

MANUALS MANUALS

Guidelines for the evaluation of treatment in the field of problem drug use

A manual for researchers and professionals





Guidelines for the evaluation of treatment in the field of problem drug use

A manual for researchers and professionals



Information on the EMCDDA can be found on its website (http://www.emcdda.europa.eu).

A great deal of additional information on the European Union is available on the Internet. It can be accessed through the Europa server (http://europa.eu).

Cataloguing data can be found at the end of this publication.

Luxembourg: Office for Official Publications of the European Communities, 2007

ISBN 92-9168-279-9

© European Monitoring Centre for Drugs and Drug Addiction, 2007

Reproduction is authorised provided the source is acknowledged.

Printed in Belgium

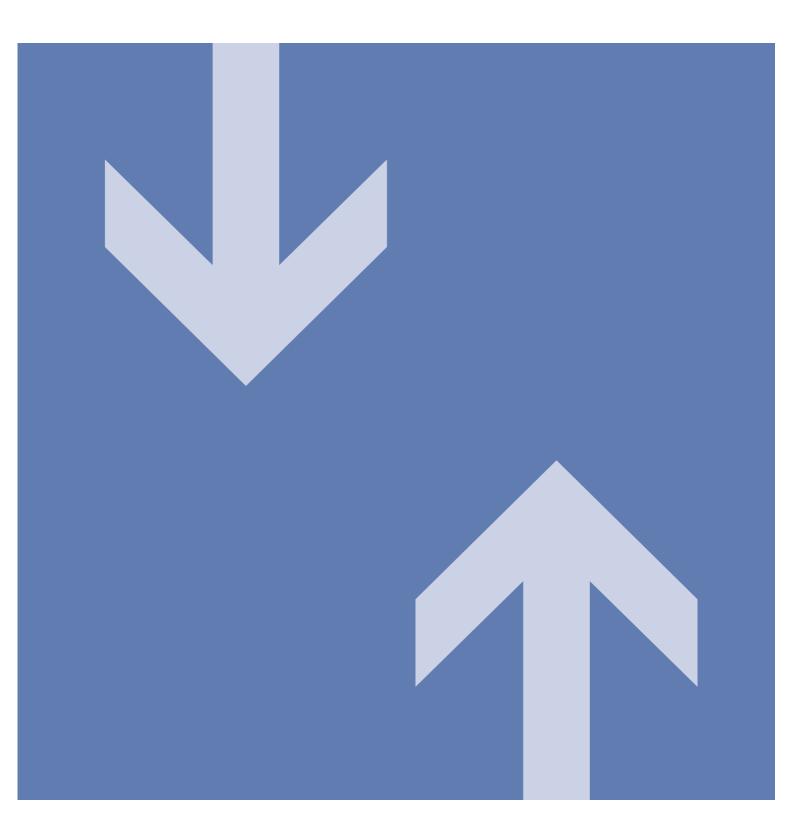


Rua da Cruz de Santa Apolónia, 23-25, 1149-045 Lisbon, Portugal Tel. (351) 218 11 30 00 • Fax (351) 218 13 17 11 info@emcdda.europa.eu • http://www.emcdda.europa.eu

Contents

Preface	7
Introduction	11
Part 1: Approaching evaluation	
Chapter 1: Why evaluate treatment?	15
Goals and purposes of treatment evaluation	1.5
Typology of treatment evaluation	16
Evaluation by whom?	18
Evaluation for whom?	19
When should evaluation take place?	20
Chapter 2: Preparing for treatment evaluation	23
Identifying objectives, scope and time frame	23
Identifying evaluation level	24
Identifying participating parties	24
Identifying needed and available resources	25
ldentifying available data	26
How shall evaluation results be used and disseminated?	26
What obstacles to implementing evaluation are expected?	27
Part 2: Implementing evaluation	
Chapter 3: Quantitative evaluation	31
Determining research questions and hypotheses	31
Determining sampling methods and sample size	32
Determining the design of study	33

Determining the criteria of measurements	36
Determining the timing of measurements	37
Determining the instruments to be used	38
Practical implementation of evaluation research	42
Chapter 4: Qualitative evaluation	47
Objectives	47
Methods	47
Chapter 5: Implementing and assuring the evaluation process	51
Checklist for the preparation and implementation of treatment evaluation	51
Checklist for the evaluation process	52
Chapter 6: Communicating and presenting your results	55
Structuring the content of the report	55
Oral presentations	56
Scientific publications	57
Presentation via the Internet	57
Part 3: Evaluation networks	
Chapter 7: Evaluation and research networks	61
European level	61
International level	65
Part 4: Glossary	
Glossary	69
Selected bibliography	75



Preface

With the publication of this, the third, title in the EMCDDA's Manuals series after those on prevention and outreach work, the Monitoring Centre completes its planned set of guidelines for evaluation in the field of interventions against problem drug use. The guidelines presented here have been drawn up by Ambros Uchtenhagen in collaboration with Ulrik Solberg from the EMCDDA under a mandate by the COST A-6 Working Group on Treatment Evaluation in the Field of Drug Use.

The main objective of the guidelines is to provide a European audience with basic information on the options, elements and procedures of drug-related treatment evaluation. The target readership includes professionals working in treatment services for substance use and dependence, administrators and officials in social and health authorities, researchers dealing with treatment of substance dependence, and those who professionally or politically may have an interest in evidence from treatment evaluation.

Drug-related treatment evaluation is practised in many countries, using diverse concepts, approaches and instruments. The guidelines should facilitate the adoption of a shared terminology, conceptualisation and methodology for evaluation research in Europe. They should also help to promote a shift in policy towards more widespread and systematic evaluation of treatment programmes and services.

The guidelines do not aim to recommend a specific evaluation model or methodology. The reasons for having treatment evaluated and the questions one wants answered are so diverse that it makes more sense to present options and to facilitate the choosing of an option. Furthermore, in some countries where the practice of treatment evaluation is advanced, the existing concepts and instruments must also be taken into consideration. This, however, must be done at the national level and cannot be dealt with in the guidelines.

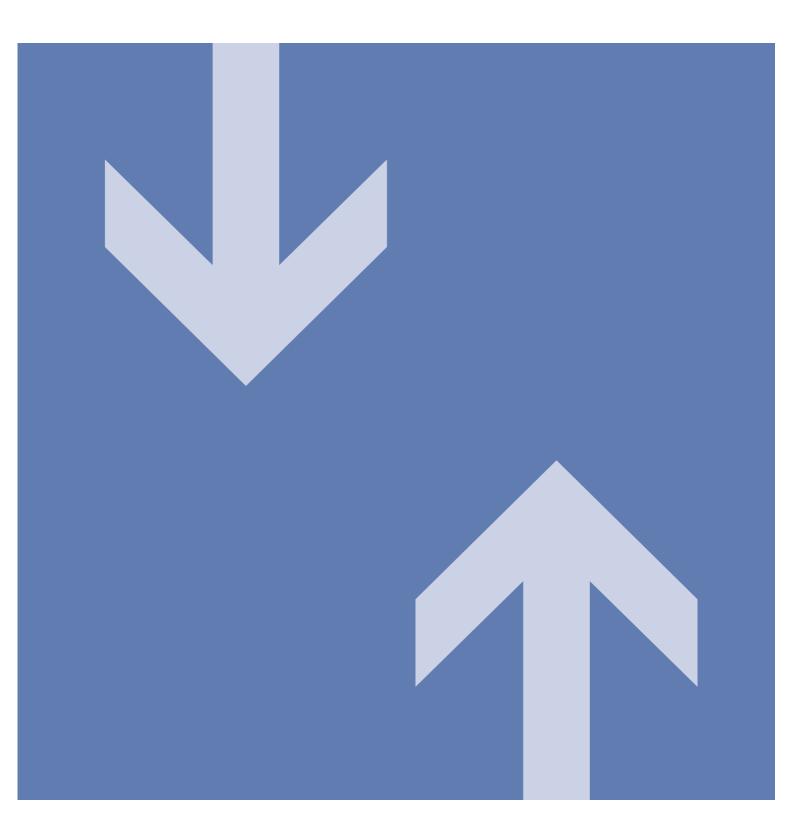
The guidelines give references to more detailed information as an additional support for those who engage in evaluation research. They will also be made available on the Internet, enabling the information to be uptated periodically.

This manual is not the first publication in the field of treatment evaluation by the EMCDDA. In 2000, the EMCDDA, in collaboration with the World Health Organisation (WHO) and the United Nations International Drug Control Programme (UNDCP), published a series of workbooks, of which one overview volume was entitled *International guidelines for the evaluation of treatment services and systems for psychoactive substance use disorders*. Since then, the EMCDDA has

Guidelines for the evaluation of treatment in the field of problem drug use

developed and harmonised its terminology in the field of drug-related treatment and launched the Evaluation instruments bank (EIB), an online collection of free evaluation instruments. During this time, the Internet has come to play a more central part in the exchange of information and ideas in the field of drug treatment. These guidelines are our attempt to provide in one concise volume a road map to treatment evaluation, including links to relevant information and research, that can help the reader to benefit from these developments.

The authors would like to thank the following for their contributions: Julio Bobes, Erik Broekart, Maurizio Coletti, Jack Dercks, Heinrich Küfner, Petra Paula Merino, Valeria Pomini, Edle Ravndal and Enrico Tempesta.



Introduction

In the framework of an evidence-based health policy and service-system building process, the evaluation of what services achieve in terms of coverage, quality and outcome is of paramount importance. This is all the more relevant in the case of the treatment of substance use problems, as in this field target populations change over time, while innovations are made in treatment responses, and there has been an increasing awareness of quality standards. Furthermore, evaluation studies should help policymakers to include measures of effectiveness and cost-effectiveness in the allocation of resources to treatment systems and programmes.

These guidelines are designed to facilitate the preparation and implementation of evaluation studies and to help professionals to assess critically the value of evaluation research for their everyday practice. All major issues to be taken into consideration are briefly described, for quantitative and outcome evaluation mainly, but also for qualitative evaluation. As well as the more technical aspects, the guidelines also touch on issues such as when external specialist evaluation and when internal evaluation are indicated. The use and misuse of evaluation results are another aspect that deserves attention. In addition, advice is given on dissemination of the results.

To help take the reader beyond the scope of this manual, information is included about European and international evaluation networks along with a selected bibliography for more in-depth study.

PARTONE Approaching evaluation

OHAPTER NE

Chapter 1

Why evaluate treatment?

The international trend to introduce evaluation as a public health tool exists for a number of reasons. Owing to a constant process of diversification and innovation, treatment programmes and services encompass a large variety of approaches and methods. It has become difficult to assess the relative value of the various approaches and programmes. The choice of treatment in a given situation often depends more on accessibility and non-systematic information than on adequate knowledge of the advantages and disadvantages of the available programmes. Furthermore, the increase in treatment offers, in terms of both quantity and diversity, has led to different services competing with each other for treatment clients. The need to legitimate public funds spent on treatment services calls for rational criteria and adequate data on their efficacy and cost-effectiveness. Sporadic evaluation or even systematic evaluation of services has therefore become an essential element in an evidence-based policy. Lastly, and perhaps most importantly, ageing populations in general are becoming an increasing economic burden on health budgets worldwide. This concern has already begun to press health and treatment services for cheaper and more flexible solutions, particularly as the treatment population is getting older and hence burdening systems more. On the one hand, the increasing pressure on and limited resources for health services could lead to cuts in evaluations, but, on the other hand, it will become increasingly important to know how well treatment works and which treatments work best for which clients — especially in terms of value for money.

Goals and purposes of treatment evaluation

Here, we distinguish the following goals and purposes of treatment evaluation.

Programme and service improvement

Evaluation is designed to initiate a process that is directed towards identifying deficits and weaknesses and towards facilitating the testing of modifications to overcome these.

Quality assessment

Evaluation measures the conformity of a given service to quality criteria and standards, as a basis for enabling adaptations to be made. Achieving satisfactory quality assessment can be made a condition of funding or can act as a trigger for remedial action.

Testing of new therapeutic approaches or methods

Evaluation has to determine in which sense and to what extent the innovative approach is superior to existing approaches; this is achieved mainly through using a comparative design and following the rules of good clinical practice (GCP).

Client placement strategy/matching

Evaluation contributes to better knowledge on what treatment is most suitable and has the best chances for which clients under which conditions.

Administrative controlling

Evaluation provides transparency on the use of resources (e.g. working hours, finances) as well as on the appropriateness of procedures and structures.

Monitoring treatment policy

Evaluation provides information on the effects of changes in treatment policy or indicates policy issues that need critical reviewing.

Typology of treatment evaluation

The assessment of the value of a given treatment must consider its results as well as the intervening factors and the costs involved. Intervening factors include clients' pretreatment characteristics, their social networks and the opportunities for employment and social integration. The overall research question therefore cannot be which treatment leads to which results, but which treatment presents which chances for which clients under which circumstances. There is no simple causal relationship between treatment and results.

A tentative breakdown of treatment evaluation typologies could look like this:

Needs assessment evaluation

This is a systematic attempt to determine gaps between 'what is' and 'what should be'. It involves documenting important discrepancies between current outcomes and desired outcomes and prioritising these discrepancies for programme planning and intervention. The *Workbooks* series by WHO, the EMCDDA and UNDCP dedicated one volume specifically to needs assessment, which can be found at http://www.emcdda.europa.eu/?nnodeid=5860. For instruments to assess needs, see http://eib.emcdda.europa.eu/?nnodeid=3074.

Structure evaluation

This is an evaluation that concerns the relevant service factors responsible for treatment outcome, such as organisation, composition of staff, infrastructure and financial resources. It determines to what extent treatment structures are adequate to enable the desired outcome to be achieved.

Outcome evaluation

This type of evaluation focuses on the consequences of treatment for the clients, their families and the community. It also has to consider an eventual impact on other treatment approaches and on treatment motivation in the target population. Outcome can be measured against predefined behaviour norms (normative evaluation), baseline pretreatment status (evaluation of change) or predefined treatment goals (goal attainment evaluation). More on the methodology and planning of an outcome evaluation can be found at the WHO/UNDCP/EMCDDA Workbooks series website (see above). To access and download outcome evaluation instruments, go to http://eib.emcdda.europa.eu/?nnodeid=3071.

Client satisfaction evaluation

Measuring client satisfaction with treatment provides valuable feedback about the extent to which service activities have met client expectations. There is also one volume of the WHO/UNDCP/EMCDDA Workbooks series on this aspect of treatment evaluation, whereas instruments for actually carrying out client satisfaction evaluations are available at http://eib.emcdda.europa.eu/?nnodeid=3073.

Cost-benefit evaluation/economic evaluation

The aim of this type of evaluation is to determine the overall cost of treatment (e.g. per treatment day) and the individual or public benefits (e.g. in terms of reduction in health costs, unemployment, law enforcement costs). In cost-effectiveness evaluation, effectiveness is expressed in terms of costs per unit of outcome. Cost-utility evaluation determines the gains in years and quality of life in relation to costs. Cost evaluation and economic evaluation each have their dedicated volume in the WHO/UNDCP/EMCDDA Workbooks series. Instruments are available at http://eib.emcdda.europa.eu/?nnodeid=3070.

Process evaluation

Process evaluation documents and analyses how treatment is delivered, focusing on the therapeutic programme and elements, qualifications and attitudes of staff, entry and exclusion criteria for clients, sanctions, etc. This is a central aspect of treatment evaluation and a volume of

Guidelines for the evaluation of treatment in the field of problem drug use

the WHO/UNDCP/EMCDDA *Workbooks* series is dedicated to this subject. Process evaluation constitutes the biggest group of instruments in the EIB, with a total of 96 instruments available and with eight languages represented (Dutch, English, Finnish, German, Greek, Italian, Spanish and Swedish). See http://eib.emcdda.europa.eu/?nnodeid=3072.

Formal evaluation

This describes evaluation that assesses the compliance of a given treatment service with professional standards, ethical standards and legal conditions.

Evaluating adequacy to treatment needs

Evaluating adequacy to treatment needs means determining how treatment services in a given region respond to the treatment needs in that region.

Meta-evaluation

This approach entails evaluating evaluation studies, according to specific criteria and standards, and thereby providing information and tools for the improvement of evaluation research. Standards for evaluating evaluation studies are in development; they concern research methodology as well as clarity and presentation of reporting.

Evaluation by whom?

External evaluation

External **outcome** evaluation is performed by researchers who are independent of the evaluated service — often from governmental or semi-governmental research or evaluation centres. This option reduces the chance of bias in collecting client data and the credibility of the evaluation results is enhanced. The acceptability of results will also be bolstered if the evaluation team involved is experienced and if it has no vested interest in a specific treatment service or approach. External **process** evaluation shares the advantages of impartiality and objectivity, but compared with outcome analysis can be a more difficult task for an outsider. The two main hurdles for external evaluations are the costs and the scepticism from the social workers/ therapists, who feel 'evaluated' and 'observed'.

Internal evaluation (self-evaluation)

Self-evaluation of a treatment service can be useful when the main purpose concerns an internal learning process about the treatment programme. Internal evaluators may be more familiar with

the intervention and its processes than an external evaluator and may be more likely to enjoy the trust of staff and gain access to useful informal information. Feedback to staff of results of the evaluation may also be met with less resistance. Furthermore, internal evaluations are less expensive than external ones and for this reason can be considered when budgetary resources are scarce but evaluation is considered necessary. However, the obvious disadvantage of internal evaluators is their potential lack of objectivity due to both their dependence on the organisation and their personal relationships with staff. Consequently, internal evaluation is not recommended for outcome evaluation. In any internal evaluation, some level of expert consultation is useful in order to avoid pitfalls and shortcomings.

Qualification profile of evaluator(s)

If external evaluation is intended, it is essential to look for evaluators with specific professional experience and qualifications. Suitable experience includes designing and handling evaluation projects, cooperating with treatment services and an adequate understanding of treatment objectives and goals. A realistic picture of substance-dependent persons is also a requirement. If there is only one evaluator, it is important that this person embraces the above-mentioned features as well as possessing the necessary analytical skills.

Evaluation for whom?

It is advisable to determine from the beginning for whom the results should be meaningful. This has an impact on the choice of research objectives and questions.

Policymakers

Policymakers typically require that as many aspects as possible are considered in the research process and that the results are presented in a concise and straightforward way. Evaluation results can go one step further and suggest action and policy considerations.

Professionals in treatment services

Professionals are primarily interested in the outcome of their therapeutic work and hence in what elements need to be changed in the treatment process in order to increase the positive outcomes. Outcome analysis completely detached from process analysis will lead to the black-box syndrome and will not be useful for this target group. They also have an interest in knowing about those who are able to profit from their treatment and in learning how eventually to improve their programme (matching). Surveys of the satisfaction of clients can give indications of the extent to which treatment actually matches the needs and expectations of the clients. Professionals may

also need evaluation results to be able to promote their services in the face of competition in the 'treatment market'.

Administrators and authorities

Non-therapeutic professionals who have a responsibility for treatment provision need information about the effectiveness, outcome and adequacy of services. They want to know if services do what they are supposed to do, if they make good use of their resources (manpower, working hours and finances) and if those in need of treatment will be treated. Information on costs and benefits is often requested by this target group.

Media and public at large

Coverage of drugs issues in the media often focuses on individual news stories, often of a dramatic nature and generally concentrating on the problems associated with drug use at the expense of the measures taken to treat drug users. Evaluation results have a role in counterbalancing such sporadic information and in providing a more realistic picture of what treatment is about and what it is achieving. Overviews and results of a more global nature can be of interest for this group.

Drug users/treatment clients

The evaluation can to a greater or lesser extent include drug users/clients in the target group as they have an obvious interest in knowing something about the quality and efficiency of the treatment assessed by a neutral party as well as about their rights and duties while in treatment. Access to evaluation results for different treatment centres can enable a potential client to be better informed about the range of services and approaches available.

When should evaluation take place?

Temporal priorities

Major changes in treatment programmes should be evaluated in order to find out if the changes have led to an improvement. Evaluation is needed when changes in the characteristics of the target population necessitate an adaptation of treatment programmes. Evaluation is urgent whenever serious and justifiable doubts are raised about a treatment programme's effectiveness or appropriateness. Comparative evaluation may also be indicated when the funds available for treatment become scarce and decisions have to be made regarding which services to subsidise and where to make cuts.

Continued versus sporadic evaluation

It is a priority at all times to have adequate knowledge of treatment outcome. More important than sporadic assessment of outcome is a systematic or periodic evaluation of outcome and of changes in outcome. Most treatment services nowadays are in a process of continued adaptation and change, responding to changes in the characteristics and needs of the target population and reacting to changing conditions for treatment provision. Sporadic evaluation therefore may yield results that apply only to the time at which the exercise was carried out or, at best, for as long as the circumstances remain unchanged.

The solution to this problem can be a combination of continued systematic client description (at least at intake, preferably also at discharge) and a periodic description of service characteristics, activities and utilisation.

TWO

Chapter 2

Preparing for treatment evaluation

For more information, the WHO/UNDCP/EMCDDA workbook *Planning evaluations* may be useful (available at http://www.emcdda.europa.eu/?nnodeid=5860).

Identifying objectives, scope and time frame

All procedural decisions depend on defining the purpose of the evaluation study. If the purpose of the evaluation study is not made explicit, there is a high risk of choosing the wrong design, instruments and actors.

Goals and objectives

A decision is needed on which of the evaluation goals (see page 15) are to be pursued. It is equally important to make sure that the decision is shared by all relevant participating parties (mandating agency, treatment service and research group). Ultimately, the objectives of evaluation have to be stated in explicit and concrete terms (e.g. evaluation of specific programme elements or staff attitudes).

Scope and size of study

The purpose of the study determines the type and amount of information required (e.g. the number of clients to be included in follow-up research for outcome evaluation). On the other hand, the size of the study is constrained by the available resources. In general, the more detailed and complex the research questions, the more data are needed for statistical analysis. Decisions on sample size and size of study should never be made without consulting an experienced expert in the field.

Time frame of study

The purpose of the study eventually determines the deadline for terminating an evaluation study (e.g. if specific decisions have to be made on the basis of evaluation results or if research has to respect given time schedules). The available resources limit the amount of time to be spent on an evaluation study. If the budget is not predetermined by other factors, the duration of the study will depend on the methodology chosen for a specific purpose.

Identifying evaluation level

Treatment methods/activity

Evaluation of a single method (e.g. systemic-oriented psychotherapy, anti-craving medication, educational methods) within a given programme is mostly done to identify advantages and disadvantages in comparison with other treatment methods. Without a comparative design, single-method evaluation is observational and descriptive and is unfit to determine the relative value of a method; hence the 'gold standard' is usually defined by a randomised or quasi-experimental design.

Treatment programmes and services

Single-service evaluation, where one service is evaluated in isolation, can be useful for process evaluation. However, outcome evaluation asks for a comparison of programmes or services.

Treatment networks

Two types of network evaluations have to be distinguished: an evaluation of organisations, in which a number of services are linked together under the same organisational umbrella; and the evaluation of regional networks, including all services operating in a given region (treatment system). The purpose of network evaluation is to assess not only the treatment outcome in the various services, but also the quality of collaboration and information exchange as well as the adequacy of the network in responding to the treatment needs in a given region.

Identifying participating parties

Mandating agency

Who wants the evaluation study to be carried out? Is that agency entitled to order such a study or can it only invite it? The organisation to which the service belongs usually has the power to ask for evaluation research. A subsidising agency may have the same rights to ask for evaluation results. The service itself may take a decision to start evaluation research if it is entitled to do so and to use funds for evaluation research. Political and administrative bodies that are accountable for the quality of treatment are entitled to start evaluation programmes. In any case, the mandating agency has to be explicit regarding the goals and purposes of the intended evaluation.

Treatment programme/service

The evaluator's rights of access to the records, clients, personnel and facilities of the programme or service being evaluated must be set down in the mandate for the evaluation study. The terms of cooperation, voluntary or mandatory, must also be defined. For comparative studies, the number and type of services have to be clearly identified.

Research group

For external evaluation, an adequately experienced research group must be identified and included in the preparatory phases of evaluation studies, before the basic decisions on the scope and the design of the project are taken. For internal evaluation projects, consultation with experienced experts from the very beginning is recommended.

Funding agency

The necessary funds for evaluation research are often provided by the mandating agency. If this is not the case, the funding agency has to be involved in the planning phase in order to avoid funding problems or conceptual controversies at a later stage.

Identifying needed and available resources

Each evaluation project, depending on its objectives and scope, is bound to calculate the resources needed and the specific manpower required for implementation. However, circumstances often do not permit the evaluation to be implemented ideally and it may be necessary to reshape the project accordingly.

Human resources

It is advisable to identify the essential actors in the study: key persons in the treatment services responsible or involved in the research activities (e.g. data collection, data flow, compliance of clients), interviewers who are familiar with the target population and with the instruments to be used, scientists who have competence in evaluation research, statisticians and other specialists as consultants. This not only facilitates the implementation of the study, it also helps to set up a realistic budget.

Financial resources from mandating agency

If the mandating agency sets out a budget for evaluation purposes, it is necessary to determine which type of study can realistically be performed on the basis of this budget. More often, the purpose is formulated and a budget proposal is expected from the research group.

In some cases, a stepwise procedure is preferred: a feasibility study precedes the main evaluation study, especially if access to services and clients is not guaranteed or if major methodological difficulties are expected. Budgetary provision is first made for the feasibility study and on the basis of the results the budget for the project can be set.

Financial contributions from other sources

Evaluation research initiated by treatment services or by research groups has to set up a budget and to submit a research proposal to a research council, health authority, foundation or other source. The time needed for this process depends on the type of funding source and its time schedules. In general, comparative studies have a better chance under such a funding scheme than single-service evaluation projects.

Identifying available data

In addition to identifying the participating partners, it is also essential to know what kind of data on clients and on services are available for evaluation purposes from existing files and what new data can be collected for the research project. Issues such as data coding, data protection and data quality have to be considered as well.

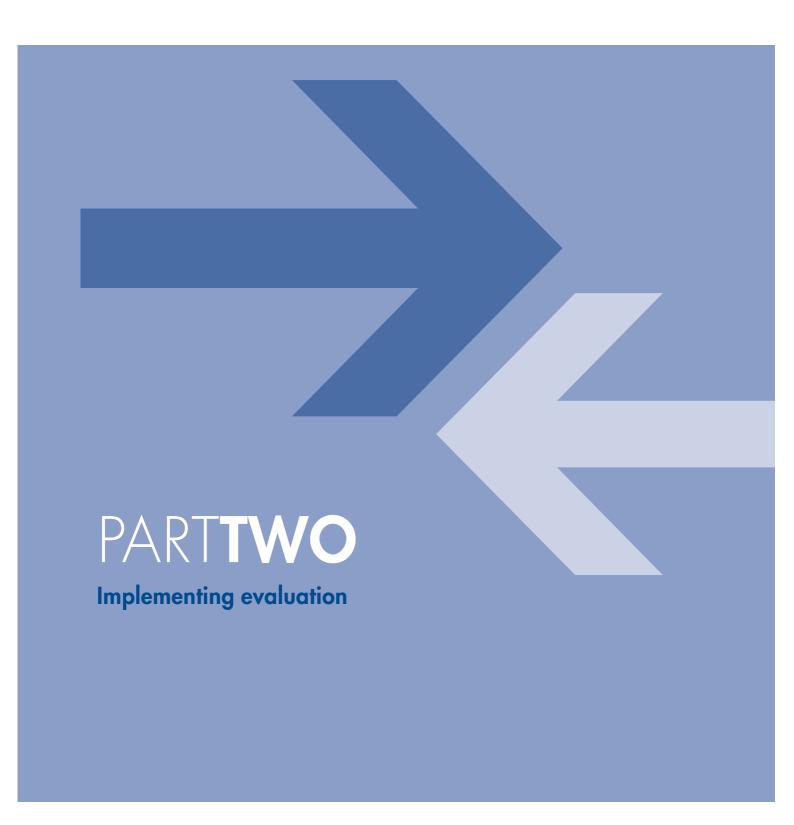
How shall evaluation results be used and disseminated?

The various partners collaborating in an evaluation project may have different ideas on how the results may serve their interests. Also, there may be different opinions about ownership of data and results, including the right to publication. It is advisable therefore to discuss these questions in an early phase of the project and eventually set up a written agreement, including publication plans. See Chapter 6 for advice on how to ensure that the research results are noticed by the various professional communities involved and have the greatest chance of influencing policymakers.

What obstacles to implementing evaluation are expected?

If, for those engaged in treatment provision, evaluation research is not a matter of routine or at least familiar, some resistance is to be expected. Therapists are often reluctant to have their treatments documented and analysed; evaluation may be perceived as an additional burden and possibly even as a threat, with the danger that the therapist will be found lacking in the areas of competence and effectiveness. Administrators and authorities are often unwilling to provide the necessary resources for participating in evaluation research. There may also be political issues involved, especially if attitudes to specific treatment options are controversial (e.g. to substitution treatment or compulsory treatment).

It is advisable to discuss such obstacles and possible strategies to overcome them from the very beginning. Sometimes, it is best to start a stepwise process, including an adequate information policy, discussing critical arguments and providing safeguards against misuse of evaluation results.



CHAPIER

Chapter 3

Quantitative evaluation

Determining research questions and hypotheses

Research questions corresponding to evaluation goals

The goals determine to a large extent what type of questions should be asked and what kind of data are needed in order to answer those questions. Evaluation studies designed for service improvement concentrate on aspects where change can take place (e.g. details on client assessment, treatment planning and treatment programme and continued education of staff). Quality assessment has to ask for information on defined quality indicators, whereas testing of specific treatment methods has to consider effects, side effects and outcome criteria.

Additional research questions

In the context of evaluation projects, it may be useful to include additional topics which are of interest for staff or for other participating agencies, although they are not the main focus of research. It is advisable to respect the information needs of all participating parties whose collaboration is needed.

Specific hypotheses to be tested

The testing of hypotheses is essential (e.g. hypotheses on the role of specific programme elements for relapse prevention), especially in comparative studies on treatment methods.

Types of research questions

Evaluation questions can be descriptive, normative or impact questions. Answers to descriptive questions provide descriptive information on what has been observed. Normative questions compare the difference between what has been observed and what should be expected. Impact questions ask for information that can be used to establish a cause and effect relation between the evaluated programme and its observed outcome.

Determining sampling methods and sample size

As it is often not feasible to question all personnel or sometimes even all units in a treatment service, it is necessary to take samples of persons or services to be studied in the evaluation research. Sampling methods for services and for clients follow different rules.

Sampling of services

Comparative evaluation studies can focus on the following issues:

- What is the outcome of two or more treatment modalities?
- What are the outcomes of two or more treatment methods/protocols within the same modality?
- What are the outcomes of different client groups within the same treatment service or within treatment services of identical modality using identical methods/protocols?
- What are the programme differences of services with different outcomes in identical treatment populations?

For each one of these questions, the guiding principles for the selection of services will be different.

If the results should be representative of specific treatment modalities or methods/protocols, then the selection of services should be made in a representative way (representative of all services of the same modality, e.g. in a given region or country).

However, there are limits to a theoretically founded sampling procedure. Accessibility to services (willingness to cooperate in research, geographical situation) is a limiting factor and has to be assessed in an early planning phase.

The size of service samples is variable and depends on the scope of the evaluation study (e.g. comparison of two individual services, comparison of two types of services, evaluation of a regional or national network of services).

Sampling of treatment populations

Sampling of treatment populations also depends on the research questions. As a rule, all clients entering a service in a predefined time period or being in treatment at a predefined point in time (day, week) must be included. Studies involving only those who have completed a treatment programme or only those who are available for interviews are seriously biased and open to criticism. An evaluation study focusing on certain sections of the treatment population, for example specific age groups or dual diagnosis patients, would be more efficient if it excluded all other types of client from its sampling.

The sample size of treatment populations largely depends on the subgroups to be compared and on the statistical procedures to be used; the size should be based on a power analysis determining the minimal cell frequencies needed for statistical analysis. Also, expected attrition rates have to be taken into consideration. When non-identical treatment populations are compared, comparability can be enhanced by forming matched pairs or on the basis of specific scores; while such procedures end up with smaller samples, the original sample has to be large enough to allow for such procedures.

Determining the design of study

The various designs that are used in evaluation studies depend on the objectives of a given study and on the questions it wants to see answered. Table 1 provides an overview of the most frequently used designs.

Table 1. Most frequently used evaluation study designs			
Type of study	Objective of study		
Cross-sectional	Comparing client populations Comparing service structures Comparing retention and dropout rates Comparing treatment outcome		
Longitudinal retrospective	Long-term careers Natural history of addiction Antecedents of addiction		
Longitudinal prospective	Treatment process Measuring outcome as change in clients' behaviour, self-perception and status		
Observational ('naturalistic')	Comparing outcome in client cohorts		
Randomised	Comparing effectiveness of treatment modalities/methods		
Double-blind randomised	Comparing effectiveness of medications		
Quasi-experimental designs (waiting-list design, Zelen design)	Comparing effectiveness of treatment modalities/ methods		

Cross-sectional studies compare data at a given point in time. They are useful for limited purposes, for example comparing treatment services or comparing treatment populations in a descriptive manner. They can also be used to describe differences in outcome, without considering baseline data; in such studies the status of the clients at follow-up are compared, not the type and extent of change during treatment.

Longitudinal retrospective studies are mainly used to identify anamnestic data before the onset of addiction or before entering treatment. This method is mostly combined with a longitudinal prospective study on the evaluation of clients during and following treatment. Longitudinal retrospective studies can also be used to create a description of the 'natural history' of addiction and of long-term careers with or without therapeutic and legal interventions.

Longitudinal prospective studies allow for a detailed description of treatment processes and of the status of clients and their behaviour during and following treatment. Prospective studies have

better and more reliable baseline data than retrospective studies and avoid error from biased or otherwise distorted data collection on past events.

Observational ('naturalistic') studies are cohort studies from treatment services where the indication for treatment is made in a 'naturalistic' way, not by randomised allocation. The largest treatment evaluation studies have followed this design: 'Drug abuse reporting programme' (DARP), 'Treatment outcome prospective study' (TOPS), 'Drug abuse, treatment outcome study' (DATOS) and 'National treatment outcome research study' (NTORS).

Randomised studies are generally considered the gold standard in clinical studies, following the rules and procedures of good clinical practice. Clients are allocated at random to treatment modalities or methods. This allows for a more precise comparison of outcomes, because selection factors are minimised. However, selectivity takes place if the treatment modalities show differences in acceptability and in dropout rates, based on clients' expectations that are incompatible with the random assignment.

Double-blind randomised studies are used in the comparison of medications. Effects and side effects of prescribed substances can be compared without the interference of clients' and treatment staff's expectations and beliefs.

Quasi-experimental designs are used when standard randomisation is not feasible. Studies with waiting-list design compare the evaluation of clients in a given treatment programme with the evaluation of those who have been randomly put on a waiting list for a defined period of time (e.g. six months). The Zelen design uses different sequences of treatment modalities (e.g. A–B–A compared with B–A–B and B–B–A).

When choosing the design of an evaluation study, not only the purpose of the study has to be considered, but also the access to services and their treatment populations and the resources available for research.

All comparative studies have to deal with a concern on the part of services that they may be identified as being inferior in outcome or in quality; protection against misuse of study results or even anonymity of participating services may be essential in order to get access to services for evaluation research.

Determining the criteria of measurements

In the measurement of treatment outcome, a set of indicators (Table 2) is used rather than one single indicator (such as 'relapse'). Substance use behaviour is only part of a lifestyle and behaviour pattern which is the target of drug treatment. It is essential to learn which treatment has what kind of positive effects in which dimension of such a complex behaviour pattern.

Addictive behaviour is measured by types of substance of use, extent of use and patterns of use. Measuring change in these indicators gives a more realistic picture than just measuring abstinence versus relapse. Reducing the number of substances used, reducing the extent of use and changing to less risky use patterns can be rated as positive changes even if abstinence is not achieved.

Changes in health status include physical health, nutritional status, symptomatology of somatic conditions, symptoms of psychiatric conditions and other indicators of psychological health such as suicidal thoughts or avoidance of social contacts.

Indicators of social integration have to be assessed independently of those of addictive behaviour and health status. Essential indicators are type and stability of housing situation, type and stability of employment, schooling or vocational training, and type and resourcefulness of social contacts. Involvement in illegal activities (drug-related or non-drug-related) and in semi-legal activities (e.g. sex for money, sex for drugs) also has to be assessed.

Table 2. Outcome indicators				
Retention (rate)	Time in treatment			
Status at discharge	With or without staff's consent and/or as planned?			
Addictive behaviour	Consumption rates of legal and illegal addictive substances			
Risk-taking behaviour for drug-related infections	Injecting drugs Needle and syringe sharing Unsafe sex			
Health	Changes in somatic and/or psychiatric status			
Social reintegration	Housing situation, changes in employment rates, social networks, lifestyle, delinquency			
Quality of life	Subjective well-being			

A special type of indicator is risk-taking behaviour for contracting or transmitting infections such as hepatitis or HIV, wherever reduction of risk-taking behaviour is one of the treatment objectives.

Quality of life, measured subjectively as well-being, has been introduced more recently as another indicator of treatment outcome, in the treatment of substance dependence as well as in other especially chronic conditions. Using a range of outcome indicators implies that treatment outcome is not to be measured and expressed by a single variable. Rather, all the abovementioned indicators are measured and the result is expressed as a treatment outcome profile. Making comparisons between treatment outcomes means comparing the treatment outcome profiles.

Determining the timing of measurements

The timing of measurements has to distinguish the following time points.

Baseline data

Baseline data on clients are recorded before entering or during treatment. They describe the status quo at entry or during the last four weeks or six months (the same time periods have to be used for collecting follow-up data). As a rule, baseline data should be assessed during the first two weeks after entering treatment, to ensure that early dropouts are adequately documented.

Some anamnestic and psychopathological data are difficult to assess during acute withdrawal states in patients undergoing detoxification treatment; however, such acute withdrawal states, during which the client feels sick, do not last longer than a few days as a rule. Protracted withdrawal states may mimic depressive conditions or a symptomatology of unrest and anxiety. Screening for psychopathology, therefore, may have to be postponed or repeated until withdrawal is over. Some data on psychopathology can be collected before starting detoxification, but then the possible effects of intoxication from continued drug consumption have to be considered (continued drug use can be tested through urine analysis).

In-treatment data

Early in-treatment data on motivation, treatment expectations, attitudes and understanding of the treatment process can be assessed and used as predictors for treatment outcome. Other items such as compliance, treatment satisfaction and future perspectives need more time to develop and are better documented in the later stages of treatment.

Termination of treatment

The manner of termination (e.g. regular completion of programme, exclusion, dropping out) is documented as an intermediate indicator of outcome and eventually as a predictor for outcome at follow-up. Prognostic ratings by staff of clients' plans and prospects at the end of treatment are also used as intermediate outcome measures.

Follow-up data

Early measurement (6–12 months after termination of treatment) is appropriate to assess if plans for aftercare or other measures have been realised; if improvements in status and behaviour as required during treatment are kept up, have further improved or became reversed; and if eventual intervening crises have been adequately met.

Medium-term assessments (12–36 months after termination of treatment) focus on the evaluation of status and behaviour as well as on the identification of intervening factors (such as life events, quality of social network, job opportunities).

Long-term outcome focuses, in addition, on age-related lifestyle changes ('ageing/maturing process').

Determining the instruments to be used

Two principles have to be considered:

- instruments that are available and validated take priority (validity of data, comparability of results):
- instruments for which proper training has been carried out or is available take priority (quality of data).

Where new instruments are constructed, compatibility with existing instruments should be attempted as far as possible. Modular-type instruments (with specific modules for specific items, but common modules for core items) are preferable to instruments that allow no comparison.

Since 2000, the EMCDDA has made accessible to the public through the Internet the EIB, which is a collection of evaluation instruments. The EIB holds a total of more than 200 evaluation instruments in the field of treatment and prevention. Around 170 evaluation instruments in the field of treatment are currently available in the EIB. The EIB now holds instruments in a total of 19 languages (17 EU languages — Czech, Danish, Dutch, English, Finnish, French, German,

Greek, Hungarian, Italian, Lithuanian, Polish, Portuguese, Romanian, Slovak, Slovenian, Spanish and Swedish — plus Norwegian and Russian). Many of the instruments described below can be found at the EIB website (http://eib.emcdda.europa.eu/).

The European version of the Addiction severity index (Europ-ASI) is available on the EIB website in Czech, Danish, Dutch, English, French, Hungarian, Italian, Lithuanian, Polish, Portuguese, Swedish and Russian. Apart from describing clients in all the above mentioned dimensions, the Europ-ASI allows an approximate estimation of the severity of deficits in the various dimensions. It can therefore be used for repeated measurements of change. Another internationally developed instrument is the Treatment demand indicator (TDI) protocol. This instrument/protocol was developed in close cooperation between the EMCDDA, the Pompidou Group and national representatives. The TDI protocol is available at http://www.emcdda.europa.eu/?nnodeid=1420.

Client description

Treatment evaluation is meaningful only if the treatment population is adequately described. Treatment modalities cannot be compared if it is not known in detail what the treatment populations are. Client description instruments, therefore, have to provide data in various dimensions, including demographic data, data on social history and status, data on medical history including addictive behaviour and data on previous treatment and treatment outcome. In some countries (Denmark, Germany, Norway, Switzerland and the United Kingdom), instruments for client description have been developed which are now used in national evaluation studies and/or national documentation systems. Instruments which include elements of client description are the ASI (Addiction severity index — see http://eib.emcdda.europa.eu/?nnodeid=3538) and MAPS (Monitoring area and phase system — see http://eib.emcdda.europa.eu/?nnodeid=4406).

Psychiatric rating

In addition to general client description, the increasing rates of psychiatric co-morbidity in addicted populations make it advisable to use additional instruments for establishing psychiatric diagnoses. Internationally, the most frequently used diagnostic systems are the International Classification of Mental Diseases (ICD-10) (WHO, 2006) and the Diagnostic and statistical manual of mental disorders (DSM-IV) (American Psychiatric Association, 2000). Specific instruments for diagnosing depressive states are Beck's depression inventory (BDI) and the Standardised assessment of depressive disorders (SADD). More general instruments are the Brief psychiatric rating scale (BPRS), the Present state examination (PSE) and the Symptom checklist

(SCL-90 R). For personality disorders, the International personality disorder examination (IPDE) can be used, and for the description of personality traits, the Personality research form. None of these is available on the EIB website, partly for copyright reasons.

Programme/service description

Treatment evaluation makes sense only if the treatment services and the methods they use are adequately described. Growing diversification of treatment modalities and methods called for the development of instruments describing the differences in sufficient detail. Again, some countries have developed instruments which are now used at national levels (Sweden, Switzerland and the United Kingdom). At the international level, two instruments may be mentioned. The Treatment unit form (TUF) has been piloted in a number of European countries through the EMCDDA. The TUF is available at the EIB website in English, German and Greek. The other instrument is the BioMAP (Öberg et al., 1998), used in an international research project evaluating relapse prevention measures for treated drug- or alcohol-dependent persons (IPTRPs).

Motivation/readiness to change

The client's motivation for behaviour change is an important factor for treatment outcome. Based on the work of Di Clemente and Prochaska (1982), the Stages of change inventory and the Readiness to change questionnaire can be used. Alternatively, the CMRS scales for substance abuse treatment, which is in the EIB, by George de Leon and Gerald Melnic, can be used.

Process evaluation

Documents describing the analysis of how treatment is delivered, focusing on therapeutic programmes and elements and including the qualification and attitudes of staff, entry and exclusion criteria for clients and sanctions, are available on the EIB, which contains 64 such instruments (http://eib.emcdda.europa.eu/?nnodeid=3072).

Therapeutic relationship

The relationship between client and therapist is instrumental in facilitating behaviour change. The quality of the relationship includes issues such as mutual respect and agreement on treatment goals. The Working alliance inventory (WAI — Horvath and Greenberg, 1989) can be used to evaluate client/therapist relationships. This instrument is not included in the EIB.

Social network of clients

The quality of a client's social network has repeatedly been found to be a predictor of treatment outcome, especially at follow-up. The Important people and activities instrument (IPA -

Longabaugh, 2001) is designed to assess the client's social network. This instrument is not in the EIB but an alternative, NetMAPS, which is in the EIB, can be used.

Staff satisfaction and ward atmosphere

Staff burnout and an unpleasant atmosphere in treatment units can impede the therapeutic process. Instruments available to measure these factors include the Maslach burnout inventory (MBI), the Ward atmosphere scale and the Semantic differential. A Spanish version of the latter is available on the EIB website.

Client satisfaction

The client's satisfaction with treatment is an outcome measure, but it can also be used as a predictor of outcome. Two examples are the Treatment perception questionnaire (TPQ) and the Client satisfaction questionnaire (CSQ), which is available in 30-, 18- and 8-item versions. The TPQ is available on the EIB website in English, Italian and Spanish (http://eib.emcdda.europa.eu/?nnodeid=3073).

Quality of life

Subjective well-being is one element of outcome. Available instruments include the Satisfaction with life scale (SWLS), the Quality of life inventory (QOLI), the Subjective well-being inventory (SUBI), the WHO quality of life instrument (WHOQOL) and the Lancashire quality of life profile. The last two can be downloaded from the EIB website.

Satisfaction of referral agencies

Where clients are referred for treatment, the satisfaction of referral agencies can be used as an outcome measure. No instrument can be suggested for the time being.

Economic analysis

The aim of this kind of evaluation instrument is to enable treatment providers to assess the resources used in treatment operations and their associated costs. Resource categories normally include clients, staff, supplies and materials, contracted services, buildings and facilities, equipment, etc. One non-copyright protected instrument in this category is the Drug abuse treatment costs analysis program (Datcap), available on the EIB website (http://eib.emcdda.europa.eu/?nnodeid=3508). Additionally, the WHO/UNDCP/EMCDDA Workbooks series has a volume on cost analysis (available at http://www.emcdda.europa.eu/?nnodeid=5860).

Other instruments focus more specifically on substance abuse problems, such as the Severity of dependence scale (SDS) and Composite international diagnostic interview — Substance abuse module (CIDI-SAM). SDS is currently available in the EIB in Czech, English and Lithuanian.

Practical implementation of evaluation research

Research plan

The planning of any evaluation research project includes decision making on the issues already described in this section. It also includes careful consideration of the topics listed below. The research plan should be drawn up by evaluation experts, or at least under the guidance of and subject to review by such experts.

The research plan describes the rationale, objectives and methods to be used, contains a detailed working plan and timetable, indicates deliverables and milestones, and provides information on budget and staff to be involved.

It should also identify the role and responsibilities of all partners participating in the project.

Data sources are:

- clients to be interviewed;
- staff from treatment programmes/services providing general and individual information on treatment provided and on client observation;
- collateral informants (medical records, criminal registers, police files, social service files, family members of clients);
- laboratory findings.

Data collection has to follow a detailed research protocol describing the sources, the timing, the instruments and the procedures to be used. Descriptions of procedures must include information on who is conducting interviews, how interviewers are trained and how data are coded and transferred to the evaluation team.

Informed consent, confidentiality, data protection

Whenever client data are used, written information on the research project and its objectives, the expected effects and possible side effects, liabilities, obligations for participating clients and

data protection must be presented to and signed by all clients involved. No ethical committee will accept a research project without having seen the consent sheet.

Personal data on clients may be revealed only to those who are involved in the present treatment of the individual client. This implies that external evaluators will not be allowed to receive personal data that enable the identification of a client. Data must be coded and the key for decoding should be available only to the responsible treatment representative. Use of social security numbers or other codes that allow identification of clients by people other than the treatment representative is not acceptable. Coding should not only ensure data protection, but also allow all data belonging to a specific client to be recognised.

Code lists must be safely locked away. Data files must be secured by privileged access measures.

Interviews

Client interviews for the purpose of assessment at intake and follow-up clinical ratings may be performed by external interviewers or by adequately trained staff from the treatment programme/service. In the case of behaviour studies, to avoid self-reporting bias, follow-up interviews should be conducted only by external interviewers as clients have a tendency to select and even distort information given to their therapists. For the same reason, confidentiality must be secured so that no information given to an external interviewer is accessible to programme staff.

Interviewers must be able both to adopt a non-judgemental but sympathetic and understanding attitude and to create an atmosphere in which the interviewee can feel accepted and at ease. The interviewer must be already familiar with the instruments used in the evaluation project or receive proper training in their use.

Self-rating

Some instruments are designed to be filled in by clients without an interview (e.g. the Symptom checklist, SCL-90 — Derogatis et al., 1973). However, as many clients are not used to doing this, such instruments should be introduced to them and the filled-in form should be checked with the client for completeness and possible misunderstandings. (Not in the EIB for copyright reasons.)

Collateral informants

Any use of collateral information must be mentioned in the informed consent sheet and acknowledged by the client's signature. In general, the use of medical documents does not present major problems. Gaining consent to use police information or information from family members or employers, however, may be problematic, because this entails revealing that the

client has drug problems, a fact that may otherwise not be known to those informants. It has also to be considered that information from relatives or other key persons is not more objective or more reliable than information provided by the client. When the information given by a client differs from that given by the client's relatives, it is difficult to know whose answer is closer to reality. For these reasons, most evaluation projects nowadays proceed without collateral informants.

How can the credibility and veracity of client self-report data be assured without collateral informants? This problem has been studied repeatedly, with the result that self-report data have been found to be reliable if confidentiality is assured and if no consequences may be expected from the information given. It is particularly important that information is not disclosed to the client's therapists and the services involved in his or her treatment, or to others such as relatives, employers and authorities. Laboratory information may be used to verify some self-report data.

Laboratory findings

Urine testing for substances of use is frequently employed to check on self-report data. It is an appropriate technique to detect substances and their metabolites for a limited time after ingestion (depending on the half-life of the various substances). The findings are mostly qualitative, quantitative analysis being more sophisticated and costly. An alternative is sweat analysis. Hair analysis, in contrast, provides retrospective information on substance use over a longer period of time (depending on the length of hair). A combination of urine analysis and hair analysis gives the best available laboratory information on past substance use. Other laboratory findings concern diagnostic issues such as seropositivity rates for specific infections (especially HIV and hepatitis) and specific findings related to clinical conditions.

Data control

Incoming data have to be painstakingly checked for completeness, plausibility and accuracy. Whenever possible, original data sources should be checked to obtain missing data or clarify unclear data. It may be necessary to check interview data with the interviewers. The acceptance of research results and their publication in refereed scientific journals may depend on the transparency of data-control procedures.

Data organisation, data processing

Data will be entered in a computerised file using a program developed for each instrument and organised for evaluation purposes.

Data analysis

At present, the most frequently used tool for data analysis in treatment evaluation research is the Statistical Package for the Social Sciences (SPSS).

Feedback to participating partners

Feedback is essential not only after termination of the research project, but also during the process, when it should provide information on data quality and on preliminary findings, in order to improve not only data collection, but also the motivation of treatment staff. Releasing preliminary results to a larger public, however, is problematic and should be avoided. Many larger or politically sensitive projects periodically publish newsletters to satisfy legitimate information needs and to prevent gossip-like misinformation.

Reports and publications

It is advisable to define the type and frequency of reports to funding agencies at the very beginning. Intermediate reports should take care not to go beyond factual information on the project's progress and a description of some preliminary findings.

The preparation of publications often takes more time and resources than anticipated and therefore should be well planned. Topics, authors and publication channels should be identified at the planning stage. For many evaluation projects, it is advisable to provide separate information products tailored to the specific needs of the different interested parties (e.g. professionals working in treatment, scientists, health authorities and other target groups). Dissemination of results is an essential part of an evaluation project, and this task may be carried out by the research team or by other appropriate professionals.

The results will have the highest impact in the scientific or professional spheres if they are published in peer-reviewed journals or in journals and books that have the attention of professionals. Each of these different types of publication has its own rules and standards which must be followed.

Misuse of evaluation results must be prevented. Typical examples of results being misused include their selective use in the marketing activities of one service at the expense of other services and their selective use to justify cutting budgets on the basis of preconceived plans, rather than on a proper interpretation of evaluation data. The best protection against misuse is careful avoidance of imprecise summary statements, protection of client and service identity and a common understanding and joint plan involving all partners about how to proceed with publications and other forms of dissemination.

FOUR

Chapter 4

Qualitative evaluation

Qualitative evaluation is less used and explored than quantitative evaluation. The main reason for this is the high costs involved in gathering and analysing data from personal interviews. Other more practical and less costly methods are not sufficiently known and introduced as yet. Correctly performed, qualitative evaluation can give valuable insights into treatment programmes. Some of the major approaches are mentioned below.

Objectives

Qualitative methods can be used to achieve at least four goals:

- to collect information for process evaluation: for example, on attitudes, programme implementation problems, obstacles to goal attainment;
- to collect information as a basis for determining the focus and extent of quantitative evaluation studies: helping to identify the burning issues and priorities in a given situation;
- to collect information for the construction of questionnaires for quantitative evaluation studies: helping to identify the relevant questions to be asked and the categorisation of responses;
- to provide information for an interpretation of quantitative data.

In many instances, it is therefore recommended that quantitative and qualitative approaches be combined in treatment evaluation.

Methods

Participant observation

This is technically the easiest and the least costly approach. It can provide useful information on the everyday working of a programme, such as communication styles, staff attitudes and process aspects including waiting times and dealing with problem situations. The goals of participant observation must be clear at the outset: its role in the evaluation project and the issues where observation is expected to be helpful.

Semi-structured interviews

This is one of the more 'classical' approaches, involving face-to-face interviews with selected partners and providing the opportunity for open questions and answers. Confidentiality is an important aspect, requiring anonymised recording and an appropriate environment for the interview. Interviewers need sufficient training in how to conduct qualitative interviews, if they are to extract the least biased and the most relevant information.

Focus groups

This is a useful and cost-effective method for collecting qualitative information. Focus groups consist of about eight participants and a moderator. Participants should represent the target groups from which information is needed, such as staff, clients, families of clients, referral agencies and other external groups. Focus groups can be used for looking into the functioning of a programme as perceived by the various partners, into areas for improvement, and also into issues to be considered in a quantitative evaluation study and the instruments to be used.

Narrative research

Probands are encouraged to tell their stories and these stories are analysed in terms of their structure and content. This method can be combined with others, for example with projective techniques in the form of vignettes.

Selection of interview and focus group partners

The Glaser and Strauss (1967) theoretical sampling model is the best-known method for obtaining the broadest possible spectrum of opinions and views. Interview partners are not determined in advance, but after each interview a person is selected with an expected different view, in order to avoid a lopsided representation of opinions and views. As is the case with focus groups, the selection must take into consideration how the views of the various groups can be best represented (e.g. in focus groups with staff: identifying which professions and which levels of the hierarchy should be included; and in groups with clients: identifying which age groups, gender, socioeconomic characteristics, duration of ongoing participation in the programme, etc., are potentially of importance).

Analysis of qualitative data

The 'classical' model of video-taping, tape-recording and transcribing of interviews and groups can provide a wealth of information, but it takes time and resources. Well-trained interviewers and group moderators may also take notes and dictate or write up a report immediately after the

event. However, analysing the data can be difficult, especially in the case of a large number of interviews, requiring knowledge about the theoretical and methodological pitfalls, and therefore should rely on expert support.

CHAPTER

Chapter 5

Implementing and assuring the evaluation process

The following section is meant to help in the preparation, implementation and management of an evaluation project by means of checklists.

Checklist for the preparation and implementation of treatment evaluation

Objectives

- What are the objectives of the project?
- What should be evaluated?
- Are objectives accepted and shared by all parties concerned?
- What are the external conditions for the objectives?
- How will the results be used?
- Who is the audience for the evaluation report?

Scope

- What resources are available?
- How many services and programmes are needed?

Timing

- When can the project start?
- When should the results be available?

Partners

- Who wants the evaluation?
- Who pays for the evaluation?
- Who are the data owners?
- Which services will be involved?

Guidelines for the evaluation of treatment in the field of problem drug use

- Who are the evaluators?
- Who are the partners for publications?

Research plan

- What are the research questions and hypotheses?
- What design should the project have?
- How are samples defined?
- What indicators and outcome criteria will be used?
- What data sources will be used?
- What instruments will be used?

Checklist for the evaluation process

- Are staff in the evaluated treatment services adequately informed?
- Has an ethics committee accepted the research plan and the informed consent sheet?
- Are interviewers and those involved in data collection familiar with the instruments?
- Is training needed for interviewers and those involved in data collection?
- Have possible collateral informants been identified and are they cooperative?
- Have laboratories to be involved (and possibly a reference laboratory) been identified and are they cooperating?
- Is the infrastructure for data computing and processing adequate and ready?
- Is statistical know-how for data analysis available?
- Are all responsibilities clearly defined and accepted?
- Is the project keeping to its time schedule?
- Are all obligations being met?

CHAPTER



Chapter 6

Communicating and presenting your results

In this section, guidance is offered on the communication and presentation of evaluation results. Disseminating evaluation results to internal and external stakeholders and other interested parties can fulfil many objectives. These may include demonstrating the project's relevance, improving working practice, accounting to funding and regulatory bodies, informing local communities and gaining support for current and future projects.

Above all, the presentation of the evaluation project should always be linked to the initial aims and objectives of the project, as well as to the target audiences. There are a variety of approaches and tools for presenting results, of which the written report is the best known. However, it is also useful to consider other forms of presentation, such as oral presentations, press releases, articles in scientific journals and use of the Internet.

The message and means of communication should be tailored to the specific audience or target group. Different target groups need different kinds of information and different ways of obtaining it.

Independent of the target group, any report should be presented in an appropriate and attractive manner, as this will increase its chance of being read and understood. This is especially important if it is to be the basis for making decisions. It is quality and not quantity that counts.

Timing is often of importance, and publication of results before certain deadlines should be respected. Moreover, timely publication of the evaluation results may be essential to ensuring that they have the maximum impact at the political level. It should also be remembered that newer data say more about the current situation and get comparatively more attention than older data. Conversely, results should not be reported too early and evaluators should not be persuaded to disclose 'first impressions' prematurely. If requests for information are likely to be received at an early stage, press releases announcing when disclosure of results will take place can be of use.

Structuring the content of the report

The information to be included in the report depends on the target readership and what it needs to know or is interested in. The level and scope of content should be tailored to the specific needs

of different target groups. The following checklist can help in ensuring that the most relevant issues are addressed in the report:

- title page (indicating main topic, authorship, date);
- table of contents, list of tables and figures, and other visual tools;
- executive summary (design, findings, conclusions);
- introduction (background, mandate, partnership, objectives);
- questions to be answered, hypotheses to be tested;
- study design, methodology, instruments used, time frame;
- data collection, control and analysis;
- protocol changes during the study;
- findings;
- interpretation and discussion of findings;
- conclusions and recommendations;
- appendices (e.g. literature, questionnaires, guidelines for interviewers, tabulations).

Each section of the report should include an interesting title as well as an introduction to the issue at hand and a description of the way in which the section is structured.

It is always advisable to have the draft report read by someone else, who can check how readable and understandable the text is, and by an experienced editor, who will check the layout and language.

Oral presentations

Findings can also be transmitted through presentations at conferences, media appearances and personal discussions. However, oral presentations are usually best received if they are complemented by written abstracts, copies of slides or other written material. Overhead transparencies are virtually extinct and have been replaced by PowerPoint presentations. Presentations should be short and to the point, and time must be allocated for discussion. Animating the discussion is as important as presenting in a clear, audible language adapted to the audience's professional level and interests.

The structure of the presentation can follow that indicated for written reports, but it will be restricted to the specific purpose of the event and the expectations of the audience. It is especially important to take this into consideration when presenting results at media conferences.

When presenting evaluation results to professionals working in the drugs area or who work with drug users in the primary healthcare and social services, outline and discuss the possible consequences of your findings for their field of work.

Scientific publications

Scientific journals usually do not publish study reports as such, but may accept reports that conform to the journal's requirements for structure and content. Before writing a journal article, it is advisable to decide to which journal the article should be submitted and to consult the instructions for authors. Also, the specific rules for authorship, for organising the references and for ethical requirements should be consulted.

Presentation via the Internet

The research community is using the Internet more and more to make studies publicly available without delay. This can be done by means of a PDF (portable document format) file for downloading. PowerPoint can also be used to communicate results in a fast and easily comprehensible manner. Such presentations can be configured in a way that the reader merely opens the file and the PowerPoint presentation unfolds as a little video. Reports can also be restricted to, or complemented by, the executive summary and an indication of how the full text report can be accessed. Ideal sites include the home page of the research group, of the mandating agency or of a professional organisation that provides its members with the latest findings. Reports of a more sensitive nature can also be made accessible to a restricted group of recipients, using an undisclosed e-mail list or a restricted-access website.

PARTTHREE **Evaluation networks**

SEVEN

Chapter 7

Evaluation and research networks

European level

There are several European networks or bodies working on treatment evaluation or treatment research. Below are the most important, comprising Commission-funded projects, volunteer-run networks and an international body, the Pompidou Group under the Council of Europe.

The Pompidou Group owes its name to the late French President Georges Pompidou, who took the initiative to set up this intergovernmental body in 1971. Originally, the body consisted of seven European countries (Belgium, France, Germany, Italy, Luxembourg, the Netherlands and the United Kingdom) which were looking to share their experience of combating drug use and drug trafficking. In 1980, the Pompidou Group was incorporated into the Council of Europe and its membership has been increasing since. There are currently 35 Member States, namely 26 EU Member States (Latvia is not a member), the three EEA countries, Iceland, Liechtenstein and Norway, the candidate countries Croatia and Turkey, the future Schengen country Switzerland, plus Azerbaijan, Russia and San Marino.

Link:

http://www.coe.int/T/DG3/Pompidou/Default_en.asp

The European Association of Libraries and Information Services on Alcohol and other Drugs (Elisad) is a non-profit-making association founded in 1988. Elisad's main objective is to enable professionals, practitioners, social workers and others working in the field of both licit and illicit drugs to gather information easily and exchange this among themselves. In order to achieve this, Elisad organises meetings, services and activities, including an Internet site. The 'Internet gateway' project started up in 2002 and was funded by the European Commission. At the 'Internet gateway' site, a number of quality-controlled portals and/or sites have been identified and searches will be carried out only at these particular and chosen sites and not on the whole Internet. Elisad is both a human network and an institutional network, with around 50 members in the different European countries.

Links:

```
Home page — http://www.elisad.eu/
Internet gateway — http://www.addictionsinfo.eu/
```

Toxibase is a French national and documentation network. The creation of Toxibase dates back to 1986 when it was decided that six documentation centres around France should get together and set up a comprehensive drug database. With the arrival of the Internet, Toxibase became an Internet-accessible drug database with an increasing number of partners.

Link:

http://www.toxibase.org/

Ewodor, the European Working Group on Drugs Oriented Research, was founded in 1986 with the aim of setting up a forum in which researchers in the drugs field could share research experience and expertise and make their work subject to peer reviews. In order to achieve this aim, Ewodor provides an online discussion site and an annual symposium.

Link:

http://www.dass.stir.ac.uk/drugs/ewodor.htm

The European Society for Social Drug Research (ESSD) has had annual conferences since 1989, with contributions mostly from European countries, on issues ranging from epidemiology to drug policy and research methodology.

Link:

http://www.ift.de

The European Association of Substance Abuse Research (EASAR) was founded in 1994 in close cooperation with the WHO Regional Office for Europe and in consultation with the EMCDDA. The object of the association is to stimulate and strengthen European cooperation in any field of research of abuse of psychoactive substances in order to improve prevention and treatment and to contribute in this manner to the well-being of people. The association was set up with the participation of researchers and research groups from Austria, Belgium, the Czech Republic, Germany, Greece, Hungary, Italy, the Netherlands, Poland, Russia, Sweden, Switzerland and the United Kingdom. Annual research conferences are organised with presentations on ongoing and recently accomplished research projects, including presentations by young researchers and extensive interactive discussions and exchange on methodology and other specific topics. Other activities include bilateral exchange between members, joint research projects and contacts with non-European research groups. Currently, 20 research institutes and research supporting organisations are represented in EASAR. The association is managed by a board and a rotating chairperson. Membership is by cooptation.

Link:

http://www.easar.com

Itaca was established in 1999 when a group of drug professionals and researchers from the fields of prevention and treatment agreed to set up a European network. The multidisciplinary constellation was deliberate and had as its ultimate goal the use of research findings to improve drug demand reduction interventions. Itaca has been seeking to achieve this through its website, electronic newsletters, a four-monthly magazine, and an exchange grant. In 2000, Itaca received funds from the Directorate-General for Health and Consumer Protection to undertake such activities.

Link:

http://www.itacaeurope.org

ERIT, the Federation of European Professionals working in the Field of Drugs, was formally founded in 1993 and has since worked to promote exchange of knowledge and to increase the competence and skills of professionals in the drugs field. The federation received funds from 1993 until 2001 from the Directorate-General for Health and Consumer Protection. The most visible results of the network are a number of European conferences and publications covering topics such as opiate substitution treatment and evaluation of interventions in the domain of drugs.

Link:

http://www.erit.org

The research project CASE ('Children of addicts study in Europe') was financed by the thematic programme 'Quality of life and the management of living resources' under the fifth research framework programme. CASE studied treatment outcomes for heroin addicts and their children according to pre-established outcome measures. The heroin addicts and their children were assessed at admission to treatment and were then followed and assessed annually over a three-year period.

Project description:

http://www.aramis-research.ch/e/12901.html

TREAT 2000 is another project funded under the fifth research framework programme. TREAT 2000 analyses and compares healthcare systems provided for opiate addicts in six European regions and follows a total of 150 opiate addicts over 18 months in the six regions. Furthermore, TREAT 2000 will carry out a comparative assessment of the costs of the regional healthcare systems and take the first steps towards an approximate cost-effectiveness evaluation.

Project description:

http://www.aramis-research.ch/e/7176.html

The Commission's Directorate-General for Health and Consumer Protection has financed projects related to drug treatment. One example is the project 'Quality improvement of substitution treatment in Europe', which has developed guidelines for the delivery of methadone treatment available in four languages (English, French, German and Spanish) as well as an Internet site with information on 'methadone assistance points' in Europe (not only the EU but also Norway, Switzerland and accession and SAP countries). Other outputs of this project include an online 'virtual clinic', and a series of training manuals for professionals as well as an information booklet about substitution treatment aimed at policymakers.

Link:

http://www.q4q.nl/methwork2/home.htm

Cocineu, 'Support needs for cocaine and crack users in Europe', financed by the Directorate-General for Research under the fifth research framework programme, is a study evaluating the support needs of cocaine and crack cocaine users in Europe. The general aim of the study is the formulation of practicable recommendations for the adaptation of help programmes to the needs of persons with problematic cocaine or crack use.

Links:

```
Website — http://www.zis-hamburg.de/forschung_kokain_eu.de.html Final report — http://www.zis-hamburg.de/D13_Final_report.pdf
```

The project 'Rose: Management of high-risk opiate addicts in Europe', also funded under the fifth research framework programme's action line 'Life quality', aimed at describing and analysing two distinct groups of high-risk opiate addicts, namely insufficiently treated opiate addicts in maintenance treatment and untreated opiate addicts on the streets. The project design included quantitative and qualitative interviews with untreated or insufficiently treated opiate users about their perception of barriers and gaps in the drug treatment system.

Project description:

http://www.sorad.su.se/projects.php?id=13

'Quasi-compulsory and compulsory treatment in Europe' (QCT Europe) aims to create evidence on the use of quasi-compulsory treatment of drug-dependent offenders. It is funded by the European Commission (fifth research framework programme) and involves five EU countries (Austria, Germany, Italy, the Netherlands and the United Kingdom) and Switzerland. Among the planned outputs are a quantitative dataset with data from the research sample and a qualitative document based on the evaluated QCT systems.

Link:

http://www.kent.ac.uk/eiss/qct/index.htm

International level

A number of agencies and institutions have built up their own networks for treatment evaluation and evaluation research. Only a few are named here.

Two UN organisations are actively involved in the promotion of good practice and evaluating the practice of drug treatment. The World Health Organisation, based in Geneva, has a long-standing tradition in this field and has produced a range of relevant publications, in collaboration with international networks of experts from many Member States. More recently, the United Nations Office on Drugs and Crime (UNODC) in Vienna has engaged in a similar endeavour with its own networks and publications.

links

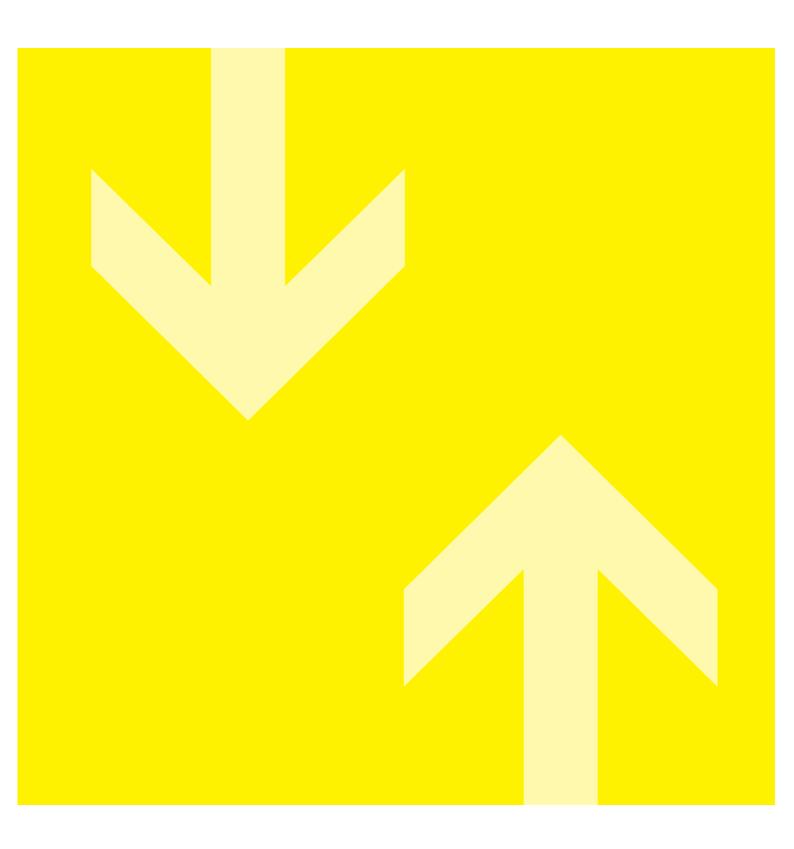
http://www.who.int http://www.unodc.org

The National Institute on Drug Abuse (NIDA) is the largest single organisation funding research, publishing research evidence and addressing professionals internationally in the field of drug use including drug treatment.

Link:

http://www.nida.nih.gov

PARTFOUR Glossary



Glossary

Aftercare

Structural approaches to reinstate ex-drug users into social networks and employment to ensure that they can function within a social network, are psychologically stable and earn their own money. This mainly constitutes the last phase of long-term treatment. Examples include therapeutic housing, therapeutic communities, networks of family housing and halfway houses.

Bias

Bias refers to any systematic deviation from the truth that affects the conclusions that may be made. An example of bias is the extent to which only specific subgroups of the designated target group participate in the intervention (only highly motivated clients, for instance). Such a sample is 'skewed' and the results could be invalid.

Detoxification

See withdrawal treatment.

Drug treatment

See drug-related treatment.

Drug users

Persons repeatedly self-administering illicit psychoactive substances.

Drug-free treatment

Drug-free treatment is treatment in which no drugs are used to alleviate the drugs problem. However, 'drug-free' does not exclude the use of drugs for the treatment of co-morbid conditions.

Drug-related treatment

Drug-related treatment is 'the use of specific medical and/or psychosocial techniques with the goal of reducing or abstaining from illegal drug use thereby improving the general health of the client'. It is a longer and more accurate term than drug treatment, with which it is used interchangeably. Treatment related to illegal drugs is the overall term for all treatment interventions targeted at problem drug users and covers the three main kinds of interventions: medically assisted treatment, drug-free treatment and withdrawal treatment.

Evaluation

A systematic collection of data and/or insights with the aim of determining the merit, worth or value of a product, outcome or process.

Evaluation indicators

Measurement elements related to the objectives and expressed in numbers, allowing monitoring of the extent of change resulting from an intervention in relation to the initial situation.

Evaluation method

The methodology/approach used in the process of evaluation. It includes quantitative methods as well as qualitative approaches.

Evaluation tools

Technical resources and specific instruments used to perform the evaluation.

External evaluation

An evaluation conducted and/or organised by persons who are not employed in or connected in any other way with the evaluated project.

Guidelines for drug treatment

A document outlining what to include and assure when providing treatment for drug addicts. Guidelines are normally only recommendations and are therefore not binding.

Inpatient treatment

Treatment offered to clients in a clinical setting where they stay for 24 hours a day, receiving multidisciplinary treatment within the psychiatric treatment system, general or specialised hospitals, therapeutic communities, or other treatment centres.

Internal evaluation

An evaluation conducted and/or organised by persons who are connected with the evaluated project as employees, volunteers or others.

Maintenance treatment

Medical treatment with a substitution or non-substitution drug in a long-term, not time-limited, perspective.

Medically assisted treatment

This consists of treatment with agonists (also known as substitution treatment) and treatment with antagonists (and antagonistic agonists).

Needs assessment

Needs assessment (or needs analysis) is the systematic appraisal of the perceived phenomenon and the appropriateness of the proposed intervention. It is essential in order to avoid misjudging the size and character of the specific problem and therefore the need for the specific intervention.

Objectives

Objectives are specific and measurable statements regarding the desired outcome of the intervention. For evaluation purposes, the formulation of objectives must specify the variables to be changed and establish measurable success criteria. A plausible, testable assumption must link programme activities to objectives, and objectives to intended outcomes. If the objectives are vague, it will not be possible to implement an intervention or to assess the effectiveness of the intervention.

Outcome evaluation

An evaluation that looks at and measures the consequences and results of the intervention for the target group.

Outpatient treatment

Treatment that does not require the client to spend the night at the treatment centre.

Problem drug use

Injecting drug use or long duration/regular use of opiates, cocaine and/or amphetamines.

Process evaluation

An evaluation that looks at how interventions are implemented in order to achieve their goals.

Self-help group

Bottom-up approach involving concerned persons, who organise themselves for mutual support or in order to get more information on drug-related matters. Examples: Narcotics Anonymous, parents' groups, peers to peers.

Social reintegration

Any social intervention aiming at integrating former or current problem drug users into the community.

Substitution treatment

Activities intended to support drug users in using alternative drugs, typically methadone, buprenorphine, slow-release morphine, dihydrocodeine, or heroin, under medical control in a way that causes less health and social damage, including reducing the risk of HIV infection. The term substitution treatment does not say anything about the length of the intervention.

Treatment slot (place)

A treatment slot is defined as a bed in an inpatient setting. In an outpatient or in a GP setting, the number of clients cared for varies depending on the treatment objectives and individually and is therefore more difficult to measure.

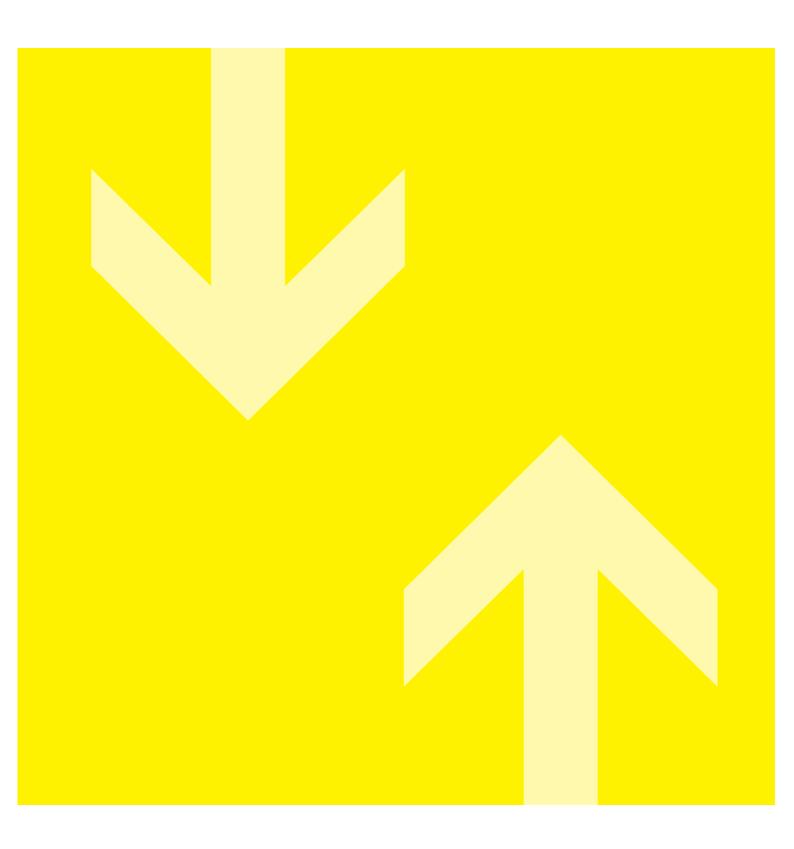
Guidelines for the evaluation of treatment in the field of problem drug use

Treatment unit

A physically detached or separate setting with one or more specific activities.

Withdrawal treatment

Treatment that without medication aims at removing the client's physical craving for drugs. This type of intervention is sometimes called detoxification, although this may be misleading as medicine is frequently used in the process of treating withdrawal symptoms. Withdrawal treatment can be sudden, that is an immediate cessation of drug use ('cold turkey'), or it may entail a gradual reduction in drug consumption during which time the users are aided by means of medication (methadone, lefexidine, dihydrocodeine) to overcome or at least cope with their drug problem.



Selected bibliography

American Psychiatric Association (2000), *Diagnostic and statistical manual of mental disorders*, Fourth edition, text revision, American Psychiatric Association, Arlington.

Derogatis, L. R., Lipman, R. S. and Covi, L. (1973), 'SCL-90: An outpatient psychiatric rating scale — preliminary report', *Psychopharmacology Bulletin* 9(1), pp.13–28.

Di Clemente, C. C. and Prochaska, J. O. (1982), 'Self-change and therapy change of smoking behaviour', *Addictive Behaviours* 7, pp. 133–142.

COST A-6 (1998), Evaluation of treatment: a European overview, Coletti, M. (ed.), Cedis, Rome.

EMCDDA (1998), 'Guidelines for the evaluation of drug prevention', EMCDDA *Manuals* No 1, European Monitoring Centre for Drugs and Drug Addiction, Lisbon.

EMCDDA (1999), 'Evaluating the treatment of drug abuse in the European Union', EMCDDA Scientific Monographs No 4, European Monitoring Centre for Drugs and Drug Addiction, Lisbon.

EMCDDA (2001), 'Guidelines for the evaluation of outreach work', EMCDDA *Manuals* No 2, European Monitoring Centre for Drugs and Drug Addiction, Lisbon.

EMCDDA (2006), Annual report 2006: the state of the drugs problem in Europe, European Monitoring Centre for Drugs and Drug Addiction, Lisbon (available at http://www.emcdda.europa.eu/?nnodeid=419).

ERIT (1997), The evaluation of medical, psychological, socio-educational interventions with drug users in Europe, Nizzoli, U. (ed.), Mucchi, Modena.

Glaser, B. and Strauss, A. (1967), The discovery of grounded theory: Strategies of qualitative research, Wiedenfeld and Nicholson, London.

Graham, K. et al. (1994), The evaluation casebook. Using evaluation techniques to enhance programme quality in addictions, Addiction Research Foundation, Toronto.

Horvath, A. O. and Greenberg, L. S. (1989), 'Development and validation of the working alliance inventory', *Journal of Counselling Psychology* 36, pp. 223–233.

Keen, J., Mendive, J., Oliver, P., Walker, J., Hawley, H., Ramos, A., Guettinger, F., Glendenning, R. and Mathers, N. (2005), Children of addicts study in Europe (CASE). Final report, Institute of General Practice and Primary Care, University of Sheffield, United Kingdom.

Longabaugh, R. (2001), Manual for the administration of the important people and activities instrument adapted for use for BST decision trees, Centre for Alcohol and Addiction Studies, Brown University, Providence, RI.

Neale, J., Allen, D. and Coombes, L. (2005), 'Qualitative research methods within the addictions', *Addiction* 100, pp. 1584–1593.

Öberg, D., Gerdner, A., Sallmén, B., Jansson, I. and Segraeus, V. (1998), BioMAP-unit. Monitoring area and phase, unit description form, National Board of Institutional Care, Stockholm.

Rush, B. and Krywonis, M. (1996), Evaluation and continuous quality improvement of substance abuse services and systems, Addiction Research Foundation, Toronto.

SAMHSA (1997), *Demystifying evaluation*. A manual for evaluating your substance abuse treatment programme, Substance Abuse and Mental Health Services Administration, Rockville, MD.

United States General Accounting Office (1990), Case study evaluations, United States General Accounting Office, Washington, DC.

WHO (1991), Evaluation of methods for the treatment of mental disorders, World Health Organisation, Geneva.

WHO (2006), International Statistical Classification of Diseases and Related Health Problems, 10th revision, version for 2007 (available at http://www.who.int/classifications/apps/icd/icd10online/).

WHO/UNDCP/EMCDDA (2000), International guidelines for the evaluation of treatment services and systems for psychoactive substance use disorders, World Health Organisation, Geneva.

WHO/UNDCP/EMCDDA (2001), 'Evaluation of psychoactive substance use disorder treatment', *Workbooks* series, World Health Organisation, Geneva.





European Monitoring Centre for Drugs and Drug Addiction

Guidelines for the evaluation of treatment in the field of problem drug use — A manual for researchers and professionals

Luxembourg: Office for Official Publications of the European Communities

2007 - 76 pp. - 21 x 21 cm

ISBN 92-9168-279-9

How to obtain EU publications

Our priced publications are available from EU Bookshop (http://bookshop.europa.eu), where you can place an order with the sales agent of your choice.

The Publications Office has a worldwide network of sales agents. You can obtain their contact details by sending a fax to (352) 29 29-42758.

About the EMCDDA

The European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) is one of the European Union's decentralised agencies. Established in 1993 and based in Lisbon, it is the central source of comprehensive information on drugs and drug addiction in Europe.

The EMCDDA collects, analyses and disseminates objective, reliable and comparable information on drugs and drug addiction. In doing so, it provides its audiences with an evidence-based picture of the drug phenomenon at European level.

The Centre's publications are the prime source of information for a wide range of audiences including policy-makers and their advisors; professionals and researchers working in the drugs field; and, more broadly, the media and general public.



