RESCueH Alcohol Research Studies

Conference:
Treatment for addictive behavior and rehabilitation -
Assessment, combination of methods and training of staff

Assessment – In A Way That Makes Sense

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Treatment and Support

A good relation is the first and most essential ingredient for helping people with problems

(Structured) assessment can be helpful, but has to be as lean and simple as possible

People with a SUD are just normal people (with a problem)

Content

1. Functions of assessment in general health care and the addictions
2. Multidimensional Assessment Measures
3. Symptoms and Functioning
4. Structured assessment with the MATE
5. Research possibilities

Benefits Of Structured Assessment

1. More time for personal contact
2. Lesser risk of forgetting important issues
3. Statistical info better than clinical intuition for treatment allocation and evaluation
4. Uniform assessment of patient characteristics provides epidemiological data for research and development

Major Functions of (Structured) Assessment in Health Care

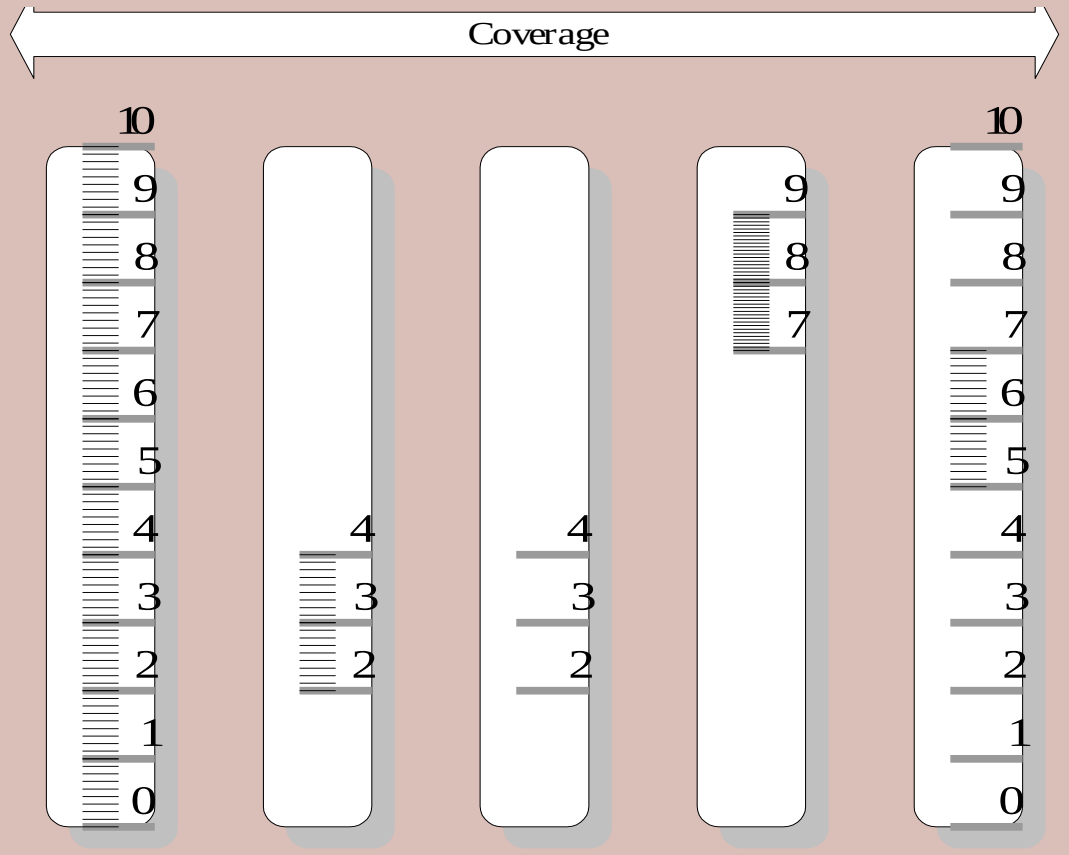
- Screening and detection
- Selection (crisis; referral to elsewhere)
- Triage (allocation) to levels of care
- (Complementary) diagnostics for treatment planning
- Monitoring and evaluation

Characteristics Of Good Assessment Instruments

- Valid
- Reliable (objective)
- Adequate sensitivity and specificity
- Feasible
- Functional and purposeful (inevitably limited)
- "Sensible" (Feinstein, *Clinimetrics*, 1987).
  - "making obvious sense", handy

Instruments Differ In Coverage, Range, & Precision

Measured domains



Range:	10:0-10	2:2-4	2:2-4	2:7-9	10:0-10
Precison:	10	10	1	20	10;5-7/1;rest

Functions Of (Structured) Assessment In The Addictions

- Screening and detection
- Selection (crisis; referral to elsewhere)
- Triage (allocation) to levels of care
- (Complementary) diagnostics for treatment planning
- Monitoring and evaluation

Screening and (Early) Detection

- Identification of people with
  - hazardous substance use
  - substance use disorder
- Justified by the high prevalence of substance use problems and by availability of evidence based interventions (SBI)
- Distinction between *screening* (in large populations) and *case-finding* (in populations at risk)

Screening and (Early) Detection

Screening and (early) detection require short, sensitive instruments

(like the AUDIT)

Monitoring and Evaluation

Monitoring: during an ongoing treatment

Evaluation: after completion (follow-up; after care)

Evaluation is important because it can help

- to learn (on individual cases) and to adapt
- to research (data mining)
- to account

Screening and (Early) Detection

Monitoring and evaluation require change-sensitive instruments

Not just objective behavioral measures, but, in routine practice, to be combined with the assessment of patient satisfaction and personal evaluation, and the needs of the person (after care)

Functions Of (Structured) Assessment In The Addictions

- Screening and detection
- Selection (crisis/referral to elsewhere)
- Triage (allocation) to levels of care
- (Complementary) diagnostics for treatment planning
- Monitoring and evaluation

Treatment Service Centers

An intake is in particular important in treatment centers that have a large variety of cure and care interventions

In such centers, stepped assessment might be most functional, triage in the intake, detailed diagnostics as part of the treatment intervention

Functions of the Intake in Treatment Service Organizations

- Building helping relationship
- Practical information gathering for administrative purposes
- Assessment of relevant patient characteristics
- Evaluating data, for treatment planning
- Feedback and negotiation about treatment allocation and planning
- Introduction into planned interventions

Triage and (Complementary) Diagnostics For Treatment Planning

- Substance Use
  - consumption
  - severity (incl craving)
- Personal Characteristics
  - Readiness to change
  - Self-efficacy
  - Coping skills
  - Expectations
- Comorbid Psychopathology
  - Psychiatric
  - Neuropsychological
  - Somatic
- Personal and Social Functioning

Triage and (complementary) Diagnostics For Treatment Planning

Require a mulitdimensional assessment

Preferably able to assist in patient placement and treatment planning;

Often used instrument: ASI

Addiction Severity Index (ASI), originated in the 80s, now version VI

- The ASI has helped greatly in professionalizing assessment in the addiction - disciplined intake assessment in Substance Abuse Treatment Centers
- Supported much health services research
- Used in many countries

ASI: Criticisms

- Limited feasibility
- High level of complexity
- Limited clinical relevance

- Many different versions around
- Not functionally related to needs of SAT

ASI: Conclusion

The ASI is an all-in-one, first generation instrument that should be replaced by a new version (ASI-6) *or*

… by a new conception.

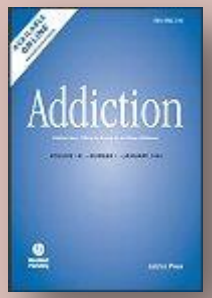
Arguments for Development of a New Multidimensional Tool

- Other available instruments also conceptually and/or psychometrically weak
- Need for an European instrument
- Need for an instrument integrating the substance use disorder treatment field with psychiatric and general health care (in particular in measuring personal and social functioning)

Publications

- Schippers GM, Broekman TG, Koeter MJW, & van den Brink W. The addiction severity index as a first-generation instrument: Commentary on ‘Studies of the reliability and validity of the Addiction Severity Index’ by Mäkelä. *Addiction 2004*;99:416–417

- Broekman TG, Schippers GM, Koeter MJW, & van den Brink W. (2004). Standardized assessment in Substance Abuse Treatment in the Netherlands: The case of the ASI and new developments. *J Subs Use 2004;9:*147–155



MATE - TEAM

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  - Prof Dr Ludwig Kraus
  - Prof dr Fred Rist
- **English Edition**
  - Prof W. Miles Cox, PhD

Netherlands Organisation for Health Research and Development

ZonMw

Specifications of a New Instrument for Assessment in the Addictions

1. Functional for the everyday practice of the healthcare sector
2. Acceptable to persons on whom the instrument is used and evaluate both needs and compensation options
3. Based on a clear conceptual framework
4. Promote the exchange of information and knowledge and therefore be based on the best of the available (sub)instruments
5. With the exception of SU, generally applicable

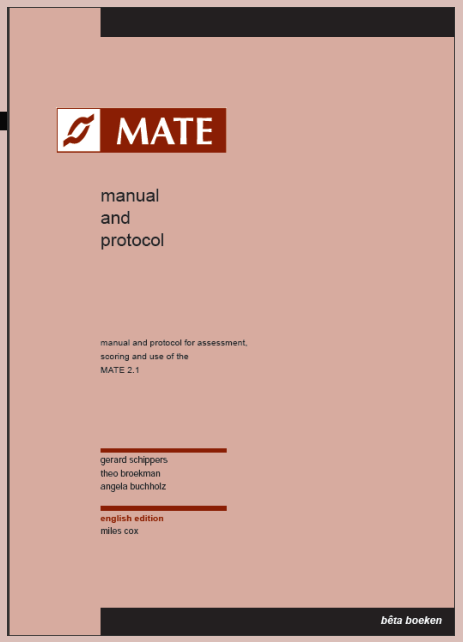
Specifications

Multidimensional Assessment Tool in the Intake for

- Administration
- Selection (crisis/referral to elsewhere)
- **Triage for level of care**
- (Complementary) diagnostics for treatment planning
- **Evaluation**

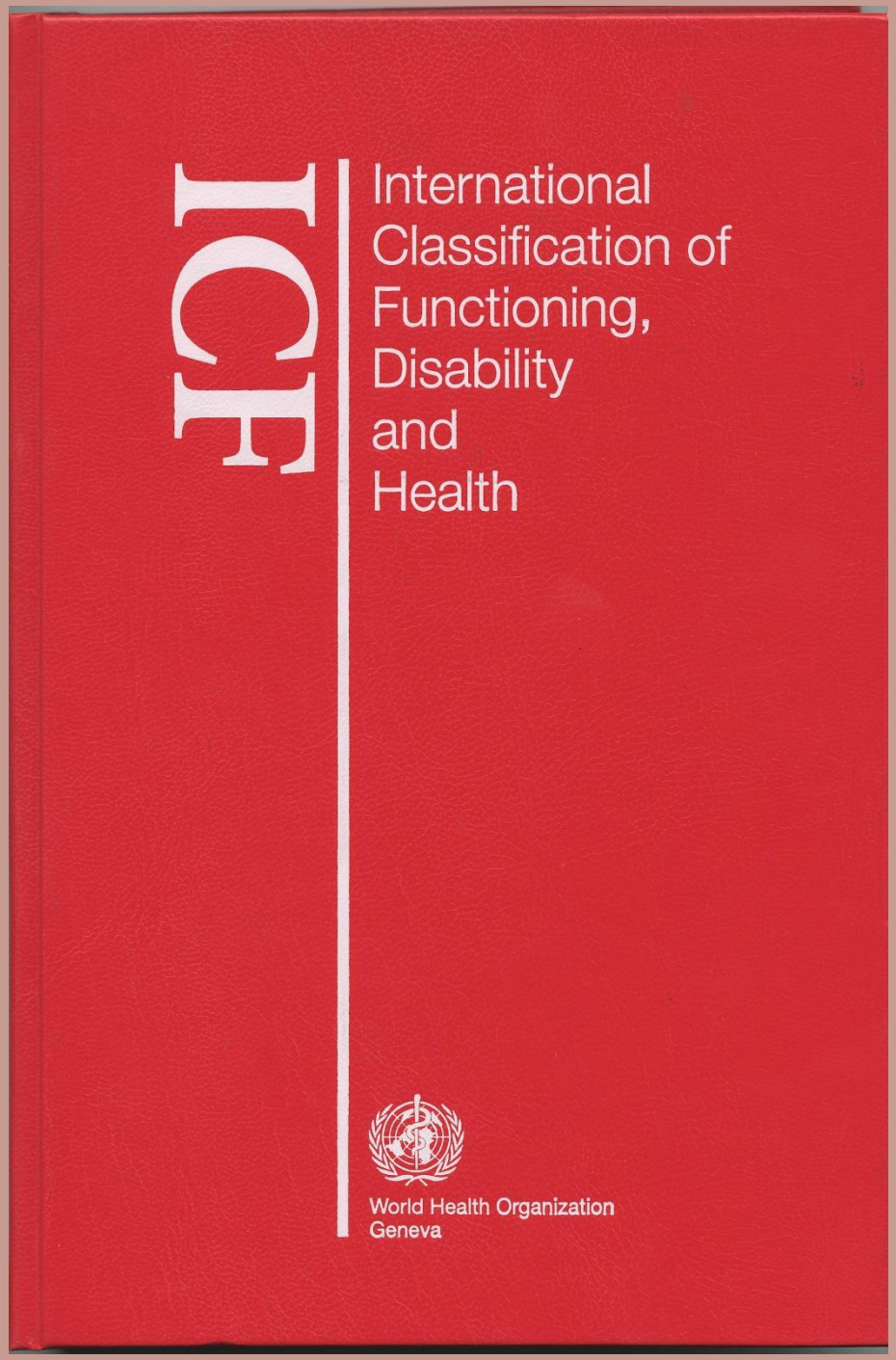
MATE

Measurement in the Addictions for Triage and Evaluation



Conceptual Framework: WHO-FIC

- WHO FIC: Family of International Classifications
  - ICD-10 International Classification of Diseases
  - ICF International Classification of Functioning, Disability and Health
- ICD refers to diseases (diagnostic system)
- ICF refers to human functioning for all life areas, both bodily functions as well as activities and participation
- ICF is based on the biopsychosocial model

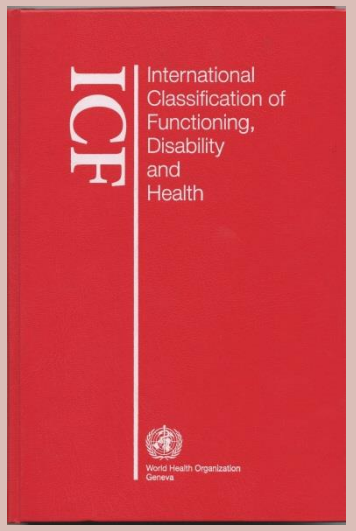


International Classification of Functioning, Disability and Health: ICF. WHO, Geneva 2001

Formerly:
International Classification of Impairments Disabilities and Handicaps (ICIDH) since 1980

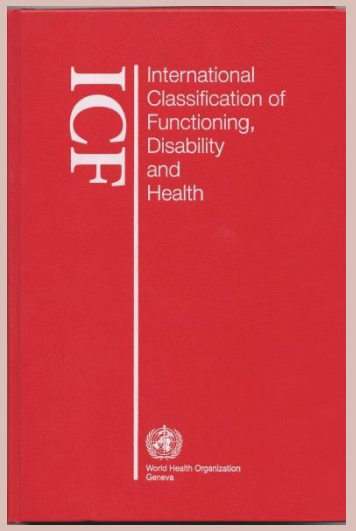
ICF - components

1. Functional charactistics of human organism
2. Anatomical charactistics
3. Activities and participation
4. External factors



ICF - components

1. Functional charactistics of human organism
2. Anatomical charactistics
3. Activities and participation
4. External factors influencing health functioning



Design

Modules of the MATE

Substance Use	*Function*	*MATE-module*
Substance Use Disorder Dependency and Abuse	DIAGNOSTICS	WHO- CIDI
Substance Use - consumption	ASSESSMENT	Use Grid
Craving	ASSESSMENT	Obsessive Compulsive Drinking/Drug Scale

Modules of the MATE

Comorbidity	*Function*	*MATE-module*
Psychotic disorders	CASE FINDING	observation and questions
Mood disorders	CASE FINDING	Depression, Anxiety & Sress Scale
Eating disorders	NOT	
ADHD	NOT (yet)	
Personality disorders	CASE FINDING	Standardised Assessment of Personality Abbreviated Scale (SAPAS)
Physical disorders	CASE FINDING	Maudsley Addiction Profile-Health Symptoms Scale (MAP-HSS)
Psychosocial functioning	ASSESSMENT	MATE-ICN

Modules of the MATE

1. Substance use: quantities, frequency and variability
2. Indicators for psychiatric / medical consultation
3. History of substance use disorder treatment
4. Substance dependence and abuse (CIDI)
5. Physical complaints (MAP)
6. Personality (SAPAS)
7. Activities & Participation, Care & Support (MATE-ICN)
8. Environmental factors influencing recovery (MATE-ICN)

Q.1. Craving (OCDS)

Q.2. Depression, Anxiety, & Stress (DASS)

Activities & Participation, Care & Support (MATE-ICN)

- Module 7 measures functioning on 19 domains from component *d* of the ICF ´Activities & Participation‘
- Module 8 measures functioning on 4 environmental factors of influence from component *e* of the ICF
- Selection (‚core set‘) based on relevance
- The MATE-ICN is an independent part of the MATE, suitable for patients with psychiatric disorders in general, not just for SUD.

MATE-ICN: Module 7 assesses

1. The **limitation in activities and restriction in participation**, which is the problem the person experiences with the activity or participation in question (from none to full).
2. The **amount of care or support** (where applicable) the person receives from services or institutions (from none to full).
3. The **need for care the assessor** feels the person does or doesn't need.
4. The **need for care the person** feels he or she does or doesn't need.

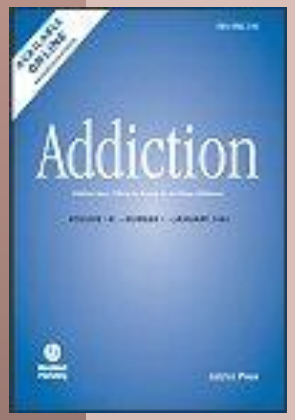
Usage of the MATE

- MATE is an interview schedule, taking about 50-70 minutes
- Provides ca 20 MATE-scores
- Can be used for triage
  - Care decisions based on unprocessed information
  - Indicators for psychiatric / medical consultation
  - Suggestion for the level of care
- For monitoring and evaluation
- …. and for research

20 MATE-scores

S2.1 Characteristics of physical comorbidity
S2.2 In psychiatric or psychological treatment
S2.3 Characteristics of psychiatric comorbidity
S4.1 Dependence
S4.2 Abuse
S4.3 Severity dependence/abuse
S5.1 Physical complaints
S6.1 Personality
S7.1 Limitations - Total
S7.2 Limitations - Basic
S7.3 Limitations - Relational
S8.1 Positive external influence
S8.2 Negative external influence
S7.4 Care & support
S8.3 Need for care
SQ1.1 Craving
SQ2.1 Depression
SQ2.2 Anxiety
SQ2.3 Stress
SQ2.4 Depression Anxiety Stress - Total

First test on the Feasibility, Validity and Reliability



Measurements in the Addictions for Triage and Evaluation (MATE): an instrument based on the World Health Organization family of international classifications

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2010

2010

Special issue: Measurements in the Addictions for Triage and Evaluation (MATE)

Guest Editor: Fred Rist

Editorial

Research Reports

Themenschwerpunkt: Measurements in the Addictions for Triage and Evaluation (MATE)

Gastherausgeber: Fred Rist

Editorial

Originalarbeiten

Implementation of the MATE

- Version 2.1 implemented in ca 85% of Dutch Substance Use Disorder Treatment Services and some German Institutes
- Several language versions now in use
- MATE-Crimi
- MATE-Outcomes (for evaluation)
- MATE-Y (Youth)

MATE

www.mateinfo.eu

Example Of The Clinical Use Of Assessment Of Patient Characteristics

Triage to the Level of Care (LOC)
Is it Feasible and Effective?

Some test done (not with the MATE yet)

Manualized Intake and Referral to Treatment Intensity (Level of Care - LOC)

Dutch Substance Disorder Treatment Centers are large, regional institutions, with relatively large numbers of treatment seeking clients varying greatly in characteristics and needs for cure or care services.

Manual for Matching and Referral (Triage) Substance Abuse Treatment Centres
Implemented since 2002 in several Dutch regions.

De Wildt, W., Schramade, M., Boonstra, M., & Bachrach, C. (2002). *Module Indicatiestelling & Trajecttoewijzing* Utrecht: GGZ Nederland.

Manual for Matching and Referral (Triage) in Dutch Substance Abuse Treatment Centres

Four levels of care (treatment intensity)

1. Brief out-patient treatment
2. Standard out-patient treatment
3. Day treatment or residential treatment
4. Long term care (rehabilitation and harm reduction)

Routine outcome data available of about 50% of all patients

Some evidence for matching criteria

- Matching to intensity of treatment (‘level of care’) can be based on three characteristics
  - Addiction severity
  - Psychiatric impairment
  - Social stability
- Number of former treatments (stepped care model)

  number of unsuccessful treatments in the treatment history, because of the stepped care approach

The American Journal on Addictions, 18: 488–493, 2009

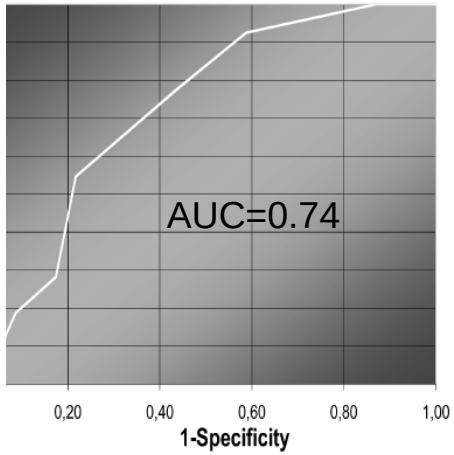
ISSN: 1055-0496 print / 1521-0391 online
DOI: 10.3109/10550490903205983

A Simple Risk Scoring System for Prediction of Relapse after Inpatient Alcohol Treatment

Mads Uffe Pedersen, PhD, Morten Hesse, PhD

TABLE 2. Variables Included in the RARS = Risk of Alcohol Relapse Scale

		Value in the original construction sample		
	Code	Mean or percentage (relapsers)	Mean or percentage (abstainers)	Probability*
Standard units of alcohol per day during intensive periods	One if >20	23.0	17.2	0.003
Economic problems (EuropASI Composite Score)	One if >0	0.66	0.54	0.04
Treatment on the initiative of the clients, their families or workplace	One if false	58%	75%	0.001
Treatment paid by the client and/or the clients family	One if false	18%	31%	0.02
Treated for alcohol problems before	One if true	74%	62%	0.047
Prescribed psychopharmacological medicine	One if true	44%	30%	0.04
Contemplated suicide	One if true	29%	16%	0.03
Attempted suicide	One if true	8%	2%	0.048
Troubled with social problems/conflicts	One if>2	1.42	0.92	0.03
Need for help physical problems	One if>2	1.40	0.96	0.04



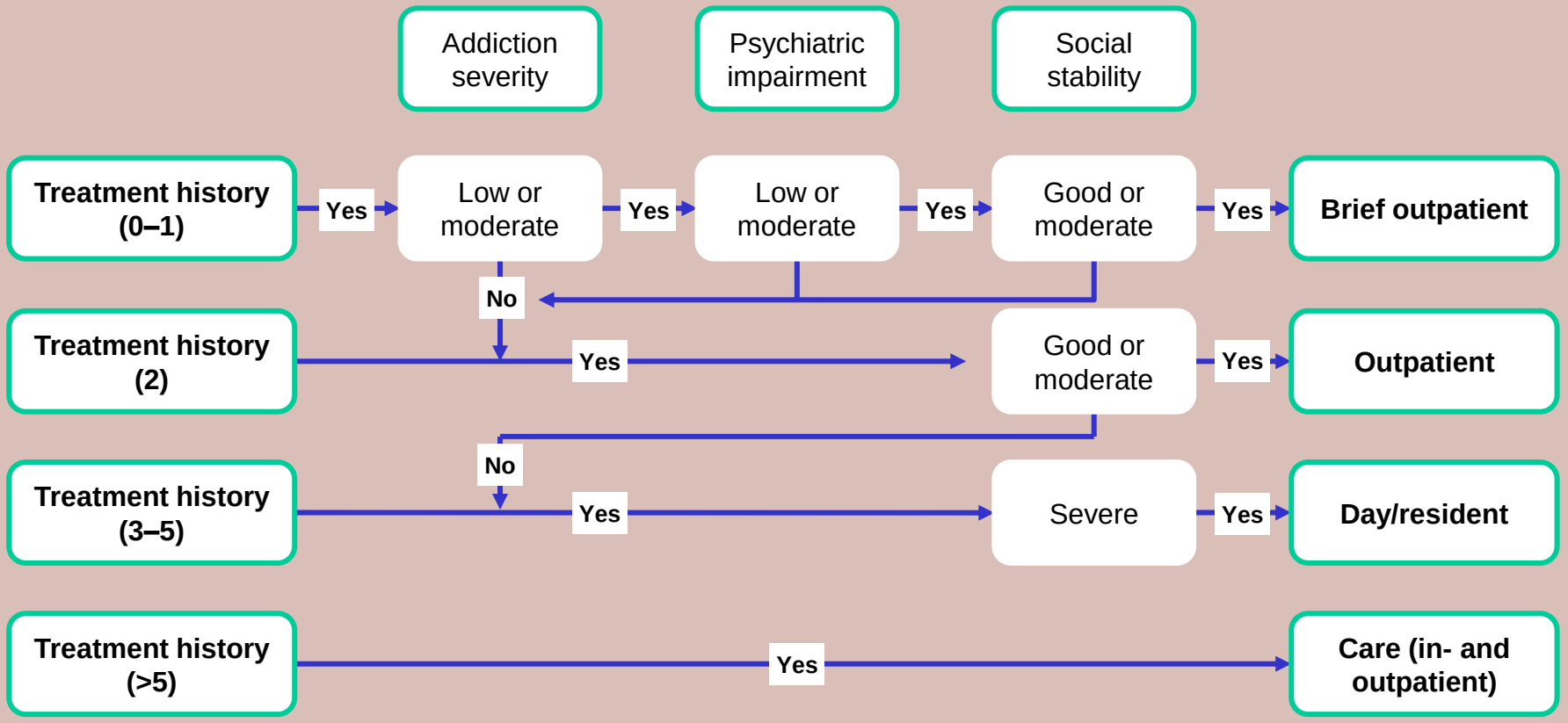
Receiver operating characteristics curve for valida-
1 (RARS as a predictor of uncontrolled drinking during
llow-up).

Predictors outcome:

* severity (alcohol consumption)
* social problems (money, conflicts)
* psychiatric comorbidity
* somatic problems
* motivation for treatment
* treated before

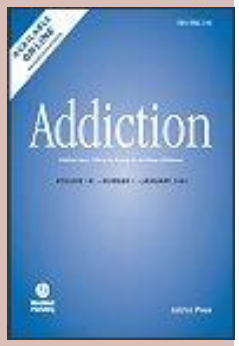
Algorithm for allocation to level of care (treatment intensity)

Guidelines for matching and referral



Merkx et al. Addiction 2007;102(3):466–474

Feasibility of Matching Guideliness (Triage Algorithm) in Practice (Cohort 2003)



RESEARCH REPORT

doi:10.1111/j.1360-0443.2006.01716.x

Allocation of substance use disorder patients to appropriate levels of care: feasibility of matching guidelines in routine practice in Dutch treatment centres

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Guideline-based treatment allocation is feasible but is limited due to:

- inadequate data collection of patient characteristics
- suboptimal guideline-based treatment allocation

Guidelines for allocating outpatient alcohol abusers to levels of care: Predictive validity

Maarten J.M. Merkx [a,*], Gerard M. Schippers [a], Maarten W.J. Koeter [a], Pieter Jelle Vuijk [a], Suzan C.C. Oudejans [a,b], Ragna K. Stam [c], Wim van den Brink [a]

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[c] The Jellinek, Arkin, Jacob Obrechtstraat 92, 1071 KR, Amsterdam, The Netherlands

Predictive validity of treatment allocation guidelines on drinking outcome in alcohol-dependent patients

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Merkx et al. Addict Behav 2011;36(6):570–575;
Merkx et al. Addict Behav 2013;38(3):1691–1698

Example Of Research with Assessment Data

Epidemiological studies on characteristics and treatment outcomes of patients in routine care.

Mining data on from large cohorts

Staging and Profiling

- The group of SUD patients treated in psychiatry is very heterogeneous
- Only a minority can be helped with effect
- Diagnostic info (DSM-V!) is of little help
- Different treatment in different stages needed
- Possibly *staging* and *profiling* can be helpful
- Whether a disorder can be usefully ‘staged’ is to be revealed yet
- Has been (and still is) is very useful in medical disciplines (cancer!)

Epidemiological Studies in SUD patients

- Models for staging and profiling individual patients have been suggested for variety of psychiatric disorders (McGorry, 2007)
- Based on existing models in oncology (TNM) and on current knowledge about the neurobiology of addiction, preliminary models have been proposed (Vd Brink et al, 2013)
- For studying staging and profiling the addictions large data bases on patient characteristics are needed – and available!

Conclusions

- Structured assessment is feasible and helps to professionalize addiction treatment services
- The choice for instruments must be guided by well defined functionality
- Protocollized patient allocation to different level of care is feasible and probably (cost-)-effective
- Analyzing datasets from large cohorts might help unraveling substance abuse as a staged disorder, supporting better individualized treatment