ich würde aus dem Bauch heraus sagen 95% war das, konnte ich das verstehen, fand ich das angemessen. Es gab halt nach oben und unten einen Ausreißer. (...)" (Projekttreffen_1 P1 #01:10:07-7#)

Only in a few cases at one clinic the research assistants had problems allocating patients to a LOC and mixed them up. However the recommendations as LOCs were communicable. Also the classifications were plausible and comprehensible.

"Ja, das war gut zu vermitteln. Ich hatte am Anfang, (...), dass ich die ambulante Rehabilitation in das LOC 3 gesteckt habe, einfach wegen dem Wörtchen Rehabilitation. Das war aber nur kurz am Anfang so und dann hat sich das relativ gut ergeben. Ich fand das auch plausibel und nachvollziehbar." (Projekttreffen_3: P11 #00:27:19-5#)

The recommendation by the matching guidelines was experienced as concordant to the clinical team recommendation except of few outliers.

"(...) bei uns war es gar nicht so häufig, dass man sich so total widersprochen hat, (...) dass es nicht gepasst hat, was wir eh schon vor gehabt hatten auch dem Patienten zu empfehlen, das auch der MATE empfohlen hat." (Projekttreffen_1: P2 #00:16:04-8#)

But in another clinic some discrepancies occurred concerning the concordance between the recommendations of treatments by the matching guidelines and the clinical team.

”Du hattest da gerade schon gesagt, dass es ab und zu Mal vorgekommen ist, dass es nicht übereinstimmt.“ (Projekttreffen_1: P7 #01:10:51-3#)

“Nicht oft aber es kam vor.“ (Projekttreffen_1: P3 #01:10:54-7#)

3.3.6 Proceeding of decisions for further treatment in feedback-interview

The following category is about the proceeding of the decisions for further treatment discussed in the feedback-interview. The main question considering this category is, if the procedure was done like practiced in the previous trainings and if the learned tactics for treatment motivation and shared-decision-making could be applied. Further it was discussed about if the feedback-interview had an effect on motivation strengthening in the patients.

Table 26 Proceeding of decisions for further treatment in feedback-interview

Category	Code
Proceeding of decisions for further treatment in feedback-interview	1. Conduct as practised
	2. Given tactics of Motivational Interviewing could be applied
	3. Previous decision was considered by a patient due to the feedback-interview

In one clinic the decision process was conducted like practised in the training and the patients’ acceptance of the recommended LOC as well as the motivation of actually doing it would be strengthened. A more in-depth feedback as required by study process sometimes felt artificial, as patients had already consented in this session.

“Aber tatsächlich in vielleicht 70% der Fälle war es so, erst mal eine ordentliche Rückmeldung und dann Empfehlung der Weiterbehandlung in unsere Institutsambulanz LOC2 und dann, (…) auch mit Dr. ... schon besprochen. (…) Also was soll ich dann halt auch mit dem noch diskutieren, wenn er sagt, das nehme ich an, dann habe ich es versucht so ein bisschen auszubauen und (…) auch nochmal so ein bisschen als Bestärkung, sie sehen, das sind die Gründe warum wir ihnen das empfehlen. (…).“ (Projekttreffen_1: P1 #01:15:48-2#)

In some cases at one clinic the techniques of Motivational Interviewing could be applied and discussed as it was the intention of this intervention.

"(...). Also es war ganz nett, weil manche Patienten, da konnte man sich so ein bisschen abarbeiten und wirklich die ganzen Techniken des Motivational Interviewing anwenden und auch besprechen und eine Sitzung hat auch eine dreiviertel Stunde gedauert. (...)." (Projekttreffen_1: P1 #01:15:48-2#)

In one case which was reported by a research assistant the patient actually considered about his previous own decision, after the reported recommendation out of the matching guidelines in the feedback-interview.

"(...) und ich weiß noch einen konkreten Fall, der hat dann angefangen sich doch tatsächlich Gedanken zu machen." (Projekttreffen_3: P11 #00:07:01-9#)

3.3.7 Feelings about the feedback-interview in general

The perceived feelings by the research assistants about the feedback in general were also a topic in the discussion. This category is about how comfortable or not the feedback was for the research assistants and if it was accepted by the clinical team. Further it was interesting to know if there was a necessity for the feedback session in general.

Table 27 Feelings about feedback-interview in general

Category	Code
Feelings about feedback-interview in general	1. Comfortable and adequate for research assistants and patients
	2. No increase in motivation for treatment
	3. Few patients of CG requested for an extensive feedback

The feedback was accepted and liked by the patients as two attendees pointed out. Also the feedback session in general was evaluated as comfortable and adequate by these research assistants.

"*Feedbackgespräch war für alle eigentlich so adäquat. Ja das fanden die auch gut.(...)" (Projekttreffen_3: P11 #00:03:49-2)*

Statements of two research assistants demonstrate that in general the motivation for further recommended treatment was not increased for the patients by this feedback, because the decision for further treatment was already discussed in previous time-points of qualified withdrawal.

“ (...), aber an dem Zeitpunkt wo wir uns getroffen haben waren eigentlich die Entscheidungen in mindestens 70% der Fälle schon fest, oder die hatten sowieso keinen Bock, (...).“ (Projekttreffen_1: P1 #01:16:41-0#)

However in few cases patients of the CG requested a feedback as well, as it was stated for one clinic.

”Hattet ihr Kontrollpatienten, die auch so eine Rückmeldung haben wollten von denen? (...).“ (Projekttreffen_1: P6 #01:16:49-6#)

”P2 Wenige, aber auch ja.“ (Projekttreffen_1: P6 #01:16:53-2#)

3.3.8 Opinions about preparation of the training

This chapter summarizes the opinions of the research assistants about the training which took place before the study was implemented into the wards. Two aspects will be demonstrated in this part: Local organization of the training and the handling of the assessments as well as of the feedback-interview.

Table 28 Opinions about preparation of the training

Category	**Sub-Category**
Opinions about preparation of the training	Locally organization of the training
	Training and actual conduct of the assessments

3.3.8.1 Locally organization of the training

First of all the valued locally organization of the training by the research assistants will be demonstrated.

Table 29 Locally organization of the training

Sub-category	**Code**
Locally organization of the training	1. Good organization and feedback by the principal investigator
	2. Intensity and material for practical application was positive
	3. Duration of training was too short

The main statements by two research assistants were that the training was too short and too much regarding the time. Especially the training of the MATE-ICN and the feedback-interview was not intensive enough, which was also the impression of another participant of the focus group.

”(...) also jetzt auch so von meinem Eindruck war es sehr sehr viel. Also auch diese beiden Tage Training waren sehr sehr dicht. Viel Informationen und viel irgendwie was gelernt und verarbeitet werden musste und mein persönlicher Eindruck war, dass diese Feedback-gespräche mir ein bisschen zu kurz gekommen sind dabei.“ (Projekttreffen_1: P7 #01:33:40-4#)

The intensity and given material was also stated to be positive.

“(...) ich glaube das war auch von der Intensität her schon gut, wie ich vorbereitet wurde und wie viele Materialien ich mitbekommen habe und so.“ (Projekttreffen_1: P1 #01:36:51-4#)

One person stated that the training was organized well and the rest was worked out during the study process, especially because of the feedback to the principal investigator of the study.

“(...) ich kann wenig beurteilen in wie weit das hätte mehr oder weniger sein müssen. Ich glaube ich habe mit dir P6 ja auch immer relativ viel Rücksprache gehalten, was sehr gut war und ja würde das jetzt so platt beantworten, das war eine gute Vorbereitung und der Rest ist halt im Laufe der Zeit dann so eingespielt und hat auch geklappt. (...).”(Projekttreffen_1: P1 #01:35:04-0#)

3.3.8.2 Performance of the assessments

This paragraph deals with the training and the impact of the actual conduct of the assessment and how performance was perceived.

Table 30 Performance of the assessments

Sub-category	Code
Performance of the assessments	1. Supervision during the study was supportive
	2. Questions occurred during practical application of MATE
	3. Initial difficulties in practical application of MATE –ICN
	4. Suggestions for future trainings

The supervision during the study was also experienced as a support during the study process, which was stated by one research assistant.

"(...) das ist ja auch eine grundsätzliche Frage. Ich glaube, das ist super wichtig, dass manchmal schleichen sich ja auch Fehler ein (...) und deswegen finde ich das schon sehr gut." (Projekttreffen_1: P2 #01:32:50-9#)

Despite the training some questions occurred during the practical application of the MATE with the first patients. But these questions were answered by one research assistant of the project during the study.

"(...) Aber eben viele Fragen kommen dann erst mal so mit dem ersten Patienten, (...), wenn man einmal so den ganzen Durchlauf gemacht hat. Also deswegen ist beides wichtig, dass man geschult wird und das man da nochmal so ein Feintuning macht." (Projekttreffen_1: P2 #01:32:15-2#)

In the beginning of the practical application also difficulties showed up with the MATE-ICN in two clinics. The application of categorization into the scale was valued as difficult, but these problems could be solved via learning by doing.

"(...) Ja also ich fand es natürlich auch schwierig, wie das ja schon vorhersehbar war, das mit dem MATE-ICN so ein bisschen. Aber das war halt wirklich Learning by doing, dann letztendlich. Das du am Schluss wirklich gemerkt hast, okay wo musst du darauf achten. (...)." (Projekttreffen_1: P1 #01:36:14-9#)

One suggestion for future trainings was made concerning the implementation. The training should contain a performance of at least ten interviews or per investigation ten interviews per interviewer followed by another performance.

"(...) Ich meine wenn man dann sagt okay, wie bereitet man zukünftige Studiendurchführer vor, würde ich vielleicht sagen okay lass die halt mal zehn Interviews vorab erheben, oder wir planen pro Untersuchung zehn pro Interviewer ein, dann ist derjenige eingearbeitet. Machen vielleicht dann nochmal eine Durchführung." (Projekttreffen_1: P1 #01:36:14-9#)

3.3.9 Thinkable reasons for the low rate of recommended or initiated treatment at discharge

In this section the deductively developed categories were restricted just to the overall category of thinkable reasons for the low rate of recommended or initiated treatments at discharge. This category deal with possible reasons which could have an influence on in the focus group presented low rate of recommended and initiated treatments at discharge.

Table 31 Thinkable reasons for the low rate of recommended or initiated treatment at discharge

Category	Code
Thinkable reasons for the low rate of recommended or initiated treatment at discharge	1. Wrong documentation
	2. Wrong approach of data analysis
	3. Lack of motivation in patients
	4. External organizational aspects
	5. Internal organizational aspects

One thinkable reason could be an incorrect documentation. In the comparison between the team and feedback recommendations (see Table 3) the concordance was 87 % and perceived as high by a research assistant, so at discharge the documentation could have been incorrect. This was stated by two research assistants.

"Aber das ist ja eigentlich identisch mit dem was im Feedbackgespräch, (..), haben sie ja eine Empfehlung bekommen und da waren ja sehr hohe Daten und dann kann ich mir das nur so vorstellen, dass das nicht mehr richtig dokumentiert wurde. Das ist ja total unlogisch." (Projekttreffen_1: P2 #01:25:08-6#)

Also another mentioned concern was, that the variable of initiated and recommended treatments at discharge were separated from each other in the process of concordance analysis. This separation in the analysis process might be an artifact in the presentation of results. This variable needs to be recoded in to an either or variable with both, initiated and recommended treatments combined.

"Aber dann müssen wir nur um mal zu gucken, ob das mit den Zahlen hinkommt, einfach mal sowas, so ein entweder empfohlen oder eingeleitet nur um zu gucken ob dann immer noch so 70 Leute übrig bleiben, bei denen da gar nichts passiert." (Projekttreffen_1: P8 #01:27:54-8#)

Besides it happened in one clinic that the patients decided for another treatment than recommended after the intervention. Further the motivation for treatment in some cases was too low which was reported by one research assistant.

" Ja genau oft war das, dass sie dann sagten, so das wird der Patient nicht wollen. Aber das weiß ich schon, weil ich den kenne, weil der das achte Mal hier ist und der wird das nicht wollen (...)." (Projekttreffen_3: P11 #00:06:26-8#)

A further component influencing the recommended or initiated treatment concerns external organizational factors, which cannot be influenced by the clinical team. This occurred for patients who could not get specific treatment granted by e.g. the health insurance, because it had been approved a couple of times and had shown no effect.

"(...) das ist unrealistisch, der wird so nicht noch eine Rehabilitation bekommen." (Projekttreffen_3: P11 #00:06:26-8)

Not only external, but also internal organizational aspects also could influence the low rate.

Table 32 Internal organizational aspects

Code	**Sub-code**
5. Internal organizational aspects	a) Missing integration of the research assistants into routine care
	b) Overlap in the organizational process

a) Missing integration of the research assistants into routine care

The first thinkable reason was that in two clinics the research assistants were not integrated in the routine care, which could lead to incongruence between the research assistants' recommended and at discharge initiated treatments.

"(...) Also bei uns war es ja so, dass SM2, die ja gar nicht in den Stationsbetrieb integriert war, den MATE gemacht hat und das nicht unbedingt parallelisiert ist mit der klinischen

Versorgung. Also in so fern kann da auch eine Inkongruenz zwischen dem was die beiden, also sie mit dem Patienten besprochen hat und was dann gemacht wird, würde sich ja aus meiner Sicht sehr gut dadurch erklären." (Projekttreffen_2: P5 #00:23:20-8#)

b) Overlap in the organizational process

In another clinic it was described as a general problem of the organizational process, that lead to the social worker making forward to the patients much earlier before the MATE-interview took place.

"(...) Ich glaube (...), ja dass es zu diesen Überschneidungen einfach kommt durch den Organisationsablauf, also das bei uns eben auch der Sozialdienst schon sehr sehr früh auf die Patienten zugehen muss (...)."(Projekttreffen_1: P5 #00:10:04-7#)

3.3.10 Suggestions for conditions with an implementation of guidelines, MATE, feed-back-interview and the decision-making process

The research assistants in the focus group were also asked about some suggestions for conditions with an implementation of the decision-making process and its' instruments. Results are divided into sub-categories in which the suggestions for an implementation for every instrument were discussed as well as the decision-making process in general.

Table 33 Suggestions for conditions with an implementation of matching guidelines, MATE, feedback-interview and decision-making process

Category	Sub-category
Suggestions for conditions with an implementation of	Matching guidelines
	MATE
	Feedback-interview
	Decision-making process

3.3.10.1 Matching guidelines

Suggestions of conditions with an implementation of the guidelines are about the information for the algorithm, a possible implementation with another assessment and a more flexible dealing with the combination of criteria for the LOCs.

Table 34 Suggestions for conditions with an implementation of matching guidelines

Sub-category	Code
Suggestions for conditions with an implementation of matching guidelines	1. Guidelines' dimension "History of treatments" needs to include only treatments regarding the dependence for the algorithm
	2. Implementation without the MATE
	3. More flexible combination of criteria for the LOCs

One necessary condition for implementing the guidelines was set before the study began. This was stated to be an important factor when implementing the guidelines into routine care. Treatments of disease of the liver or mental disorders were not included into guidelines' dimension "History of treatment". So just treatments regarding alcohol dependence were counted for this dimension and therefore entered in the calculation of the algorithm.

"(...) wenn jetzt ein Patient z.B. vordergründig erst mal wegen einer Lebererkrankung oder so behandelt werden muss, dann macht das ja überhaupt keinen Sinn den überhaupt in diesen Algorithmus reinzujagen oder wenn der wegen einer anderen psychischen Erkrankung behandelt werden muss, (...), dass waren Entscheidungen, die wir letztlich bevor wir mit der Datenerhebung angefangen haben getroffen haben. (...) "(Projekttreffen_2: P7 #01:04:51-6#)

Another condition which was suggested by a participant was the implementation of the matching guidelines without the MATE, because the information could be gained out of other assessments as well. Also the time-points of collecting information via an assessment needs to be flexible. Further this assessment needs to be adjusted to the individual information needed from the patients. For patients who are well known not every question needs to be asked.

"(...) ich finde diesen Algorithmus halt sehr gut und sehr wichtig und dann ist die Frage, (...) mit welchen Informationen wird der gefüttert, dass der angepasst wird. Wenn ich an meinen Alltag irgendwie denke, dann kann das sein, was weiß ich, es ist ein ruhiger Morgen, ich habe Zeit, es kommt jemand Neues, dann erhebe ich das irgendwie ganz ausführlich. Es kann aber auch sein, dass ich merke so, oh Gott es haben sich jetzt gerade vier Leute gleichzeitig angemeldet und Herr Müller, Meier, Schmidt ist neu, aber ich (...) trage

bei Suchtanamnese einfach nur ein, was weiß ich missbräuchlicher Alkoholkonsum seit fünf Jahren. Seit dem letzten Jahr täglicher Konsum und Entzugserscheinungen und kodiere dann eine F10.2." (Projekttreffen_3: P12 #00:37:03-4#)

Besides a suggestion was discussed to make it possible combining the criteria for the LOCs more flexibly. This could be supportive if a treatment is not granted for some reasons. Then the criteria of different LOCs could be combined to get a recommendation of another LOC which would be granted by the service providers.

"(...) kann ich ein LOC3 schaffen in dem ich mir einen Punkt aus eins raushole, noch drei aus zwei. Also kriege ich dann ungefähr von der Intensität das hin, durch ein Zusammenspiel von Niedrigeren? Also wenn jetzt z.B LOC3 nicht geht weil jemand schon das gar nicht mehr beantragt bekommt." (Projekttreffen_2: P2 #00:54:09-4#)

3.3.10.2 MATE

Suggestions made for the MATE were about the actual performance, structure, and possibilities for an implementation.

Table 35 Suggestions for conditions with an implementation of MATE

Sub-category	Code
Suggestions for conditions with an implementation of MATE	1. Performance by staff members anchored in the routine care
	2. Optimization and adjustments in structure
	3. Computer-version connected to hospital information system
	4. Adaption of time-point for performance
	5. Implementation as admission-interview
	6. Routine will solve difficulties in performance

The first aspect which was stated by two attendants was that organisation of the interview needs to be changed. The interview should and could be conducted by persons who are anchored in routine care.

„Wenn man da rückblickend sagen müsste, was kann man besser machen, dann wäre es sicherlich gut gewesen, wenn da jemand dran gesessen hätte, der tatsächlich mehr im Stationsbetrieb verankert ist." (Projekttreffen_1: P5 #00:23:30-2#)

Table 36 Performance by staff members anchored in the routine care

Code	Sub-Code
1. Performance by staff members anchored in the routine care	a) Primary nurse as an example
	b) Additional staff is required

a) Primary nurse as an example

As an example for a performance by staff members anchored in the routine care, the primary nurse was suggested.

"(...), das kann auch die Bezugspflege, z.B. kann ja so ein Interview durchführen (...)."(Projekttreffen_2: P7 #00:56:35-2#)

b) Additional staff is required

But therefore more personal will be needed like an additional part-time position or medical typist.

"(...) da müssten die irgendwie hier so Ressourcen freischalten. Entweder noch irgendwie eine zusätzliche halbe Stelle oder eine Stationsschreibkraft, die den Therapeuten Arbeit abnimmt, weil auch das gerade durchzuführen, da sollte man ja schon eine Dreiviertelstunde einrechnen und so viel haben die ja nicht mal zum Teil für die Aufnahmegespräche mit den Patienten." (Projekttreffen_3: P11 #00:18:01-6#)

Additionally the structure of the MATE also needs to be changed. So the ideas of four research assistants were that the MATE needs optimization and adjustments in its structure.

Table 37 Optimization and adjustments in structure

Code	Sub-Code
2. Optimization and adjustments in structure	a) Adjustments in the structure of MATE
	b) Short version of MATE

a) Adjustments in the structure of MATE

One suggestion was to adjust the questions about the social situations and its characteristic values, because this was mentioned to be the biggest reason for incongruence between the

recommendation of the MATE and the clinical team. Therefore the aspects of splitting the MATE into several sessions and shorten it, especially for the social situation, were suggested. Here the occupational groups could interact and those could collect the data from different parts of the interview. Furthermore the information for the algorithm need to be more flexible and may not overlap with other information which was gained in former steps of care in routine care.

"(...), dass nicht Sachen doppelt erhoben werden. Also dafür wäre es glaube ich gut, wenn Module auch getrennt abgefragt werden könnten. (...), man könnte ja eine Suchtanamnese erheben und dann das ICN getrennt z.B. durch einen Sozialarbeiter mit erheben lassen und dann wird das nachher zusammen geführt. (...)" (Projekttreffen_3: P12 #00:19:05-9#)

b) Short version of MATE

A short version was also requested by the research assistants as it can be seen by the following quotation. An assessment which categorizes the information of the patients needs to short and precise.

"*(...) ich finde das sehr hilfreich da in Kategorien zu denken und fänd es schön irgendwie sowas in der Mitte zu haben, was mir trotzdem hilft, gut zu Kategorien zuzuweisen und halt nicht nur nach Gefühlen und Wellenschlag, aber das sehr kurz und sehr prägnant zu machen."(Projekttreffen_3: P12 #00:35:19-4#)*

A further helpful condition, stated by two of the research assistants, was that the MATE could be conduct via computer. This shall also be connected to the hospital information software and the software needs to be good and slim.

"(...) ich könnte mir das durchaus vorstellen und in Zeiten der Digitalisierung, wir hatten ja diese netten kleinen Computer auf die wir die Daten direkt eingehängt haben. (...)." (Projekttreffen_2: P1 #00:57:22-6#)

Additionally the fixation of a time-point for conducting the MATE is an important factor. The time-point in the study was set to one week after physical detoxification, because the patients would be in a better physical and mental condition. Further the patients did see things differently concerning the dependence within the withdrawal and after one week they got more distanced and clearer about the situation

"(...), das war einer der Gründe, warum wir das in der Studie gesagt haben, dass soll nach der ersten Woche oder wenn die Entgiftung vorbei ist, soll das erst stattfinden, weil ja die Patienten einfach nochmal A) das körperlich und kognitiv besser durchstehen so ein Interview und B) auch eben einfach im Entzug viele Dinge ja auch einfach anderes sehen." (Projekttreffen_1: P7 #01:49:03-7#)

So out of these beforehand statements a condition for implementing the MATE could be derived. The MATE should be conducted at admission as an access-assessment, which was stated by three attendants.

Table 38 Implementation as admission-interview

Code	**Sub-code**
5. Implementation as admission-interview	a) Implementation without mathcing guidelines
	b) Structure of MATE is similar to the common admission interview
	c) Addiction anamnesis was perceived as supportive

a) Implementation without matching guidelines

For this purpose in one case the suggestion was made to implement the MATE without the matching guidelines.

"(...) Also weil man könnte sich ja auch z.B. sich denken, dass man ein standardisiertes Eingangsassessment, ist ja auch denkbar ohne hinterher diese Zuweisungsleitlinie." (Projekttreffen_2: P7 #00:10:53-4#)

b) Structure of MATE is similar to the common admission interview

So it could just be used as a diagnostic assessment or addiction anamnesis at admission to get just the relevant information. Also the condition of already using assessments at the admission-interview, like the Beck Depression Inventory (BDI) (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) and quality of life (EQ-5D) (Greiner & Claes, 2007), were already content of the interview as well. Further the duration of conducting the MATE-interview was identified with the duration of a regular admission-interview.

"(…) Also du machst halt ein Aufnahmegespräch und zusätzlich lässt du noch so, was weiß ich BDI und Lebensqualität und was ist noch dabei? Ja also Depression. Also so das Wichtigste." (Prjekttreffen_2: P2 #00:19:26-7#)

"Wenn man denkt so ein Aufnahmegespräch dauert ja schon auch eine halbe Stunde dreiviertel Stunde in der Regel." (Projekttreffen_2: P2 #00:20:21-7#)

c) Addiction anamnesis was perceived as supportive

The criteria regarding the addiction anamnesis of the MATE were reported to be helpful in substitution patients. A similar instrument is already in use and is perceived to be supportive because of a structured application.

" Ich habe das z.B., dass wenn Substitutionspatienten kommen dann muss ich immer eine Suchtanamnese erheben. Da habe ich inzwischen so eine Datei, wo ich verschiedene Kriterien kurz abgehe, das ist ähnlich wie im ersten Teil des MATE. Das erlebe ich als Hilfe, (…), weil es so klar strukturiert ist." (Projekttreffen:3: P12 #00:26:13-3#)

Finally the routine was assessed as very supportive in conducting the MATE. Difficulties like time pressure will therefore probably disappear after some interviews.

" (...) Aber das ist auch was, wo ich selbst bei den wenigen Interviews, die ich gemacht habe, gemerkt habe, dass da die Routine da sehr hilft." (Projekttreffen_3: P12 #00:12:40-6#)

3.3.10.3 Feedback-interview

Suggestions for conditions with an implementation of the feedback-interview session will be displayed in the following section

Table 39 Suggestions for conditions with an implementation of feedback-interview

Sub-category	**Code**
Suggestions for conditions with an implementation of feedback-interview	1. Content is already part of routine care

It turned out that an additional feedback-interview for increase in motivation in the study procedure will not be necessary for an implementation into the routine care. The ward round of the senior physicians including the social service, therapists and nurses represents

the general framework for feedback-interview by motivating the patients for further treatment.

"Ich glaube wirklich, dass die Oberarztvisite da also ideal ist, weil bei uns zumindest eben, da ist der Sozialdienst dabei, da ist der behandelnde Therapeut dabei eben der Oberarzt, Bezugspflege oder Pflege zumindest, nicht immer Bezugspflege." (Projekttreffen_1: P2 #01:19:09-0#)

3.3.10.4 Decision-making process

In this section the implementation of the decision-making process with all the previous elucidated assessments were discussed. As well the suggestions by the research assistants will be demonstrated. This paragraph will deal with organizational and structural change which would be important for an implementation from the research assistants' point of view.

Table 40 Suggestions for conditions with an implementation of decision-making process

Sub-category	**Code**
Suggestions for conditions with an implementation of decision-making process	1. Increase of treatment or process quality
	2. Foundation of decision-making
	3. Backup from chief physician is necessary
	4. Adjustments in the qualified withdrawal treatment
	5. More capacity is required
	6. Subsequent implementation study
	7. Process with MATE used at admission
	8. Standardization and manualization of assessment

For the purpose of necessary conditions for the implementation of the decision making process, four attendees describe that the necessity lies in showing an additional value. This additional value could be reached if the treatment or process quality would increase due to the implementation.

"Also ich würde das davon abhängig machen, macht das nachher wirklich auch eine Verbesserung der Versorgungsqualität und das ist ja im Augenblick unklar.(...) Es können

auch Prozesse sein. Aber natürlich wäre dann noch schöner wenn die Behandlungsergebnisse besser würden." (Projekttreffen_2: P5 #00:49:36-8#)

In addition to the pure impression and experiences of the therapists and physicians other parameters would be needed for a treatment decision. Also a clarification of the process as a foundation of decision making is seen as supportive. It should be no replacement for the clinical team but a support in the decision making. The interaction of impression and assessment-based decision was reported to be crucial.

"(...) das kann eine Entscheidungsgrundlage sein (...), deswegen glaube ich auch ist dieser Punkt, dass man Angst haben muss, dass man ersetzt wird, das geht gar nicht.(...) Also ich glaube man kann nochmal gut Daten auf eine gute, standardisierte Art und Weise erheben und quasi dann den Behandler, der vielleicht auch schon so eine Ahnung hat, aber unterstützen und ja also ich glaube dieses Zusammenspiel ist da schon ganz entscheidend. (...)." (Projekttreffen_1: P2 #01:43:29-4#)

One further aspect which was stated by a research assistant is that for a possible implementation, backup is needed from the chief physicians as well as from the executive therapists.

"Also ich denke wenn man (...) die leitenden Therapeuten, mit ins Boot holt und den vermitteln kann das ist sinnvoll, der das ja entsprechend auch weitergibt an seine Mitarbeiter. Darüber könnte man das denn wahrscheinlich implementieren." (Projekttreffen_3: P11 #00:25:12-8#)

Further a change or adjustment needs to be done in the organization of the treatment procedure in the qualified withdrawal. At first there is a need of more capacity which is stated by one attendant.

"Wir bräuchten mehr Kapazitäten." (Projekttreffen_3: P11 #00:18:27-9#)

Another person mentioned that the organization in the Netherlands is better in the continuous motivation of the patients in the treatment-chain as centres of integrated care for alcohol withdrawal. This continuous motivation can be done with a central structure of the treatment of alcohol dependent patients where all of the information coalesces.

"Ich glaube da ist ja auch der große Vorteil der Holländer, dass die einfach diese Zentren haben und eben da fließt dann die ganze Information zusammen. Also selbst wenn wir im

qualifizierten Entzug dann eine Behandlungsempfehlung aussprechen und die auch in den Brief reinschreiben. Aber wenn es der Patient dann nicht direkt umsetzt. Also wer tut da vielleicht weiter motivieren? (...) Und wenn diese Zentren da einfach auch im Verlauf immer wieder Kontakte haben, dann kann man da natürlich mehr mit anfangen mit so einer Behandlungsempfehlung als vielleicht bei uns. (...)" (Projekttreffen_2: P2 #00:46:09-3#)

Another suggested condition is that the implementation should be tested in form of a study. An implementation study should exhibit the features being implemented in a clinic over a large period of time in form of a clinical trial. The participants of a control clinic should just be treated as usual. The advantage of this would be the integration into routine care. This suggestion was even confirmed by statements of two other attendees.

"(...), wenn Implementierung und erster Versuch der Annäherung, dann wäre es ja sicherlich sinnvoll das mal über ein halbes Jahr in einer Klinik auszuprobieren und als Kontrollgruppe eine andere Klinik zu nehmen mit treatment as usual. (...)." (Projekttreffen_2: P1 #00:58:05-3#)

The suggestion of an implementation of the MATE into the admission-interview was also discussed in connection with the feedback to the team and patients. The results of the guidelines's algorithm with the help of the MATE need to be communicated very quickly to the team via a documentation system or team-meeting. With the support of the discussed results the process of decision making needs to go on with the patients.

"Du hast ja gesagt, (...) dass du dir das gut vorstellen könntest, aber dann eben als Eingangsassesment und (...), dass es irgendwie schnell kommuniziert wird an andere Teammitglieder, also entweder durch ein Dokumentationssystem oder durch eine Teambesprechung oder wie auch immer und das dann eben mit diesen Ergebnissen mit den Patienten weitergearbeitet wird.(...)" (Projekttreffen_2: P7 #00:02:19-8#)

A manualization and standardization of the assessment was also seen as supportive. This would facilitate the feedback of recommendations in a way. An example is the "Rehabilitanden-Management-Kategorien" (RMK) (Spyra, Köhn, Ammelburg, Schmidt, Missel, & Lindenmeyer, 2011) which makes use of a feedback for the practitioners in terms of emojies. If for example a sad emojy occurs as a result, the therapists have to intervene and talk to the patient again. The fundamental idea needs to be a simple form of a feedback.

"(...) Also es müsste ja sehr sehr einfach aufbereitet sein. Dann wären wir zwar wieder beim Splitten (...). Aber auch so eine Art Manualisierung und Standardisierung ist nochmal wichtiger, die Frau Spyra, die machen das ja mit so Smileys. Die haben dann so einen Rückmeldebogen und dann sieht man halt direkt, wenn ein Smiley da ist muss, man da sich nicht weiter darum kümmern und wenn der Smiley traurig guckt dann wissen die Therapeuten, dass sie halt in dem Punkt überlegen, dass sie vielleicht nochmal mit dem Patienten sprechen. Aber im Prinzip muss es ja da hingehen, dass es so eine einfache Form der Rückmeldung wird (...)." (Projekttreffen_2: P7 #00:44:13-4#)

3.3.11 Possible barriers and worries with an implementation

In this section possible barriers and worries associated with an implementation will be shown differentiated between the MATE, the guidelines, and the combination of MATE and guidelines. Possible barriers separately about the feedback were not part of the discussion.

Table 41 Possible barriers and worries with an implementation of matching guidelines, MATE and both

Category	Sub-category
Possible barriers and worries with an implementation of	Matching guidelines
	MATE
	Matching guidelines with MATE

3.3.11.1 Matching guidelines

In the following section possible barriers and worries with an implementation of the matching guidelines will be demonstrated.

Table 42 Possible barriers and worries with an implementation of matching guidelines

Sub-category	Code
Possible barriers and worries with an implementation of matching guidelines	1. Differentiation between the treatments in dimension of "History for treatments"

For the purpose of implementing the guidelines one person stated the barrier of the dimension history of treatment. The original guidelines by the Dutch do not differentiate between treatments which the alcohol dependent patient received. In the adaption phase the German researchers could not differentiate between the treatments as well, because of a lack of evidence. So whether a treatment has possibly more impact on the patient or not was not

considered in the calculation of LOCs, i.e. a higher weighting on treatments in the algorithm was not done and every treatment was entered into calculation in the same way. This had an impact on the allocation to the LOC 4. So if any patient had more than five treatments in the last five years, the patient would get the recommendation of LOC 4 which was agreed to be a barrier by several attendees.

"(...) und ich denke, dass auch gerade bei diesem LOC 4 ist das überhaupt nicht differenziert genug. Also das, wenn man weiß, dass sind Patienten die brauchen wirklich eine Langzeitbetreuung, da gibt es schon kognitive Einschränkungen oder noch andere Begleiterkrankungen ist das nicht differenziert genug und ich weiß auch, dass die holländischen Kollegen da irgendwie nochmal was extra dafür machen. Weil die das auch so sehen (...)." (Projekttreffen_1: P7 #01:48:15-2#)

3.3.11.2 MATE

This paragraph deals with the barriers and worries of a possible implementation of the MATE.

Table 43 Possible barriers and worries with an implementation of MATE

Sub-category	**Code**
Possible barriers and worries with an implementation of MATE	1. Increase of documentation effort (Problems in the acceptance)
	2. Induction of MATE
	3. MATE as admission-interview unrealistic

Two different aspects were stated for the effort with an implementation of the MATE. At first, the documentation effort was named as a barrier. In the routine care there exist several time-points and question concerning information acquisition. So implementing the MATE would increase the effort of documentation, which was the aspect of one attendant. Also the MATE was recognized as too long for too less essential information as outcome by one person.

"(...),wir sind ja sehr viel mit diesem PEPP beschäftigt, mit dem Entgeldsystem, was zu einer doch nochmal deutlichen Steigerung der Dokumentation geführt hat und wir haben mal auch das Problem mit Soarian (Patientendokumentationssoftware), dass das nicht so richtig schnell läuft (...) und sowas da zusätzlich wäre ein deutliches Akzeptanzproblem einfach in der Routineversorgung. Weil es wird ja danach ja auch elektronisch nachher

gemacht werden. Und (...) die Mitarbeiter sitzen so viel vor dem Computer mittlerweile und die Zeit für den Patienten ist da eigentlich relativ gering und sowas würde noch mehr in die Richtung ja eigentlich gehen." (Projekttreffen_2: P5 #00:33:57-7#)

In case of an implementation the effort of an induction of the MATE and additional training to get in contact with this interview was mentioned as a barrier by one research assistant.

"(...)Gleichzeitig wäre das natürlich ein Nachteil. Also dieses sich einarbeiten und mit dem Assessment irgendwie in den Kontakt kommen." (Projekttreffen_2: P1 #00:18:48-3#)

"Ja weil eigentlich brauchst du ja schon eine Schulung." (Projekttreffen_2: P1#00:19:01-5#)

In contrast of suggestions made on implementing the MATE as an admission-interview, there were also two comments on disadvantages concerning the MATE as an admission-interview. If patients will be admitted into hospital as intoxicated, a 45-minute interview at admission would be unrealistic, because of an actual understaffing in the clinics.

"(...) Allerdings den MATE als Aufnahmegespräch zu verwenden wäre halt auch nicht realistisch wenn die Patienten da intoxikiert ankommen. Das ist erst mal so das eine Problem, also ein Personelles einfach." (Projekttreffen_3: P11 #00:18:24-1#)

3.3.11.3 Matching guidelines

At least the barriers and worries of an implementation of a combination of both will be described.

Table 44 Possible barriers and worries with an implementation of matching guidelines

Sub-category	Code
Possible barriers and worries with an implementation of matching guidelines	1. Worry of therapists and caregivers losing their autonomy in decision making
	2. Possible "manipulation"
	3. Additional effort
	4. Documentation effort
	5. Implementation is methodologically challenging
	6. Funding agencies as a barrier
	7. Differences in the Dutch and German treatment system

The first statements of three attendees were the worry of the therapist and caregivers losing their autonomy in decision making. The matching guidelines would be seen as a possible replacement of the decision making in further treatment.

"Ja die Autonomie der Behandler. Man findet das natürlich ganz schick, wenn man selber entscheiden kann und ich glaube, dass viele das als bedrohlich erleben, wenn es ein Instrument gibt, da gibt es ja glaube ich auch Untersuchungen zu, was die Entscheidung dann übernimmt." (Projekttreffen_3: P12 #00:23:14-7#)

A possible risk could be that the information for the guidelines' algorithm from the MATE will be edited in the way of how to allocate a patient to a specific LOC.

"(...) Andersherum wird dann das Problem vielleicht sein, dass das Instrument auch so ein bisschen so bearbeitet wird, wie man den Patienten schicken will." (Projekttreffen_2: P5 #00:47:40-2#)

Similar to the implementation of only the MATE, the effort was mentioned for the combination of matching guidelines as a barrier as well. One person said that the personal is already working on the limit. Another research assistant described the situation as reaching their capacity's limits with almost five admissions and discharges per day.

“Ja da sind ja zum Teil fünf Aufnahmen pro Tag und das sind immer mindestens drei und ebenso viele Entlassungen und ja da sind die halt, die das regulär abarbeiten, relativ am Limit mit ihren Kapazitäten.“ (Projekttreffen_3: P11 #00:16:25-2#)

A specific effort seen as a barrier is the documentation effort. Two of the attendees mentioned, that this could lead to a problem of acceptance. But in one statement this barrier was relativized by saying that this would probably work out in the future.

“Und was ich mir eher vorstellen könnte wäre so ein bisschen eine Bürokratiefrust. Also da gibt es noch was, was ich ausfüllen muss wenn jemand kommt standardmäßig bei einer Aufnahme. Noch mehr am Computer und so weiter, also das wären dann wahrscheinlich eher so Anfangskrankheiten, die sich dann auch einspielen würden.“ (Projekttreffen_3: P11 #00:24:31-4#

Further in two cases doubts were expressed concerning the feasibility of an implementation: It would be methodological challenging to implement the matching guidelines into routine care.

“(...) ich habe halt so gewisse Zweifel, dass man das gut hinbekommt. Es ist halt methodisch sehr herausfordernd.” (Projekttreffen_2: P5 #00:50:20-0#)

Two attendees mentioned funding agencies as a possible barrier. They described the dependency on those agencies regarding decisions on further treatments. As an example it was demonstrated, that the health insurance built up the pressure on some patients who had been on sick leave to undertake inpatient care or else the sick leave would be cancelled.

“Also letztendlich sind wir abhängig auch von den Leistungsträgern. Was wird noch bezahl? Das ist, empfehlen kann man viel. Aber was letztendlich bewilligt wird, wenn drei Langzeittherapien abgebrochen worden sind, dann wird keine Vierte mehr bezahlt. Dann ist Schluss. Was wir aber vermehrt jetzt sehen auf Station, dass die Krankenkassen ganz schnell Druck machen. Auch schon bei der ersten Entzugsbehandlung, dass die sagen, wenn ein Patient vorher lange krankgeschrieben war, so wir möchten jetzt, dass sie eine Reha machen, sonst wird das Krankengeld gestrichen. (...)“ (Projekttreffen_1: P3 #01:42:32-8#)

The final remark was by one person that the system of substance abuse treatment differs in Germany and Netherlands. Further results of Dutch studies, especially the latest showed that the guidelines do not show any effects on the treatment and the cutoff-values need to be adjusted. But the treatment system of the Netherlands and Germany are not comparable and the process can just be used as a foundation for recommendations. However the question would be what additional value an implementation would implicate.

"Also die haben bis jetzt dazu drei Studien publiziert und die letzte hat eigentlich keine Effekte. (...) die Quintessenz aus der letzten Publikation war, dass sie die Kriterien anpassen wollen. Also, dass eventuell eben die Cutoffwerte nicht so richtig passen. Aber das war jetzt auch z.B. für unser Studienprotokoll echt ein Problem, weil das Paper rauskam, als wir schon angefangen hatten und dann die Gutachter zurückgemeldet haben, naja warum macht ihr das eigentlich? Wenn es doch bei den Holländern schon nicht funktioniert hat. das System ist ja eigentlich auch gar nicht vergleichbar, von daher. Und hier kann es ja eigentlich immer nur eine Grundlage für Empfehlungen sein. Und dann ist es eben die Frage, welchen Mehrwert es dann tatsächlich hat." (Projekttreffen_2: P7 #00:32:55-6#)

3.3.12 Possible positive effects and additional values of the decision-making process

As the question of the possible barriers and worries with an implementation was what additional value the MATE and guidelines would have, this will be demonstrated in the following paragraph. The positive effects and additional values on the patients and the clinical team as well as for the procedure at the ward which accompanies with an implementation of the decision making process will be described.

Table 45 Possible positive effects and additional values of the decision-making process for patients and the clinical team

Category	Sub-category
Possible positive effects and additional values of the decision-making process for	Patients
	Team (Procedure at the ward)

3.3.12.1 Patients

First of all the positive effects of a possible implementation of the decision-making process for the patients will be illustrated.

Table 46 Possible positive effects and additional values of the decision-making process for patients

Sub-category	Code
Possible positive effects and additional values of the decision-making process for patients	1. Patients feel like someone cares about them
	2. Increase of motivation for treatment in specific patients

One additional value was reported, that patients would like to be seen as a person and like to perceive that someone cares about them.

„(...)bei uns wird z.B. nicht jeder Patient psychologisch angesprochen, weil das Kapazitäten-technisch überhaupt nicht klappt und die haben sich natürlich gefreut, wenn ich mich mit denen zwei Stunden auseinandergesetzt habe, ja. (...)." (Projekttreffen_1: P1 #00:13:05-5#)

For patients who are chronified, difficult to motivate or even show a lack in motivation by a clinical impression or patients who show up at the hospital of one's own accord the motivation for treatment could be improved due to the additional basis of decision-making and demonstrated an additional value for those.

"Und so im stationären Setting halt für ausgewählte Patienten, (...)die aus eigenem Antrieb eben sofort auf die Station kommen und ich fand es jetzt auch wertvoll, ehrlich gesagt, für Patienten, die halt schon schwer chronifiziert sind. Also da wo man denkt, die laufen halt einfach weiter oder sind vielleicht auch schon gar nicht mehr zu motivieren durch den klinischen Eindruck (...). Aber ich hatte gerade bei diesen schwereren Fällen dann häufiger mal den Effekt, dass sie dann auch sagten, ja stimmt, vielleicht sollte ich das wirklich nochmal machen." (Projekttreffen_3: P11 #00:32:59-7#)

3.3.12.2 Team

This paragraph will describe the possible positive effect of the decision-making process for the clinical team.

Table 47 Possible positive effects and additional values of the decision-making process for the clinical team

Sub-category	Code
Possible positive effects and additional values of the decision-making process for the clinical team	1. Additional information out of MATE
	2. Tangible information-basis for routine care
	3. Academic grounded decision as a benefit for refunding
	4. Simple application of MATE
	5. Optimization in organization
	6. Guidelines as good foundation for argumentation
	7. Transparent procedure raise awareness
	8. Individual reaction on patients' needs for further treatment
	9. Visualization of addiction in the feedback-interview
	10. Spending time on dealing with aspects of guidelines and the patients

The first additional value for the clinical team was reported by two attendees that the additional information gained out of the MATE-interview, which could be useful in further routine care. In this statement it is described that a well-known patient stood in close contact with a good friend. This information would be missing without these questions, because such things never had been asked before.

"(...), dass ich bei den Interviews, die ich gemacht habe auch zwischendurch Sachen da gehört habe, die mich überrascht haben, weil ja auch nach Ressourcen gefragt wird und das war was wo ich also wirklich einige Male gedacht hätte, so ganz traditionell in der Klinik, das hätte ich nicht mitgekriegt. Z.B. war ein schwererkrankter Patient, (...), der einmal am Tag mit einem guten Freund telefoniert. Den kenne ich aus der Ambulanz und da bin ich fast umgefallen, weil ich hätte mir irgendwie alles Mögliche vorstellen können, nur das nicht. (...)." (Projekttreffen_3: P12 #00:11:11-1#)

Another valuable aspect discussed by two research assistants was the good foundation that comes along with the MATE and guidelines. So to speak the information collected out of the MATE would be a tangible information-basis for the routine care and the decision

which has to be made, because of the standardized characteristic of the MATE. The additional value behind this is that the decision is not only fundamental but academic grounded.

"(...) wir wollen ja sicherstellen, dass wenn eine Entscheidung, dann eine Entscheidung auf Basis von, und deswegen finde ich das halt hilfreich und deswegen glaube ich kann das auch für andere Berufsgruppen gut sein, also Hauptsache es macht irgendwer in der Klinik. Das finde ich halt das Wichtige und wenn man das auch entsprechend kommuniziert und sagt ok, das ist wissenschaftlich fundiert (...)" (Projekttreffen_2: P1 #00:04:12-1#)

This fundamental and academic grounded decision could also appear as being beneficial on the application for further treatments by the service providers like health and pension insurance.

"Ich könnte mir vorstellen, dass gerade da auch so eine standardisierte Erfassung von wichtigen Kriterien, die ja (...) vielleicht den Rehaerfolg auch voraussagen können. Also das wenn man das so eben auf diese standardisierte Weise erfasst, dass man damit vielleicht auch gerade solche Anträge auch erleichtern könnte, wenn man das so eins zu eins in einem Antrag dann umsetzen könnte." (Projekttreffen_1: P2#01:41:33-7#)

Another supportive factor, stated by two research assistants, which would accompany with an implementation is the application of the MATE. As described beforehand the MATE could be conducted by assistant physicians, therapists and caregivers with an users-manual. Especially in clinics with a high fluctuation the guidelines in combination with the MATE could be supportive for a development in routine decision making.

"Also ich finde so gerade für die Kollegen, die neuer sind und wir haben ja viel Fluktuation auf der Station, wäre es ein absoluter Mehrwert, (...)wenn man da jetzt jemanden nicht hat, der so diese Erfahrungswerte mitbringt und so ein bisschen am Schwimmen ist, ich glaube das wäre eine massive Erleichterung da auch eine Entscheidung für den Patienten zu treffen." (Projekttreffen_3: P11 #00:21:18-6#)

Further the work with assessment and guidelines actually optimized the work in one cases. In one case an information sheet with the LOCs is used to inform the patients about the supply of treatments. In another case the person stated, that the MATE as an admission assessment would optimize the organization as well because 70% of which was asked in

the MATE is part of the admission-interview anyway. The subsequent recommendation given from the MATE would adjust the process.

"(...) ich denke, dass man den MATE grundsätzlich als Eingangsdiagnostik auch verwenden sollte. Das fand ich in der Umsetzung manchmal problematisch, dass die manchmal auch gesagt haben, naja 70% von dem was sie mich hier gerade fragen habe ich halt tatsächlich schon beantwortet (...)Aber wenn ich dann hingehe und ich sehe den Montags und habe ein längeres Erstgespräch geführt und melde dem Mittwochs zurück, was ich mit dem besprochen habe, dann wird das ja durchaus auch Sinn machen. (...)" (Projekttreffen_1: P1 #01:20:07-0#)

Also the matching guidelines were perceived as a good foundation of arguing for the recommended LOC. The definition of the different LOCs was very supportive for transferring the supplies to the patients in daily outpatient treatment, because there is a high amount of different treatments in the German substance abuse treatment section.

"Ich finde eigentlich die Idee, die dahinter steht, also dass man unterschiedliche LOC hat und wie definiert man die, dass es mir das im Ambulanzalltag erleichtert, den Patienten auch zu vermitteln, was es für Angebote gibt, weil es hier einfach so unheimlich viele Hilfeangebote in dem Suchtbereich in Deutschland gibt." (Projekttreffen_3: P12 #00:22:22-8#)

A further point to be seen as an additional value is the transparency which was associated with the process of the matching guidelines. The process could raise the clinical team's awareness of what actually happened to the patients. This transparency is also a positive effect for the patients.

"(...) ich finde es wichtig, dass was ja dahinter steckt ist ja wenn wir über diese Behandlungszuweisung sprechen, dann ist das ja nochmal ein Gewahr- oder Bewusstwerden dessen, was auch mit dem Patienten bisher schon passiert ist. (...)" (Projekttreffen_2: P1 #00:04:12-1#)

An advantage of the simplified presentation form and rough guidelines is the possibility to address patients individually on the specific LOC which was recommended. It is not necessary to stick to one specific treatment but the respondent person can react on the patient's needs.

"(...) Also ich glaube ich sehe in so einer einfachen Einteilung den Vorteil, dass es halt zwar eine grobe Richtlinie gibt aber man trotzdem noch die Möglichkeit hat eben sehr individuell auf die Leute einzugehen, dass eben nicht, weiß ich nicht man hat ein zwei Stunden Assessment und es wird eine ganz bestimmte Behandlung ausgespuckt und da gibt es auch keine Diskussion mehr, sondern es ist noch einigermaßen, es gibt irgendwie eine grobe Richtung vor. (...)."(Projektreffen_2: P7 #00:55:29-3#)

Besides to take up the addiction as a topic in the interview was a positive effect for the research assistant. With this tactic the patient could be visualized his or her addiction problem, which was then again a topic in further group therapies. So the research assistant built a loop for further discussions.

"(...) Die Diagnostikkriterien fand ich auch gut und der BDI den hatten wir da drin, oder? Das war nochmal was, das wird auch bei uns praktisch nicht so umgesetzt, dass besprochen wird warum ist der abhängig und warum nicht. Das ist ja gerade in Gruppentherapien oft ein großes Thema, ich bin nicht abhängig, ich bin jetzt für immer clean und das wird alles nie wieder passieren. Und da habe ich nochmal so eine Schleife drin zu sagen, das ist auch ganz spannend schauen sie mal warum hier alle von ihnen als Alkoholabhängigen sprechen. Ich erkläre ihnen das und kann das nochmal so ein bisschen aufarbeiten und aufgreifen. (...)." (Projekttreffen_2: P1 #00:30:46-9#)

One further additional value for the team was reported in having to take time for the several aspects of the guidelines and interview. It was also seen to be positive that the research assistant actually had to spend time with the patients and that the information out of the interview is important for the treatment allocation.

"Also ich würde den Mehrwert darin sehen, dass ich mir die Zeit nehmen muss mich mit den einzelnen Punkten und mit den Patienten zu beschäftigen und weniger, dass ich die Informationen für irgendwas anderes brauche als für diese Behandlungszuweisung. (...)." (Projekttreffen_2: P1 #00:29:48-8#)

3.3.13 Possible implementation settings

This section will demonstrate possible implementations settings for the matching guidelines.

Table 48 Possible implementation settings for matching guidelines

Category	Code
Possible implementation settings for matching guidelines	1. Primary Care
	2. First contact points for patients
	3. Clinics with no or lack of recommendations
	4. Clinics with several consolidated treatments options

The implementation into the primary care and general practitioner was valued as a possible implementation setting by the most of the participants. This will even be necessary if the qualified withdrawal treatment will be shortened, as it is worried about.

"Wenn es tatsächlich so ist, dass wir keine 21 Tage mehr Zeit haben um qualifizierten Entzug zu machen (...), dann muss man sich ja tatsächlich überlegen wo das auch sinnvoll ist (...), das ist ja eigentlich dort wo die Patienten sind, also eigentlich beim Hausarzt oder irgendwo in der Primärversorgung, (...)." (Projekttreffen_2: P2 #00:00:51-3#)

Another possible implementation setting for the matching guidelines would be in primary care especially in the addiction counselling service, which was stated by three research assistants. As a possible setting to implement, the general practitioner and psychiatric institutional outpatients department (PIA) were discussed.

"(...) Ich habe den Eindruck, dass das bei mir besonders hilft bei den Menschen mit Beratungsbedarf. Die kommen rein, die möchten gerne etwas tun, die haben noch nicht viel Kontakt zum Hilfesystem und möchte gerne wissen, was sind meine Optionen. Und die Stellen, wo solche Menschen in Kontakt treten mit dem Hilfesystem wären glaube ich gut, also Beratungsstellen, vielleicht sogar Hausärzte, die psychiatrische Institutsambulanzen natürlich, ja." (Projekttreffen_3: P12 #00:32:20-5#)

Two possible clinical settings were suggested implementing the MATE in combination with the guidelines. At first it was submitted to implement it in clinics where several treatment options are consolidated, with the concern that the purchasers have to concede the treatment.

" (...)das wäre ja eigentlich ein geeigneter Implementierungsort (...)die haben ja eigentlich alles unter einem Dach. Die haben eine Suchtambulanz, (...) qualifizierte Suchtstation, (...)

eine stationäre Reha und da könnte ich es mir dann wieder ganz gut vorstellen eigentlich, dass man das als Eingangsinterview verwendet und dann erst mal guckt kommt der jetzt erst mal in den Entzug oder reicht es wenn er in der Ambulanz gesehen wird oder schicke ich den zurück in die Beratungsstelle und dann hätte man das alles eher so unter einem Dach und es ist ein bisschen leichter zu organisieren. (...)" (Projekttreffen_2: P7 #00:47:07-1#)

Further an implementation into clinics where usually no recommendations will be suggested to the patients was valued as more necessary.

"(...). Ich könnte mir halt vorstellen, gerade in Kliniken (...), wo die einfach nur zum Entgiften hingehen und uns dann auch nichts weitergibt. Da könnte ich mir sowas auch nochmal viel besser vorstellen oder viel notwendiger."(Projekttreffen_1: P2 #01:41:33-7#)

3.3.14 Possible improvements of acceptance by patients for the matching guidelines

Another topic which was discussed in this focus group was how to increase the patient's acceptance with a possible implementation of the matching guidelines.

Table 49 Possible improvements of acceptance by patients for the matching guidelines

Category	Code
Possible improvements of acceptance by patients for the matching guidelines	1. Argumentation-basis and taking time for patients
	2. Explanation of the procedure and content to the patients

Statements by two attendees were given regarding the possible improvement of the acceptance by patients concerning the matching guidelines. The acceptance could be raised because of an argumentation-basis of the recommendation and taking time for the patients.

"Damit ich sagen kann, ja wir haben das ja gemacht und haben uns Zeit dafür genommen und da ist dann das und das bei rumgekommen, dann glaube ich das die da schon auch noch mehr drüber nachdenken als wenn ich denen das nur rate, aufgrund meines klinischen Eindrucks." (Projekttreffen_3: P11 #00:30:50-0#)

One further important aspect was stated by a research assistant, which includes that the MATE needs to be explained to the patients, by describing what information the MATE actually collects and the intention of the interview in combination with the guidelines.

"(...), ich finde immer wichtig zu erklären, ja der MATE macht das und das, und das ist doch auch hilfreich." (Projekttreffen_2: P1 #00:04:25-7#)

3.3.15 Limitations within the study

During the study some limitations appeared concerning the application of the assessments and structural and organizational problems occurred in some clinics.

Table 50 Limitations within the study

Category	Code
Limitations within the study	1. Different interpretation of LOCs by patients
	2. CSSRI was difficult to apply
	3. MATE-ICN is probably not precise enough to collect valid data
	4. Organizational problems
	5. Reorganization in one clinic
	6. Data management

One limitation was present in the understandability of the several LOCs. These could be interpreted differently by patients, so they would get a higher recommendation of what they originally wanted to do for further treatment.

"Also ich finde es wird schon deutlich, dass (...) das schon ja eher so ist, dass die Patienten mehr empfohlen bekommen als sie eigentlich wollten." (Projekttreffen_1: P7 #01:01:39-2#)

The CSSRI, which was for study purposes, was reported as difficult in the application.

"Was ich schwieriger fand war (...) der gesundheitsökonomische Teil, (...).Fand ich sehr anstrengend." (Projekttreffen_3: P12 #00:12:53-4#)

Another aspect was the adaption of the MATE-ICN from the Netherlands, even though it hadn't been validated yet. Therefore this assessment was probably not precisely enough to collect valid data.

"Das ist ja genau der MATE-ICN und das ist wir haben ja die Cutoffwerte oder die Werte die bestimmen darüber ob jetzt der MATE sagt die soziale Situation ist gut oder schlecht, (...). Die haben wir von den Holländern so übernommen und (...), die haben das ja eigent-

lich auch nicht validiert. (...). Das ist sicherlich ein interessanter Hinweis, dass es an der Stelle noch nicht so gut das erfasst was man wirklich wissen will, offensichtlich." (Projekttreffen_1: P7 #01:12:14-8#)

Table 51 Organizational problems

Code	Sub-code
4. Organizational problems	a) Research assistant was not employed at the ward
	b) High personnel fluctuation
	c) Qualified withdrawal of eight days

a) Research assistant is not employed at the ward

Organizational problems during the study once occurred in a clinic, because the research assistant did not work for the clinic and therefore was not integrated into the routine care.

"Ich glaube in Klinik4, (...). Das war auch so, dass die Studienmitarbeiterin auf der Station nicht gearbeitet hat, die musste da immer extra hinfahren." (Projektreffen_2: P7 #00:26:44-9#)

b) High personnel fluctuation

Further the implementation was difficult because the ward had high personnel fluctuation.

"(...). Also ich glaube während des Studienverlaufs war es so, dass mindestens ein Mal die Stationspsychologin oder die Psychiatrische Instituts Ambulanz gewechselt hat. Bei den Assistenzärzten gab es auch Veränderungen und das ist natürlich schon schwierig, dann immer zu vermitteln, wie die Abläufe standardgemäß ablaufen, ohne das jetzt auch noch eine Studie mit dabei ist." (Projekttreffen_3: P12 #00:16:57-5#)

c) Qualified withdrawal of eight days

Another issue was the shorter period of the qualified withdrawal with only eight days except of twenty-one. Patients need to care about the application for further treatment after two three days of admission.

"Ja und ich finde so gerade Zeit, das ist halt eins der größten Probleme oder speziell für mich jetzt, weil die ja oft die Patienten, wenn sie noch entzügig sind, also so am zweiten

dritten Tag, schon bei den Sozialarbeitern sitzen und die ersten Informationen für den Antrag zusammentragen. Das eben, ja die Rehabilitation möglichst schnell gestellt werden kann, (…). Das ist ja eher so ein, ja strukturelles Problem. (…), ja dadurch, dass eben der qualifizierte Entzug bei uns etwas schneller gelaufen ist als vielleicht in anderen Klinken." (Projekttreffen_3: P11 #00:20:32-5#)

Due to a reorganization of the ward like a draft of the senior physician and the omission of the consultation-hour for alcohol dependent patients represented a limitation as well. Many patients therefore were dropped out which had an influence on the recruitment of the participants for the clinical trial.

"*(…) es gab so ein Paar einfach organisatorische Punkte, dass der Oberarzt gewechselt hat und auch in der Suchtsprechstunde, die wir ja auch haben in der psychiatrischen Institutsanstalt (PIA) viel Wechsel war und (…) die ganzen Suchtpatienten blieben weg und das ist genau in die Zeit von der Studie gefallen. Das war natürlich blöd." (Projekttreffen_2: P2 #01:06:49-5#)*

Besides there occurred also problems in the data management because the most documentation was delivered delayed and some lists probably were not supplied completely, which could not be confirmed at the actual time-point.

"Also ich habe gelegentliche Listen bekommen, aber ich weiß nicht ob das alle sind." (Projekttreffen_1: P9 #00:36:54-7#)

3.3.16 Biases for the study results

Within the study some biases occurred also, which could be deduced out of the statement within the focus group discussion. These will be demonstrated in the following paragraph.

Table 52 Biases for the study results

Category	Code
Biases for the study results	1. Dropouts included
	2. Selection bias
	3. Internal treatment prevent the allocation to LOC1 in one clinic
	4. Patients received recommendations before feedback-interview

About three patients were included into the CG although those dropped out because of terminating the treatment but received a MATE-interview.

"(...). Ich hatte bestimmt drei Patienten, wo ich ganz normal das Interview durchgeführt habe, die aber vorher abgebrochen haben oder rausgeschmissen wurden, wo ich ja darum gebeten hatte die zu Studienzwecken zumindest mit in die Kontrollgruppe dann aufzunehmen, die haben wir jetzt auch schon eingeschlossen (...)." (Projekttreffen_1: P1 #00:42:52-7#)

Some of the patients were selected by a research assistant to address only patients who actually could participate in the study.

"Wobei wir ja auch geguckt haben wen wir ansprechen und wen nicht. Aber die die ich angesprochen habe, da hat ja ein Großteil auch mitmachen wollen. (...)." (Projekttreffen_3: P11 #00:03:11-9#)

In general the presented high amount of patients who get the recommendation of LOC1 was surprising for the most research assistants. In one clinic most of the patients did not get the recommendation of LOC1, because an internal PIA was connected to the ward, which could offer appointments very soon.

"Ja das finde ich, das hatte ich ja auch schon angegeben, bei uns werden eigentlich keine Patienten überhaupt in LOC1 vermittelt, alleine weil wir diese Psychiatrische Institutsambulanz haben und die immer einen Termin kriegen. (...)." (Projekttreffen_1: P1 #01:04:18-4#)

Moreover in another clinic the patients received the feedback by the recommendation out of the matching guidelines from the personal in the ward, before the actual feedback-interview, which was not the intention of the study.

"(...), viel passte nicht zusammen. Es wurde das geplant und das wurde ausgespuckt aus dem System. Und das war für die Patienten auch ein bisschen verwirrend." (Projekttreffen_1: P3 #00:14:29-8#)

"Das war doch gar nicht Intention der Studie." (Projekttreffen_1: P1 #00:14:34-3#)

3.4 Summary of qualitative data analysis results

In conclusion the results of the focus groups show how the application of the guidelines, MATE-interview, the combination of both, the feedback session and the combination of these three as a process for decision-making were evaluated by the research assistants. Moreover the performed QCA reveals 16 categories among which several advantages, disadvantages, barriers and suggestions had been discussed concerning the application and implementation of the instruments for the process of decision-making. An entire table of every category, sub-category, codes and sub-codes are demonstrated in the Appendix 2.

Acceptance of matching guidelines in combination with the MATE

As it was for the MATE-interview, results show that the research assistants accepted this assessment. The MATE was tried to integrate into the routine care by giving feedback to the clinical team and was experienced as comfortable in application because of its structure. For the patients' acceptance of the interview it was reported that there were difficulties in the understandings and some of the patients even felt exhausted by this additional appointment. The appointments during the withdrawal treatment were already perceived as too many for the patients. This was reported to be a characteristic of this patient group. Further the study environment had an influence on the patients, which was not described in detail. But there were also statements made on patients liking several parts of the interview as well as talking about personal life issues. Especially the parts of addiction anamnesis and the MATE-ICN were found to be good. Moreover, the general conditions were good and the questions were filled out well. As it was reported for the clinical team the request for a support in the decision-making process was expressed. Especially the hitherto diagnostic was rarely done and also requested by the clinical team.

Acceptance of the study

The actual performed study was accepted by the research assistants as well as it was for the assessment. One reason for that was in the sustainable relationship building with the patients, which was perceived to be supportive in the later procedures. In most of the cases the study was also approved by the patients. This can be derived out of statements concerning a generally good acceptance, the participation of some patients because of an interest in the scientific improvement and a reported benefit for the patients from the study, which was demonstrated by taking time for the patients and their personal issues. The commit-

ment even could be increased by the recruitment of the ward psychologist. But there was also perceived rejection, because as described in the section before some of the patients did actually miss the study's appointments. Furthermore an acceptance was reported by the clinical team in some cases. Especially the feedback session was seen as supportive in difficult to motivate patients. But on the other hand reservations were perceived, because some members of the clinical team, likes social workers felt threatened being replaced for further treatment decision making and patient disclosure. The lack of commitment reached from initial reservations to even missing commitment by the staff members. It was also reported that the study was not integrated into the routine care, which made it difficult to recruit patients for the study and cooperate with the team. To raise the acceptance and commitment of the team members in general a study needs to show a positive effect for them.

Cooperation of the clinical team with the research assistants

The acceptance was also represented by statements concerning the actual cooperation with the clinical team during the study performance. For those clinics reporting a good acceptance the assistant doctors were inclined to cooperate. At these wards the feedback concerning the results of recommendation out of the matching guidelines was possible within the team and the communication with the treating therapist was perceived to be nice. In the clinics where no acceptance was reported, feedback of social workers did not happen and the communication was difficult. In one occasion the cooperation with one social worker even was denied. The difficulties in the cooperation were characterized by a lack of interest in a study implementation which made it impossible to integrate into the routine care.

Documentation Effort

Opinions about the documentation effort during the study were in general evaluated as appropriate by the research assistants. Only the submission of documents was delayed because the documentation was mostly produced ex post at one occasion.

Plausibility of the matching guidelines

The plausibility concerning the guidelines was stated to be good. This was demonstrated by a good understandability and adequacy. Further the recommendations were communicable to the patients and the classifications were plausible as well. Accordance between

assessment's recommendation and the impression of the clinical team was perceived to be good. Only in few cases the recommendations were disagreed by the team.

Proceeding of decisions for further treatment in feedback-interview

Regarding the feedback-interview this was performed as it was practised during the previous trainings, but a more in-depth feedback as required in most of the cases felt artificial. The given tactics of Motivational Interviewing could be applied and one statement showed that a previous decision made by a patient actually could lead him/her to rethink this opinion.

Feelings about feedback in general

As it is for the feedback of the results and given recommendation, this was valued to be comfortable and adequate for both patients and research assistants. But in most of the cases the motivation for treatment could not be increased due to the feedback session, because this was actually done previously within qualified withdrawal treatment. However few patients of the CG even requested for a feedback session.

Opinions about the preparation of the training

In general the organization of the training and the feedback given by the principal investigators were valued as good and supportive as well as the intensity of the training and the given material for practical application. But there was also the concern of the training being too short in the duration. Especially the practise of MATE-ICN and the feedback-interview was revised to be not intensive enough. This was illustrated by reported difficulties in the application of those instruments but which could be compensated due to the routine work. During the study process the supervision by the principal investigators was mentioned to be supportive. But as it was presented before questions occurred during the application concerning MATE and especially the MATE-ICN. In future trainings the intensity for the MATE-ICN needs to be increased and the duration of the training needs to be longer to prepare the staff of routine care in an optimal way.

Thinkable reasons for the low rate of recommended and initiated treatments after discharge

Within the focus group discussion the presented results demonstrated a low rate for recommended and initiated treatments at discharge. Possible reasons were therefore discussed as well. Statements for reasons were made concerning an incorrect documentation after the recommendations regarding the study. This hint was detected because the frequencies were high except of the treatment documented at discharge. Another reason could lay in the analysis, because the variable of discharge was split into recommended and initiated. This division was suggested to revise in further analysis. One further reason was reported concerning low motivation of the patients actually wanting to do the recommended treatments after discharge. In addition external factors, like treatments which would possibly not be approved by the health or pension insurance were also discussed. Finally some internal organizational aspects like the beforehand reported missing integration of some research assistants into the routine care was also mentioned to be an influencing factor. Some overlaps according to the organizational procedures of the routine care, like social workers making forward to the patients were stated to be a reason for the low rate as well.

Suggestions for conditions with an implementation of matching guidelines

For a possible implementation of the applied instruments suggestions were given by the participants of the focus group discussion. First of all it was discussed that the previous determination of excluding treatments not directly connected to the alcohol dependence, was necessary for the guidelines' algorithm calculating the recommended LOCs. Further questions arose about if the MATE is necessary for the guidelines' algorithm and how much assessment actually is needed for this. One further discussed point concerning this latter question was that it would be supportive if the time-point of collecting such needed information could be more flexible and could be adapted to the actual effort in the routine care. The guidelines' assessment for providing information also needs adjustments in the collection of individual patients' information. Hence only relevant questions can be asked. Information of well known patients which are already collected could be left out. Another beneficial aspect could be the possibility of a more flexible combination of the dimensions' criteria of the algorithm in the allocation. This could be achieved with the support of an

interaction of information within lower LOCS, if the worry of potential treatments not being granted by insurances exists.

Suggestions for conditions with an implementation of MATE

Possible conditions for a MATE implementation were also part of the debate, in which suggestions reflected the importance of the persons performing the interview. These should be anchored in the routine care, like primary nurses. Therefore additional personnel need to be hired. The structure of the MATE in case of an implementation needs some adjustments. For this purpose the MATE could be divided into single parts and allocated to the specific professional groups. One possibility could be that the addiction anamnesis is conducted by the ward psychologist and the MATE-ICN by the social workers. The categorizing structure of the MATE itself was valued to be good, but the application needs to be shorter and more precise. An integration of the MATE into the hospital information system with slim and good software was also seen as supportive in the application. In addition the time-point of when to conduct the MATE was seen as important. Before the beginning of the study the time-point was fixed to one week after detoxification, because the patients were cognitively and physically fitter and the perception is different. But for the purpose of changing the structure of the MATE, proposals were made implementing this into the admission-interview without guidelines. The structure and content of the actual admission-interview is similar to those of the MATE. The addiction anamnesis of the MATE was reported as supportive. A similar version of this anamnesis is already in use for substitution patients in addiction ambulance as it was stated by one research assistant. With regard to the suggestion of splitting the MATE some parts could be asked in the admission-interview and others could be asked during the qualified withdrawal or hospital stay. Finally it was stated that the performance of the MATE was perceived as more simple with a regular usage and routine.

Suggestions for conditions with an implementation of feedback-interview

For the feedback session and the component of motivation for treatment there was no reflected need by the focus group, because this is already part of the chief physician visit in which members of the different occupational groups are present.

Suggestions for conditions with an implementation of decision-making process

With respect to the whole decision-making process, integration into the routine care was stated as necessary with an implementation. However this implementation needs to involve an increase in the process quality of the routine care. Another point is that the process should serve as an additional supply to get information about the patients and act as a foundation for the decision-making. To actually implement this process backup from the chief physicians and executive therapists is required, for which more staff is necessary. One suggestion was also made concerning the centralization of the information flow for a continuous motivation of the patients within the different treatments after discharge. As a model the Dutch treatment system could be taken into account, which shows this structure. Another helpful statement was made concerning a subsequent implementation study over a larger period of time. Therefore this decision-making process will be implemented into one clinic and in another clinic patients will be treated as usual. In principle the decision process shall be implemented as followed: the MATE operates as an admission-interview and pursues the guidelines with its information. The results, so to speak recommendation, needs to be communicated very quickly via documentation system or team-meetings. Afterwards these results are served to work on with the patients. Furthermore the process and feedback of recommendations to the patients also needs to be manualized and standardized. The RMK (Spyra et al., 2011) was suggested to may serve as an example for this.

Possible barriers and worries with an implementation

A possible implementation of the guidelines, MATE and both combined may also involve some barriers and worries. A barrier that implicates with a guidelines' implementation is the dimension "History of treatments". The treatments done previously were not adequately differentiated for this dimension. This was done due to the fact that there is no evidence of which treatment is more worth and could have a higher impact on this dimension. Especially for the LOC4 this differentiation is not sufficient.

As it is for the MATE the worries lay in the additional documentation effort for the clinical staff, which would implicate difficulties in the acceptance. Also the effort of inducting the MATE as well as the accompanied additional training was valued as a negative aspect for the staff. The suggestion using the MATE at admission was seen critically in the realiza-

tion, because of understaffing and in some clinics patients are admitted in an intoxicated condition.

For the combination of the MATE being the assessment to deliver the information for the guidelines a fear of autonomy loss within the clinical staff was stated. Further the possibility of "manipulating" the MATE to allocate patients to specific treatments was seen as a risk. The worry of additional effort, especially in the documentation as described beforehand was also mentioned. The implementation was valued as methodologically challenging, difficult to integrate and anchor in the routine care. Further the funding agencies could represent a barrier because these stay in charge of approving the treatments. So the actual approval of treatments lay not in the hand of the clinical staff. The implementation of this allocation instruments were named to be difficult, because there is a lack of empirical results showing any effect on the treatment and abstinence. Further this process can just function as a foundation of recommendation, which could be weakened the possibility of implementing.

Possible positive effects and additional values of the decision-making process

But there were also discussed some positive effects and additional values for the patients and the clinical team with an implementation. For the patients it was stated, that they feel good because they receive that someone cares about them, their problems and the addiction. Further the guidelines' referral even strengthened the motivation for treatment in patients who are chronified, difficult to motivate or did show up at hospital of one's own volition. Further the patients will benefit from the transparent procedure.

For the clinical team this process could be valuable because of the additional information about the patients and their addiction. The process and standardized characteristic of MATE also point out to be a good foundation for referrals in decision-making. Furthermore the academic grounded decision can be supportive as an argumentation for funding agencies to approve treatments. Its' simple and manualized application makes it easy to implement and is supportive for new employees. An implementation of the MATE into the admission-interview would be useful, because the structure of questions is in 70% almost the same. But then the feedback of results has to be given early. In addition the clear and well founded recommendations and the classification into LOCs help to recall the argumentation for the LOCs and make it easy to communicate to the patients. As well the clear

communication and the MATE-interview make the process transparent for the team. Additionally it is a good structure to know what treatments belong to which LOC. There is also the possibility to react and make changes for every individual case concerning the recommended treatment and if this would not be the optimum for patients. In addition the BDI and diagnostic criteria can help to build a loop for further group therapies, concerning the argumentation of why patients are addicted. Finally the stated relationship building and taking time for patients is seen as supportive for the clinical team as well, because this increases the practitioners' awareness for the patients and their allocation for treatment.

Possible implementation settings

Possible implementation settings were also discussed in the focus group. The drug counselling services and general practitioner was stated to be the best setting for an implementation, especially in the case of a shortened qualified withdrawal treatment. Also the guidelines would be supportive in clinics with several treatment options centralized in the same location and in clinics with a lack of declaring recommendations for further treatment.

Possible improvements of acceptance by patients for the matching guidelines

Furthermore possible improvements to optimize the patients' acceptance of the matching guidelines were debated. The patients' acceptance of the recommended treatments could possibly be higher with the guidelines, because there is an additional argumentation to the clinical impression by the clinical staff. This could have an influence on the patients' commitment for further steps in treatment. Besides the guidelines need to be explained to the patients to show its function and benefit for them.

Limitations within and during the study

In addition to the positive effects, additional values and suggestions of improvements some limitations occurred with the use of the instruments during the clinical trial. One of the limitations was a probable different interpretation of the LOCs by the patients, because in general patients get recommendations of a higher than they previously wanted. During the MATE-interview some difficulties occurred concerning the CSSRI. Moreover, the part of MATE-ICN was not previously validated and therefore this instrument is probably not precise enough for data collection. Furthermore in one clinic some organizational problems were present. The research assistant was not employed in the clinic, there was a high fluc-

tuation, and the withdrawal was shorter with 8 instead of 21 days. In another clinic the recruitment of patients was difficult, because the organization in the clinic was restructured and therefore patients fulfilling the inclusion criteria dropped out. The last point was stated beforehand, that there existed some difficulties with the data management, especially in the delayed and not completed submission of the documents to the responsible persons.

Biases within the study

Finally also some biases occurred during the study performance. In one clinic drop-outs were included into the study population. Another point mentioned was a bias in the implementation of LOCs into the routine care. Most of the patients in one clinic did not get a recommendation for a LOC1 because the PIA (LOC2) was connected to the clinic and could offer appointments at any time. Only patients who really wanted to do treatments of the LOC1 got these recommendations at discharge. Additionally a selection bias was stated because in one clinic the research assistants selected the patients who could be recruited. At least in another clinic the patients received feedback of the recommended LOC before the actual feedback after the team meeting took place.

4. Discussion

4.1. Discussion of the methods

The following section of critical appraisal of the methodological procedure regarding the analysis will be divided for the quantitative and qualitative part.

4.1.1 Discussion of the statistical quantitative analysis

First of all, the data set implicated a huge amount of variables and data, resulting in a complex overview. This extensive data set provides many data and therefore is valuable for subsequent studies. One major issue about the concordance analysis was the difficult itemization of the treatments done at the time-point of follow-up.

As discussed in the focus group the problem of different patients' understandings of the referred treatments also occurred within the follow-up interview. Some patients could not be precise on the nomination of treatments which were actually done.

Moreover some patients did several treatments. For the purpose of analysis only the highest LOC was considered. Out of these issues the concordance especially for those compared with follow-up could be biased. Therefore further analysis with better differentiation needs to be performed. Hence possible influencing factors (e.g patients' motivation for treatment, predictors like the four dimensions for the algorithm) need to be taken into account.

However the de facto performed pragmatic analysis was appropriate enough in terms of showing the matching rate with interrater-reliability regarding the study context of feasibility. In addition the results build a good foundation for subsequent studies. However the exclusion of patients whose recommendations were not documented at feedback and discharge and the fact that some patients did not make any LOC relevant treatment in the follow-up has to be taken into account for the purpose of analysis. If those patients were included for analysis the results would look a bit inferior.

4.1.2 Discussion of the qualitative content analysis

On the one hand the QCA especially the part of summarizing content analysis is impressive, but on the other hand its' procedure is very exhaustive. The tables developed out of the material have a huge amount of work and pages and all of the material has to be considered, even those that are not important for the research question. However according to Mayring an analytical summary needs to be performed without missing any information (Mayring, 2014, p. 79). Moreover the QCA is criticized for being oriented towards the quantitative content analysis. This was explained by the produced unchangeable and not flexible category system applying on the given text material. Possible characteristics are predefined and with an ordinal scale. Therefore it is excepted to find no more additional information (Gläser & Laudel, 2010, pp. 198–199; Schreier, 2014). This criticism could be avoided by inductively generating new categories, codes or sub-categories and sub–codes in addition to the former produced category system. Therefore this procedure is flexible and does not stick strictly to the created category system.

The analysis of the material in a strict methodological and controlled stepwise way is one strength of the pragmatic QCA. This stepwise analysis is also a characteristic of the grounded theory research (Cresswell, 2013, pp. 83–90). The decomposed units of the material can be edited consecutively. Because of the theory-driven system of categories there is

a determination about which text passages should be filtered out of the material (P Mayring, 2010, pp. 48–50).

Inductive category formation was additionally done because of the advantages such as no need for screening the whole material, the possibility of skipping the paraphrasing and the previous definition of the level of reduction (Philipp Mayring, 2014, p. 81). Furthermore Mayring (2014) shows that "The inductive ongoing (...) aims at a true description without bias owing to the preconceptions of the researcher, an understanding of the material in terms of the material." (Philipp Mayring, 2014, p. 79).

Concerning the validity, five strategies of Cresswell (2013, p. 243ff) and Mayring (2014, p. 110ff) are applied, namely: (1) clarifying researcher bias, (2) rich, thick description, (3) semantic validity, (4) sampling validity, and (5) predictive validity.

The researcher bias is defined due to being a member of the researcher group for one year. Moreover this thesis is written and supervised by the chief executive of this group. For the second step of validation the rich and thick description was applied in the introduction and methods part of this thesis. Here the process of performance and analysis was disclosed. (Cresswell, 2013, pp. 251–252) Another quality criterion was rudimentarily applied concerning the semantic validity. For this purpose every passage which was assigned to a certain meaning due to the introduction of the analysis was collected. Additionally the passages were compared to the construct and tested on their homogeneity regarding the researcher's comprehension. The checks concerning the construction of hypothetical passages, a possible reconstruction of meanings with this analysis instrument and the construction of problem cases were not applied. For sampling validity the text material was determined, the origin of the formation of the material was described, the audio-taped material was transcribed, the analysis and its direction was described, and the analysis follows a theoretically based and clear topic of substance. As a last step predictive validity can be applied, because the results comprise of suggestions for implementation (Mayring, 2014, pp. 109–111).

The audio-taping is rated as beneficial, because the quality and validity of the data is better than those protocoled by verbatim from memory. However the disadvantage is the unnatural conversational situation and therefore possibly some information are restrained by the attendants of the focus group (Gläser & Laudel, 2010, p. 157).

Transcription was done by clean read or smooth verbatim (Philipp Mayring, 2014, p. 45), because the summarizing transcription is not controlled methodologically. Hence these protocols are subjective and no reproducible steps of interpretation (Gläser & Laudel, 2010, p. 193).

The interview-guideline regarding the focus group operates as a result of operationalization. This is to be seen as an advantage because the central questions could be transformed as interview questions and therefore the transfer of those for analysis is simplified (Gläser & Laudel, 2010, pp. 142–144).

However some limitations occurred during data collection. First of all the examination environment for both groups differed. Consequently it can be questioned whether the surveys of two different interviews reveal the same material as only one would. In contrast to the second focus group, which was conducted via telephone, the first focus group received an extensive presentation and explanation of study results. Therefore the diverse amount of information within these two groups can be biased. Another problem could be the absence of one research assistant in both focus groups therefore some information could be probably lost. The two persons representing this missing research assistant were split within the first focus group discussion. Therefore one person was present for the discussion of the actual study and the second person was present for the discussion concerning the suggestions and barriers of an implementation. However this division was previously determined, but it should be at least mentioned.

4.2 Discussion of the results

In this section the presented results will be discussed regarding the feasibility of the matching guidelines. The parts of quantitative and qualitative results are divided but compared and discussed within each section altogether.

4.2.1 Discussion of quantitative results

Results of the concordance regarding the steps of the recommendations given during the study show that after an increase in the CTFB the concordance decreases as well as the interrater-reliability. The same effect can be seen for the MATE concordances. The hypothesis of a concordance of matching guidelines recommendations with the actual LOC entered at follow-up in equal or more than 48.4% was rejected because the concordance was 28% in both groups. After discharge the concordance decreased by almost 21%. The

content validity could be demonstrated due to the comparison of MATE and team recommendation in the IG by an overall concordance of almost 59% with a Kappa of .41. This is at least a moderate agreement. Hence there might be some reasons which lead the patients to do another or no treatment. Reasons for that were mentioned in the focus group to be organizational problems like a long latency period because there are no or too less treatment options and problems or even denial of treatment approvals by the funding agencies. These problems were also reported by Merx et al. 2007. The same phenomenon was seen in a decreased concordance of MATE discharge (CMD) and MATE follow-up (CMFU). At this point the concordance almost decreased by almost a half for both IG and CG.

The hypothesis that patients of the IG exhibit higher concordance of MATE recommendation and actual treatment done after discharge could not be proven. Results demonstrate the opposite with both groups showing an overall concordance of 28%. Also in both cases the interrater-reliability is poor. This leads to the assumption that feedback-interviews as further intervention show no additional effect in increasing treatment motivation. But this effect could have been masked a strong effect of the withdrawal treatment itself, because increasing the motivation for treatment is a fundamental part of this treatment (Mann, 2002). This can be confirmed by statements of the focus group in which it was discussed that the motivation for treatment is already part in other time-points of the withdrawal treatment.

The overall mostly recommended treatments of the LOC2 and LOC3 could be confirmed by the German pilot study (Röhrig et al., 2013) in which most of the patients also get recommendations for LOC2 and LOC3. The presented difference within the substance abuse treatment system of Germany and Netherlands is present in the recommendations of LOCs as well. Dutch patients mostly got treatment recommendation of LOC1 (Merkx et al., 2007). This difference could be explained by different substance abuse treatment systems, which is centralized in the Dutch substance abuse treatment centers and decentralized in Germany.

It was also obvious that LOC2 not only exhibits the highest amount of recommendations but also the highest concordance rates in both groups and in most of the cases, except the results of CDFU and CMFU. For those LOC3 show highest rates of concordance.

The substantial concordance of 87% within the recommendations of clinical team and the feedback session, compared to the other concordances, was not surprising to be higher, because the recommendation was discussed with the team. However this reveals positive results, especially to weaken the reported bad acceptance of matching guidelines and some employees of the clinical team. Moreover the recommendations of the matching guidelines discussed with the clinical team could lead the patients to a recommendation-based decision in the feedback-interview.

4.2.2 Discussion of qualitative results

As demonstrated in the qualitative results, advantages and disadvantages of the study and the assessments as well as barriers and suggestions of a possible implementation were discussed. In general terms the advantages show that the matching guidelines can be implemented in routine care. It was in general accepted by the research assistants, patients and the clinical team, which could simplify a subsequent implementation. The feasibility results regarding the acceptance are similar to those reported in Röhrig et al. (2013).

But there were also some disadvantages mentioned by the research assistants. Hence improvements are necessary before the matching guidelines can be implemented into routine care. First of all the MATE needs to be adjusted. Therefore suggestions of shortening the interview were made. Moreover the categories of the MATE can be splitted and allocated to the respective persons of the different professional groups. For example questions of the MATE which are similar to those of the actual admission-interview, like addiction anamnesis can be implemented into the existing admission as an initial diagnostic assessment. Further questions of social situations can be asked by the social workers at different timepoints during the hospital stay. This could also increase the acceptance by the social workers, who are reported to be suspicious towards the matching guidelines in some cases, because they are integrated into the process. The results can be collected via the hospital information system. Besides, the guidelines and an implementation with another assessment than the MATE as well as the necessity of assessments for the guideline were discussed. One possible assessment examined by Merx et al. (2007) proving to be feasible with the used guidelines is the ASI. However Schippers, Broekman, Koeter and van den Brink (2004) discussed the ASI as a "(...) first generation instrument, and should now be succeeded by the next." (Schippers et al., 2004, p. 416). Further the reliability and validity of the ASI was evaluated as being negative (Mäkelä, 2004). Moreover the results of Röhrig et

al. (2013) rated the feasibility of the MATE in combination with the matching guidelines to be a supportive result for implementation. Hence the promising results and suggestions for adjustments of the MATE given within the focus group should be used in a subsequent implementation.

The reported rejection of patients missing appointments will probably be present in an implementation because within focus group discussion it was stated, that this is a characteristic of alcohol dependent patients. Moreover this characteristic can be confirmed by the statement of patients feeling exhausted by the MATE-interview. However this could be a regional problem, because Röhrig et al. (2013) stated, that the interview was valued as appropriate by the patients. The difficulties in understandings of some questions might be faced by assumption of modifying the questionnaire. However, the constellation of the MATE being performed in a personal interview could be sufficient because the interviewer can intervene and explain questions that are difficult to understand. The influencing examination-environment will be omitted with an implementation into routine care, because the interviews do not have to be audio-taped for treatment purposes. Therefore the atmosphere during the interview would be more natural, which could have a possible influence on the responses of the patients and their well-being.

Although the documentation effort was reported as appropriate by the research assistants this effort was stated to be a concern for the clinical team when implementing the matching guidelines. The current documentation and general effort was valued to be high in the routine care anyway. Therefore an implementation could go along with rejection by the affected clinical team members, because they fear an increase of documentation effort and a higher workload. But this worry could be weakened by suggestions of implementing the MATE-interview at admission. As stated before most of the questions asked currently at admission are embedded in the MATE anyway. So the additional expenditure would be aggregated to a minimum. Moreover in one clinic the demand for a supportive assessment in the diagnostic was expressed. Therefore, at least in this and comparable clinics the acceptance of the assessments and the implementation would probably be simpler than in others. Besides the documentation for the CSSRI and EQ-5D are omitted because they are not needed for the routine care. Therefore an interview would take 30-45 minutes which was reported to be a normal admission interview.

In clinics with lack or even missing cooperation of the clinical team in some cases, this could be avoided with an implementation as well. If the integration of the decision-making process demonstrates an additional value for the team, an increase of acceptance and therefore integration would be possible. One condition for that is an introduction of the process and the assessments. Furthermore it needs to be clarified that the matching guidelines are merely a support for decision-making and not a replacement. The evidence-based recommendation especially for chronified, unmotivated patients or those showing up at the hospital without being referred from a central contact point, should also be clarified as an additional value and the importance of a supportive assessment in the routine care decision-making should be pointed out. The fear of being replaced regarding the provision of information and decision of the referral for further treatments by the social workers and nurses can therefore be removed. But the prior mentioned integration into the process is also important.

However one of the major issues discussed in the focus group was the problem of the study not being integrated into the routine care, which is implicated by the lack of cooperation from the clinical team and the reported difficulties with the social workers in one clinic. As a result the research assistant had to work around the routine care, which made it difficult for the study and the research assistant to receive acceptance from the clinical team. Hence the executives of the ward and clinic need to approve and support an implementation. Moreover, employees like social workers, nurses, therapists and physicians need to be integrated into the process and into assessments of decision-making for referral. The expertise of the social workers in the application for further treatment and knowledge about the substance abuse treatment system is very useful for the referral of treatments. Besides, the expertise of the nurses, therapists and physicians regarding clinical impression is necessary in addition to the recommendations of the matching guidelines. To achieve an occupational group interaction, employees need training capturing the importance of their interacting expertises in combination with the matching guidelines. The necessary results for additional values and positive effects of assessments and a subsequent study could be achieved due to a suggested implementation study. Therefore the clinic implementing the guidelines does not only need to show a better argumentation basis for referral but also a better abstinent rate than patients that are treated as usual in the control clinic. For the purpose of promising results the implementation needs to last at least one year and the clinics need to

be comparable. This comparability was difficult to achieve in the present study because in one clinic the qualified withdrawal only took 8 days except of the 21 days in the three other clinics. This difference is another major point to consider, because this could have influenced the results.

The perceived plausibility and adequacy of the MATE and the recommendations calculated by the guidelines' algorithm by the focus group attendees are good arguments for an implementation. The classification of treatments into LOCs was valued as comprehensible which would make a possible implementation into routine care feasible. However the results of quantitative analysis could not be substantiated for the reported adequacy of matching guidelines with the actual treatment done after discharge. But results show that the recommendation by the matching guidelines and the clinical impression of psychologists in at least 59% of the cases demonstrate a concordance. Hence reasons for a low concordance of MATE recommendation are probably organizational factors and the motivation of patients as described in the previous section and not the instruments of the process in principle. Some further hints were given by the reported limitations of the study and the process. These have to be prevented with an implementation. First of all the validity of the MATE-ICN needs to be examined to justify its utility in getting valid data.

The present high fluctuation of personnel in one clinic would make an implementation difficult in this case, but it could also be a helpful tool for the estimation of the referral to further treatments and to get routine for new personal. One of the further most discussed topics was the authority of the funding agencies for the approval of the referred treatments. The implementation of the matching guidelines and its referral characteristic was discussed to probably be a basis for argumentation of approving the treatments. But this would be difficult for patients showing no positive treatment outcome after several times. In addition the decentralized characteristic of the substance abuse treatment system in Germany is a major problem. The information flow is stated to be deficient, the latency period of getting a place for example rehabilitation is too long and there are only few treatment institutions in several regions. The centralized structure in the Netherlands as an appropriate setting for allocation guidelines was already discussed in the focus group. The actual difference in the structure to the German system is that patients come to the institution and MATE or other assessments will be applied. Subsequently according to the algorithms' results patients will be allocated to a treatment (Schippers, Schramade, & Walburg, 2002). There is no previous

treatment like the German qualified withdrawal and therefore this allocation is not comparable to the referral characteristic of the German matching guidelines. However in some German clinics different treatment options are offered at one location. In such clinics an implementation could be more feasible. Furthermore personal problems or barriers to begin a treatment, like family, work and further personal issues are not considered in the matching guidelines recommendation, which also show the importance of the social workers' and clinical staffs' expertise. Thereby out of all this argumentations, referral by the matching guidelines can just be a foundation for decisions and a referral for treatments.

Regarding the intervention of feedback-interview, especially the part of the Motivational-Interviewing could not reveal additional effects, because the increase for motivation is already a fundamental part of the qualified withdrawal treatment (Mann, 2002), which could mask the effect of the intervention. But the increase of motivation for further treatment is important, because a low motivation for change accompanies with the clinical picture of alcohol dependence (Loeber et al., 2009).

The feasibility of the chosen treatment setting of a withdrawal unit reported by Röhrig et al. (2013) was at least questioned in the focus group. It turned out that this setting reveals its' problems and primary care institutions like addiction counselling service and general practitioners were suggested as possible implementation settings. Furthermore the PIA, treatment centralized clinics or clinics only concentrating on the detoxification of patients were also mentioned to be a good setting for implementation. However the requirement of those organizations needs to be determined as well as the feasibility and possible implementation need to be investigated.

The sufficient variation in regard to treatment utilization of the patients after their discharge from the withdrawal unit reported by Röhrig et al. 2013 was also confirmed by a participant of the focus group. Therefore the usability of the guidelines can be verified with these statements of being a supportive assessment in the referral of further treatments. The evidence-based recommendation is a good basis of argumentation for insurance agencies. But it is also helpful for new personnel, at times of high fluctuation, to have a supportive foundation for referrals within this varying treatment region.

4.3 Outlook and Conclusion

Regarding the feasibility of the matching guidelines a binary and multinomial logistic regression will be applied with predictors like history of treatment in the last 5 years, severity of addiction, severity of psychiatric comorbidity and the severity of social disintegration. The outcomes will be the several recommendations given to the patients during the study. Therefore Hosmer-Lemeshow goodness-of-fit will be taken in to account.

In order to prove whether the stated lack of approvals for treatment referrals is entitled; this has to be analyzed by checking frequencies of applications that were not approved out of the extensive data set of the MATE-LOC project as it was intended by Buchholz et al. (2014). Furthermore results of the MATE-LOC study's primary outcome measures of alcohol consumption and health care costs six months after discharge will be presented in the near future. The documented deviation of therapists recommendations to the MATE will be analyzed as well and to figure out possible modifications for the algorithm. Moreover the relevance of clinical characteristics and demographic of patients as well as their preference and motivation for treatment on patient-treatment matching will be determined by additional explanatory analyses (Buchholz et al., 2014).

As the feasibility of the matching guidelines could be proven with this thesis, a subsequent implementation study is needed to conduct. This is seen as important to prove the feasibility of an implementation under routine care conditions. For the purpose of the suggested implementation study no concrete project was established up to now, but as it was pointed out in this thesis that the need for it is present.

In general the quantitative data of the concordances with the follow-up could not be confirmed with further study results whether for the IG nor the CG. However the concordance for the content-validity is good and proves the agreements with the clinical team which was also discussed within the focus group. These results are promising and a good basis of argumentation for an implementation into routine care especially for the reserved members of the clinical teams. Furthermore the need for training of the staff was pointed out regarding the application of the assessments and furthermore in the interaction within the different occupational groups.

The importance of matching guidelines' implementation lays in the cooperation not only with the clinical team but also with other stakeholders in the setting of substance abuse

treatment. Although the guidelines can just operate as a referral in Germany, this could build a good argumentation-basis for approvals by the health and pension insurances for further treatments.

The QCA of the focus group discussion also reveals promising results regarding the feasibility of the matching guidelines. As described before, these could not be used for an allocation of treatments via matching like in the Netherlands but rather for the referral of further treatments additionally to the clinical impression and expertise of the clinical team and social workers. It is also a good instrument for quality assurance in treatment referral especially for new clinical staff members or in clinics where no recommendations for further treatment is usual. Furthermore the guidelines could also primarily be used in drug counselling service. Therefore implementation should be investigated as well.

However concerning the MATE, this needs some adjustments with a routine care application and was also discussed to use at admission, because the duration and content is similar to the current admission interview. Moreover the feedback-interview is a necessary instrument but need to be implemented within the qualified withdrawal, because an increase in motivation and the feedback of results of the guidelines is stated to be important for the patients. Further some adjustments need to be applied before implementation especially for the training of the application of assessments. These adjustments regards to a better integration of the instrument into the routine care due to training in the interaction of occupational groups within the clinics. Besides a subsequent randomized controlled implementation study needs to be applied to demonstrate the effects of referrals by the matching guidelines. Therefore one clinic uses the guidelines in routine care and another clinic do the treatment as usual. Limitations and biases occurred in the MATE-LOC study should be taken into account and try to be avoided with this subsequent study.

Conclusively regarding the decision-making process this is a helpful tool in the German treatment referral with some necessary adjustments including the matching guidelines, MATE and feedback-interview.

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Appendices

Appendix 1: Original focus group discussion question guide

Diskussion Studiendurchführung

- Wie wurde die Studie auf Euren Stationen aufgenommen?
- Wie lief die Zusammenarbeit mit dem Team?
- Wie wurden die Erhebungsinstrumente akzeptiert – von Euch und von den Patienten?
- Wie empfandet Ihr den Dokumentationsaufwand?
- Wie plausibel waren die MATE/ Zuweisungsleitlinien- Entscheidungen:
    - Verständlichkeit
    - Angemessenheit
    - Übereinstimmung mit dem Team
- Wie verliefen die Entscheidungen für eine Behandlung im Feedbackgespräch?
- Wie war das Feedbackgespräch für Euch generell?
- Was für Gründe sind für die niedrige Quote an eingeleiteten / empfohlenen Maßnahmen denkbar?
    - Studiendurchführung /-organisation?
    - Fragebogen missverständlich?
    - Patienten haben sich nach der Intervention anders entschieden?
    - Andere Einflüsse während des restlichen Aufenthalts?
- Hat Euch das Training auf die Studiendurchführung vorbereitet?
    - Organisation der Studie vor Ort
    - Durchführung der Assessments
    - Durchführung der Feedbackgespräche

Mögliche Implementierung der Zuweisungsleitlinie & des MATE im qualifizierten Entzug

- Welche Voraussetzungen wäre für die Leitlinien-/ MATE- Implementierung wichtig?
- Welche Barrieren/ Befürchtungen gäbe es im Team?
- Welche positiven Aspekte gäbe es für das Team & für das gesamte Vorgehen auf Station?
- Wie würden die Patienten den MATE aufnehmen?

Appendix 2: Category system

Category	**Sub-Category**	**Code**	**Sub-code**
1) Acceptance of MATE by	1.1) Research assistants	1.1.1) Feedback to the team, in conspicuities of patients within the interview	-
		1.1.2) Interview experienced as comfortable	-
	1.2) Patients	1.2.1) MATE-interview was too exhausting	-
		1.2.2) Too much appointments during the treatment	-
		1.2.3) Examination-environment influenced responses	-
		1.2.4) Difficulties in understanding the questions	-
		1.2.5) Perceived acceptance because patients could talk about their personal life.	-
		1.2.6) Addiction anamnesis and MATE-ICN were found to be good	-
	1.3) Team	1.3.1) Request for a supportive assessment in decision-making	-
2) Acceptance of the study by	2.1) Research assistants	2.1.1) Study went well after some start-up difficulties	-
		2.1.2) Sustainable relationship building with the patients during the study was supportive	-
	2.2) Patients	2.2.1) Increased commitment due to recruitment by ward psychologist	-
		2.2.2) Generally good acceptance	
		2.2.3) Participation because of interest in scientific improvement	-
		2.2.4) Benefit of the study	-
		2.2.5) No acceptance demonstrated by missing appointments (16)	-

Appendix 2: Category system

Category	Sub-Category	Code	Sub-code
2) Acceptance of the study by	2.3) Team	2.3.1) Commitment by the team during the study	-
		2.3.2) Feedback session was seen as supportive in "difficult" patients	-
		2.3.3) Reservations of the nurses	-
		2.3.4) Threat of being replaced (initial reservations) of social workers	-
		2.3.5) No integration into routine care	
		2.3.6) No commitment by the social workers	
		2.3.7) Study have to show a positive effect to be accepted by the team	
3) Cooperation of the clinical team with the research assistants	3.1) Good cooperation	3.1.1) Willingness to cooperate by assistant doctors	-
		3.1.2) Feedback with the team	-
		3.1.3) "Nice" communication with treating therapists	-
	3.2) Difficulties in cooperation	3.2.1) No feedback by the social workers	-
		3.2.2) Difficulties in the communication	-
		3.3.3) Cooperation with one difficult personality was tried to deny	-
		3.3.4) Lack of interest in study implementation	-
		3.3.5) No possible integration of the study into routine care	-
4) Documentation effort		4.1.1) Appropriate effort	-
		4.1.2) Documentation produced ex post	-
		4.1.3) Delayed submission of documents (18)	-

Appendix 2: Category system

Category	Sub-Category	Code	Sub-code
5) Plausibility of the matching guidelines		5.1.1) Good understandability, plausibility and adequacy	-
		5.1.2) Communicable recommendations to the patients and plausible classifications	-
		5.1.3) Good concordance between matching guidelines and clinical team recommendations	-
		5.1.4) Discrepancies in the recommendations by MATE guideline and the clinical team	-
6) Proceeding of decisions for further treatment in feedback-interview		6.1.1) Conduct as practised	-
		6.1.2) Given tactics of Motivational Interviewing could be applied	-
		6.1.3) Previous decision was considered by a patient due to the feedback-interview	-
7) Feelings about feedback-interview in general		7.1.1) Comfortable and adequate for research assistants and patients	-
		7.1.2) No increase in motivation for treatment	-
		7.1.3) Few patients of CG requested for an extensive feedback	-
8) Opinions about preparation of the training for	8.1) Locally organization of the training	8.1.1) Good organization and feedback by the principal investigator	-
		8.1.2) Intensity and material for practical application was positive	
		8.1.3) Duration of training was too short	
	8.2) Performance of the assessments	8.2.1) Supervision during the study was supportive	
		8.2.2) Questions occurred during practical application of MATE	-
		8.2.3) Initial difficulties in practical application of MATE –ICN	-
		8.2.4) Suggestions for future trainings (17)	-

Appendix 2: Category system

Category	Sub-Category	Code	Sub-code
9) Thinkable reasons for low rate of recommended or initiated treatment at discharge		9.1.1) Wrong documentation	
		9.1.2) Wrong approach of data analysis	
		9.1.3) Lack of motivation in patients	
		9.1.4) External organizational aspects	
		9.1.5) Internal organizational aspects	9.1.5.1) Missing integration of the research assistants into routine care
			9.1.5.2) Overlap in the organizational process
10) Suggestions for conditions with an implementation of	10.1) Matching guidelines	10.1.1) Guidelines' dimension "History of treatments" needs to include only treatments regarding the dependence for the algorithm	-
		10.1.2) Implementation without the MATE	-
		10.1.3) More flexible combination of criteria for the LOCs	-
	10.2) MATE	10.2.1) Performance by staff members anchored in the routine care	10.2.1.1) Primary nurse as an example
			10.2.1.2) Additional staff is required
		10.2.2) Optimization and adjustments in structure	10.2.2.1) Adjustments in the structure of MATE
			10.2.2.2) Short version of MATE
		10.2.3) Computer-version connected to hospital information system	-
		10.2.4) Adaption of time-point for performance (12)	-
Category	**Sub-Category**	**Code**	**Sub-code**
10) Suggestions for	10.2) MATE	10.2.5) Implementation as admission-interview	10.2.5.1) Implementation without

conditions with an implementation of			matching guidelines
			10.2.5.2) Structure of MATE is similar to the common intake interview
			10.2.5.3) Addiction anamnesis was perceived as supportive
		10.2.6) Routine will solve difficulties in performance	-
	10.3) Feedback-interview	10.3.1) Content is already part of routine care	-
	10.4) Decision-making process	10.4.1) Increase of treatment or process quality	-
		10.4.2) Foundation of decision-making	-
		10.4.3) Backup from chief physician is necessary	-
		10.4.4) Adjustments in the qualified withdrawal treatment	-
		10.4.5) More capacity is required	-
		10.4.6) Subsequent implementation study	-
		10.4.7) Process with MATE used at admission	-
		10.4.8) Standardization and manualization of assessment	-
11) Possible barriers and worries with an implementation of	11.1) Matching guidelines	11.1.1) Differentiation between the treatments in dimension of "History for treatments"	-
	11.2) MATE	11.2.1) Increase of documentation effort (Problems of acceptance)	-
		11.2.2) Induction of MATE	-
		11.2.3) MATE as admission-interview unrealistic (15)	-

Appendix 2: Category system

Category	Sub-Category	Code	Sub-code
	11.3) Matching guidelines in combination with MATE	11.3.1) Worry of therapists and caregivers losing their autonomy in decision making	-
		11.3.2) Possible “manipulation”	-
		11.3.3) Additional effort	-
		11.3.4) Documentation effort	-
		11.3.5) Implementation is methodologically challenging	-
		11.3.6) Funding agencies as a barrier	-
		11.3.7) Differences in the Dutch and German treatment system	-
12) Possible positive effects and additional values of the decision-making process for	12.1) Patients	12.1.1) Patients feel like someone cares about them	-
		12.1.2) Increase of motivation for treatment in specific patients	-
	12.2) Team (Procedure at the ward)	12.2.1) Additional information out of MATE	-
		12.2.2) Tangible information-basis for routine care	-
		12.2.3) Academic grounded decision as a benefit for refunding	-
		12.2.4) Simple application of MATE	-
		12.2.5) Optimization in organization	-
		12.2.6) Guideline as good foundation for argumentation	-
		12.2.7) Transparent procedure raise awareness	-
		12.2.8) Individual reaction on patients’ needs for further treatment	-
		12.2.9) Visualization of addiction in the feedback-interview	-
		12.2.10) Spending time on dealing with aspects of guideline and the patients (19)	-

Appendix 2: Category system

Category	Sub-Category	Code	Sub-code
13) Possible implementation settings for matching guidelines		13.1.1) Primary Care	-
		13.1.2) First contact points for patients	-
		13.1.3) Clinics with no or lack of recommendations	-
		13.1.4) Clinics with several consolidated treatments options	-
14) Possible improvements of acceptance by patients regarding the matching guidelines		14.1.1) Argumentation-basis and taking time for patients	-
		14.1.2) Explanation of the procedure and content to the patients	-
15) Limitations within the study		15.1.1) Different interpretation of LOCs by patients	-
		15.1.2) CSSRI was difficult to apply	-
		15.1.3) MATE-ICN is probably not precise enough to collect valid data	-
		15.1.4) Organizational problems	15.1.4.1) Research assistant was not employed at the ward
			15.1.4.2) High personnel fluctuation
			15.1.4.3) Qualified withdrawal of eight days
		15.1.5) Reorganization in one clinic	-
		15.1.6) Data management	-
16) Biases for the study results		16.1.1) Dropouts included	-
		16.1.2) Selection bias	-
		16.1.3) Internal treatment prevent the allocation to LOC1 in one clinic	-
		16.1.4) Patients received recommendations before feedback-interview (16)	-

Appendix 2: Category system