

Research Institute for Public Health and Addiction  
at Zurich University

**QCT Europe**  
**Quasi-compulsory and compulsory treatment of drug-**  
**dependent offenders in Europe**

**Final report on quantitative evaluation**

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**Zurich, February 2006**

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## **1 HYPOTHESES FOR QUANTITATIVE EVALUATION**

### **1.1 Hypotheses development**

As stated under work package number 3, the hypotheses that are to be tested in research were developed and refined. The draft hypotheses (as included in the project bid) were discussed at the second partner meeting, and it was recognised that they need to be adapted on the ground of the QCT system description and of the literature analysis.

The Zurich centre in collaboration with the project management drafted a revised list of hypotheses that were amended and agreed at the second partner meeting. The revised list was stated in the 12 month progress report of 30.11.2003.

### **1.2 Adapted set of hypotheses**

Informed by the system description and literature review, the partners agreed that the project be designed to test the following hypotheses:

1. That the QCT group shows reductions in crime and drug use, and increases in health and socialisation.
2. That Comparison Group 1 (people who are not in QCT, but are going through treatment in centres where people in the QCT group are treated) shows reductions in crime and drug use, and increases in health and socialisation.
3. That, if other factors are statistically controlled (e.g. mental health, perceived coercion, initial motivation, previous criminality, type of drug use, length of drug use, previous treatment failure), the QCT group has better retention than CG1.
4. That, if other factors are statistically controlled (e.g. mental health, perceived coercion, initial motivation, previous criminality, type of drug use, length of drug use, previous treatment failure), the QCT group has different outcome (crime and drug use) than CG1.
5. That, when comparing time "at risk", and level of risk, the QCT group has better outcome (crime and drug use) than Comparison Group 2 (people who are eligible for QCT but receive a different sentence). This hypothesis will only be tested in countries where it is feasible to recruit people into CG2.

We also agreed to test several other hypotheses if the data (e.g. cell sizes) allow. These hypotheses refer to differential effects (e.g. between men and women, between ethnic groups), client characteristics (e.g. motivation, perceived coercion, self-efficacy, mental health), treatment characteristics (e.g. client/staff ratio, type of treatment), system effects (e.g. involvement of judge in reviewing cases, speed of response to positive drug tests).

## **2 RESEARCH PROTOCOL FOR QUANTITATIVE EVALUATION**

### **2.1 Basic protocol**

The following research protocol was developed at the Addiction Research Institute in Zurich and adopted by partners and the project management.

#### Selection of services where probands will be interviewed

Selection criteria : admission of probands eligible to the experimental group and admission of probands eligible to comparison group type 1

Experimental group (QCT) : Probands receiving treatment (residential or out-patient) on court order, as an optional alternative to imprisonment or other punishment, in a regular treatment institution where voluntary treatment is also provided

Comparison group type 1 : persons entering voluntarily treatment institutions where QCT also is provided

Comparison group type 2 : persons eligible for being referred to treatment institutions but preferring imprisonment or some other punishment

### Selection of probands to the experimental group (QCT)

Inclusion criteria :

- responding to the definition of the experimental group
- new entry
- informed consent
  
- Probands to be included in the quantitative evaluation study must have a court sentence for QCT or await such a sentence
  
- All new entries into the participating treatment institutions who respond to the QCT definition must be included in the experimental group, starting from 01.06.03.
  
- Persons responding to the QCT definition, but refusing to give consent to the use of additional data from medical and police records, must be included in interviews and evaluation (intent to treat design).
  
- Persons responding to the QCT definition but refusing consent to be interviewed, must be recorded on the basis of institutional data (for comparison of probands with non-probands).

### Selection of probands to the comparison group type 1

Inclusion criteria :

- responding to the definition of the comparison group type 1 (voluntary clients)
- new entry
- informed consent
  
- Probands to be included in the comparison group type 1 must enter the treatment institution voluntarily.
  
- All new entries into the participating treatment institutions who respond to the comparison group type 1 definition must be included, starting from 01.06.03.
  
- Persons responding to the comparison group 1 definition, but refusing to give consent to the use of additional data from medical and police records, must be included in interviews and evaluation (intent to treat design).

- Persons responding to the comparison group 1 definition but refusing consent to be interviewed, must be recorded on the basis of institutional data (for comparison of probands with non-probands).

### Selection of probands to the comparison group type 2

Inclusion criteria :

- responding to the definition of the comparison group type 2 (persons eligible for QCT but preferring imprisonment or other forms of punishment)
  - new case
  - informed consent
- All new cases who respond to the comparison group type 1 definition must be included, starting from 01.06.03.
- Persons responding to the comparison group 2 definition, but refusing to give consent to the use of additional data from medical and police records, must be included in interviews and evaluation
- Persons responding to the comparison group 2 definition but refusing consent to be interviewed, must be recorded on the basis of court data (for comparison of probands with non-probands).

### Remuneration of probands

Probands will be paid for follow-up interviews at 6, 12 and 18 months on a sliding scale to promote retention in the study.

### Data collection : Instrument set

Proband data

- |      |   |
|------|---|
| P1.a | European version of Addiction Severity Index (Europ-ASI), full version<br>Includes Beck Depression Inventory BDI, Symptom Check List SCL-90 |
| P1.b | Europ-ASI, amended version  |
| P1.c | ASI-crime module  |
| P2.  | QCT - Ethnicity questionnaire   |
| P3.  | QCT - Readiness to change questionnaire   |
| P4.  | QCT - Self-efficacy questionnaire   |
| P5.  | QCT - Victimization questionnaire   |
| P6.  | QCT - Client satisfaction questionnaire   |
| P7.  | QCT - Perceived legal pressure scale  |
| P8.  | QCT - Questionnaire for data from medical records   |
| P9.  | QCT - Laboratory data form  |
| P10. | QCT -Questionnaire for data from police records   |

Service data

- |     |                               |
|-----|-------------------------------|
| S1. | Treatment Unit Form (TUF)     |
| S2. | Service Quality Questionnaire |

Instrument language

Questionnaires used for quantitative interviews must be translated into the language of the respective partner countries. Translation procedure includes : translation from English to the national language by a native speaker of that language, check of the translation against the English version by two colleagues (experts in this research field and knowledgeable in the relevant English vocabulary).

### Proband interviews

Proband interviews will be completed face to face by external interviewers (independent from the treatment institution) who are trained in the use of the EuropASI. Answers and ratings are recorded in one of two versions. Version 1 : direct recording on PC, using the questionnaire template. Version 2 : recording on outprint, then entering data into questionnaire template. For questionnaires that are answered by clients alone, data entering is required by staff.

### Identification codes

For each proband, an anonymous code will be created with the following elements:

- country nr (1 digit)
- treatment institution nr in the country(2 digits)
- proband nr in the institution (2 digits)
- group code (1= experimental group, 2= comparison group type 1)(1 digit)

### Timing of measurements

Proband data and service data are collected at three time-points, in accordance with the QCT overall research protocol. Time points are : at entry of proband into the service (t1), after 6 months (t2) and after 12 months (t3). For probands entering early there is opportunity to have a follow-up at 18 months (t4).

Proband interviews at entry (t1) must be performed within the first 2 weeks after starting treatment. Follow-up interviews (t2, t3) are performed as a rule within a time limit of not more than 3 weeks before and after the defined time point.

Follow-up data are used for determining changes during the evaluation period (changes in proband status and behaviour, changes in service description and quality). At 6 month follow-up, only a selection of data are collected.

### Proband data

t1	at entry to treatment programme:	P1a, P1c, P2, P3, P4, P5, P7, P8, P9, P10
t2	at 6 months follow-up	P1b, P3, P4, P6, P7, P9
t3	at 12 months follow-up	P1b, P1c, P3, P4, P5, P6, P9, P10
(t4	at 18 months follow-up	P1b, P1c, P3, P4, P5, P6, P9, P10)

At t2, t3, t4 the instrument P3 readiness to change is applied for out-patients and drop-outs from residential programmes only.

### Service data

t1  
t3

S1, S2  
S1, S2

### Access to additional data sources

#### Medical records

The use of medical records on probands for checking on self-report data is restricted to the following conditions:

- Proband's written consent to use medical records
- Ethical committee's approval of using medical records
- Eventually health authority's consent to use medical records

#### Police records

The use of police records on probands for checking on self-report data is restricted to the following conditions:

- Proband's written consent to use police records
- Ethical committee's approval of using police records
- Police authority's consent to use police records

Access to medical and police records must be ensured before data collection starts. Access will only be granted on the basis of proband consent, Ethical Committee approval and health and/or police authority consent. Consultation and consent of data protection officers may also be needed.

### Information material

- Information sheet for institutional partners and authorities
- Proband information sheet

An information sheet describing and explaining the QCT study is needed, defining the various responsibilities and liabilities of probands and researchers, mentioning the right to revoke consent at any time during the study, describing how the individual data and the overall results will be used. This sheet is presented by institutional partners to eligible probands and is part of informed consent.

A similar information sheet is needed for explaining the study to institutional partners and respective authorities, describing more in detail the role, the obligations and the rights of institutional partners providing access to probands. This sheet is the basis of a contractual agreement on collaboration between institutional partners and research group.

### Consent and approval forms

- Proband consent form
- Consent form for institutional partners and authorities
- Ethic Committee approval sheet

In addition to information sheets, separate consent forms must be available for probands and for institutional partners, eventually for authorities as well. Consent forms are to be signed by probands or by service directors (representing the institutional

partners) respectively, as well as by the responsible national research director of the QCT study.

Ethic Committees usually have their own forms for approving a research study. Where this is not the case, it is useful to prepare an approval sheet.

### Protocol changes

No changes should be made without consent of the project co-ordinator and the responsible group for quantitative evaluation. Eventual changes proposed by national or local Ethical Committees must be communicated to all partners.

## **2.2 Adaptation of the Protocol**

The basic protocol remained unchanged. The following items however needed some precision.

Selection of probands for the experimental group (new formulation) :

- A minimum of 75 new entries into the participating treatment institutions who respond to the QCT definition must be included in the experimental group, starting from 01.06.03 until 31.12.03.

Selection of probands to the control group 1 (new formulation) :

- A minimum of 75 new entries into the participating treatment institutions who respond to the comparison group type 1 definition must be included, starting from 01.06.03 until 31.12.03.

Selection of probands to the comparison group 2 (new formulation) :

- All new cases who respond to the comparison group type 1 definition must be included, starting from 01.06.03 until 31.12.03.

Instrument set for data collection (adapted list) :

Proband data : instruments

- P1.a Europ-ASI, short version, incl. ethnicity
- P1.b Europ-ASI, short follow-up version
- P1.c ASI-crime module, amended version
- P2. QCT - Victimization questionnaire (QCT.victimisation.doc)
- P3. QCT - Perception of pressure questionnaire (QCT.pressure.doc)
- P4. QCT - Self-efficacy questionnaire (QCT.selfefficacy.doc)
- P5. QCT - Readiness to change questionnaire (QCT.change.doc)
- P6. QCT - Client satisfaction questionnaire (QCT.clientsatisfact.doc)

Service data : instruments

- S1. Treatment Unit Form (TUF)
- S2. Service Quality Questionnaire (SQQ)

### **2.3 Instrument set for quantitative evaluation**

The Dutch partner had started its research project before the QCT instrument set was developed. Therefore, the Dutch data cannot be included into the quantitative data analysis. However, the results of the two studies can be compared.

### **2.4 Pilot testing of instruments**

A pilot testing of the instruments as listed in the protocol for quantitative evaluation (see above) was expected in all participating countries before starting recruitment. Results were reported to the project management and to the Zurich centre. Some clarifications were needed and a few changes made according to results.

### **2.5 Changes made of instruments**

Adaptations had to be made especially with respect to the European Addiction Severity Index for client description (short version replacing the full version). Items not needed for hypotheses testing were omitted.

The Treatment Unit Form TUF for service description also had to be shortened. Essential elements needed for hypotheses testing were kept, such as provision of after-care, client-staff ratio and proportion of clients subject to a QCT order. This information is needed in order to answer the following secondary hypotheses :

- That the most important determinants of effect of QCT are length of involvement in treatment of the subject, programme integrity, provision of treatment aftercare following exit
- That a higher staff/client ratio improves the drug use and crime outcome of QCT.
- That treatment centres with a higher ratio of clients under QCT have higher drop-out rates among their voluntary clients.

However, a more detailed description of services was encouraged.

### **2.6 Translation of instruments**

Partner countries had to organise the translations of the instrument set into their national language. The procedure for translation included a check of translations by two other professionals with adequate knowledge of language and content. The German translation, to be used in Germany, Austria and Switzerland, was harmonised in order to have identical versions in all three countries. The various final versions from participating countries were not checked again for consistency.

### 3 RECRUITMENT OF SERVICES AND PROBANDS

In all participating countries, type 1 services could be recruited for the project (treatment services outside the prison system, accepting QCT clients as well as voluntary clients). In all these services, control probands type 1 (voluntary probands) were accessible.

It was not clear yet, if eventually type 2 controls (eligible but preferring legal sanctions) can be recruited in Italy and in Switzerland. It proved to be feasible in Italy not in Switzerland.

Only in Austria, probands in a prison-like setting with compulsory treatment can be recruited.

*List of proband types and controls :*

England	Type 1, control 1
Germany	Type 1, control 1
Switzerland	Type 1, control 1
Italy	Type 1, control 1, control 2
Austria	Type 1, control 2; type 3 (without control)
(NL	Type 1, control 1)

*Proband sampling*

Proband sampling followed the protocol instructions. However, the recruiting process could not be accomplished in all countries within the time limits and had to be prolonged, in the case of Switzerland until end of Mai 2004. This was partly due to the fact that client turnover was slower than expected with less new clients entering treatment, in part to a low response rate as eligible persons were not willing to participate in the study.

When recruitment was definitively terminated, the number of probands responding to conditions and giving informed consent to participate in the study were as follows :

Country	Site	n per site	n per country	Total
UK	Kent	87		
	London	70	157	
Italy	Bari	50		
	Florence	100		
	Padua	150	300	
Austria	Vienna	150	150	
Switzerland	Fribourg	13		
	Zurich	72	85	
Germany	Berlin	153	153	
<i>Total</i>				<i>845</i>

## **4 DATA COLLECTION AND DATA BANK**

### **4.1 Interviewer training**

In all participating countries, partners had to organise training of interviewers in the use of the instrument set in order to optimise data quality and comparability. However, training was not necessary where interviewers could be recruited who previously had received training for the use of the Europ-ASI.

### **4.2 Self-report questionnaires**

Self-report questionnaires had to be handed out to probands by independent interviewers who also assisted if necessary and collected the questionnaires in order to ensure confidentiality of data.

### **4.3 Additional data from medical and police records**

Additional data from medical records and from police records should be used in order to check on self-report data mainly on health, drug use and delinquency. Partners had to find ways how to get access to such records under the relevant data protection rules. The expected procedure could take place in a minority of cases, due to the restricted availability of records and the various conditions set by the protocol.

### **4.4 Entry of interview and questionnaire data into templates**

Access templates were created at the Zurich centre for entering data from questionnaires. All data entries into these templates had to be organised and made by the national centres. Templates had to be sent to the Zurich centre. For this purpose, a special mail address was opened at the Zurich centre.

### **4.5 Data control**

All intake data on probands from the partner countries were checked for errors and missings. For this purpose, a special data control programme was developed. Results of the data control procedure were communicated to the respective partners for completing the missings and for checking on errors. For communicating corrections of missings and errors, a special access entry mask was created, and the corrections were entered into the templates at the Zurich centre.

### **4.6 PSS file**

All incoming template data were stored on the server of the Zurich centre as a SPSS file, classified according to the partner country. A copy was made and stored in a separate file. A logbook was created in order to record receipt of templates, including information on country, site, dates of interview and of arrival of template, code numbers.

## 5 DATA ANALYSIS

### 5.1 Analysis plan for quantitative outcome evaluation : testing the hypotheses

#### *Basic research questions*

What effects do QCT systems have on

- drug use
- criminality and socialisation

Which target groups have the best chances for a positive outcome

- gender
- ethnicity
- main drug of abuse
- length of drug career

What are the determinants for positive outcomes

Implications for the human rights of convicts and their victims

#### *Testing the hypotheses :*

##### Primary hypotheses

	Instruments/Variables
1a Reduction of drug use in QCT group	P1a / E
1b Reduction of drug use in CG1	P1a / E
1c Reduction of crime in QCT	P1c / A-V
1d Reduction of crime in CG1	P1c / A-V
1e Reduction of victimisation in QCT	P2
1f Reduction of victimisation in CG1	P2
1g Outcome in QCT > in CG1 (other factors controlled)	
1h Retention in QCT > CG1 (other factors controlled)	

##### Differences in effects

2a different effects in gender groups	P1a / AI
2b different effects in age groups	P1a / B5
2c different effects re type of offences (e.g. property-violence)	P1c / A-V
2d different effects re length of criminal career	P1c / A-V
2e different effects re severity of criminal involvement	P1c / A-V
2f different effects re main drug of abuse	P1a / E23
2g different effects re ethnic groups	P1a / B6a
2h different effects re nationality	P1a / B6
2i different effects re type of treatment	P1a / AB; TUF-R/ B1,2
2k different effects re staff-client ratio	TUF-R/B7a, F1b

##### Predictors for retention and outcome

3a Motivation at entry	P5
3b Mental health at entry	P1a / I3-11
3c Self-efficacy at entry	P4
3d Legal status at entry	P1c / 6-7
3e Sequence in onset of crime and drugs	P1c, P1a
3f Perceived coercion at entry	P3

3g Type of treatment P1a/AB;  
TUF-R/B1,2

Predictor for retention

4a Ratio QCT / voluntary clients TUF-R / B9

Predictors for outcome

5a Time in treatment Days i.t.  
5b Programme integrity S2  
5c Provision of aftercare after treatment discharge TUF-R / B3a  
5d Involvement of sentencing judge in case reviews Descr QCT / Qual.  
5e Speed of processing drug tests and case reviews Descr QCT / Qual.

Other

6a Legal status at entry predicts perceived coercion P1c/6-7; P3  
6b High perceived coercion at entry correlated to low motivation P3; P5

*Operationalisations : composite scores*

Retention - days in treatment days i.t.  
- type of discharge TUF-R / E2

Outcome - drug use : self-report, checked („additional data“) P1a/E  
- crime : nr of types of crime, nr of each type P1c/ A-V  
- at present on parole/probation P1c/ V7

Severity of crime involvement

- as in outcome crime P1c/A-V  
- severity of type of offence see below  
- age at first offence P1c/ A-V

*Operationalisations : categories (preliminary, to be adjusted according to data distribution)*

Age groups (years) <20, 20-25, 26-30, 31-40, 41-50, >50  
Time on drugs (mths) <12, 12-24, 25-36, 37-48, >48  
Staff/client ratio <1:1, 1:1, >1:1  
Motivation >16P, >16C, >16A  
Self-efficacy total sum <15, 16-30, 31-50, >50  
Perceived coercion total sum <3, 3-8, 9-14, 15-20, >20  
Victimisation total sum <2, 2-5, 6-9, 10-13, >13  
Time in treatment(mths) <1, 1-3, 4-6, 7-9, 10-12, >12  
Type of discharge consensus, exclusion, drop-out (or : regular – irregular)  
Treatment perception (satisfaction)  
Severity of offence High (C,E,F2,J,M,N,O,Q)-medium (B,G,I2,K,V)-low (A,F,I)

### *Additional analyses*

Comparing outcome in QCT & CG1

7a	Improvement in somatic health	P1a / C10, C11
7b	Improvement in psychological health	P1a / I11
7c	Improvement in self-efficacy	P4
7d	Improvement in motivation	P5
7e	Improvement in satisfaction	P6

Predictors

8a	Injecting drugs (yes – no)	P1a / E21
8b	Previous treatments (any – none)	P1a / E24
8c	Marital status at entry (married – not married)	P1a / H1
8d	Service competence (specialised – not specialised)	TUF-R / B1

### *System effects*

The testing of the following hypotheses will be based on information from the QCT system description as delivered under work package 1 :

- that QCT systems which involve the sentencing judge in subsequent case reviews have better retention and outcome than those who do not
- that QCT systems that process drug tests and case reviews more quickly have better retention and outcome.

## **5.2 Power analysis**

The main difference hypothesized was on treatment effects between voluntary and non-voluntary groups. Here a repeated measures ANOVA was suggested. To be conservative, sample sizes were calculated under the assumption that centres will not have homogeneous results, i.e. that each centre has to be analysed as an entity.

Two questions are relevant here. First, we wanted to test differences between groups. If we use difference scores as dependent variables, the question can be reduced to a t-test of independent samples (i.e., the treatment effect of voluntary vs. non-voluntary groups). The smallest sample size for detection of a medium sized effect (0.5) was looked for; i.e. under the assumption of 80% power, one sided testing with a significance level of 0.05. Results showed, that a sample size of 50 in each group will have 79% power to detect an effect size of 0.500 using a two group t-test with a 0.050 one-sided significance level.

Given this sample size of 50, we checked whether it could detect a main effect for treatment of medium size. The design here boils down to a paired t-test. Solving for power, a sample size of 50 will have 96% power to detect an effect size of 0.500 using a paired t-test with a 0.050 one-sided significance level. With a two-sided test power would still be above 93%. Looking which effect size could be detected with a sample size of 50, we found that even effect sizes as low as 0.35 were possible to detect.

In sum, the analysis plan foresees hierarchical and multivariate analyses. To determine minimal sample sizes, however, we used conservative assumptions of analysing each centre separately. A sample size of 50 per centre will yield enough power to detect a medium sized effect of voluntary vs. non voluntary in centre-specific analyses. This sample size is also more than sufficient to detect medium sized treatment effects.

## 6 INTAKE DATA ON PROBANDS

### 6.1 Data quality

The systematic check on incoming data revealed an important number of missings and errors. The missings concerned the following instruments on client data :

Instrument	Number of missings
P1a	21'455
P1c	1'437
P2	162
P3	747
P4	71
P5	2'164
P7	846

755 types of errors were detected and classified as being critical (correction is an obligation), less critical (correction would be welcomed) or not critical (correction not needed). Classification was made on the basis of the importance of variables for answering the research hypotheses. Each study partner received a detailed list of missings and errors per site and had to mail corrections to the Zurich centre where the corrected data were entered into the master file.

Remaining missings for specific variables can be seen from the respective tabulations.

### 6.2 Analysis plan for intake data

A provisional plan how to analyse the intake data for the interim report determined the following :

- Comparing proband characteristics in national samples
  - Demographic characteristics (gender, age, marital status, nationality)
  - Educational background
  - Occupational status
  - Health status, mental health
  - Drugs of abuse
  - Crime profile
  - Victimization
  - Perceived Pressure
  - Self-efficacy
  - Readiness to change (Stage of motivation)

- Treatment received at intake
- Availability of additional information to check on self-report reliability
- Comparing proband characteristics in QCT and control group CG1
  - group distribution across sites
  - as above

### 6.3 Descriptive analysis of intake data : comparing countries

The file with intake data covers the overall figure of 845 probands. Demographic data on the study population include gender, age, nationality, marital status.

*Tab. 1 Gender distribution among countries*

Country	Female		Male		Total	
	n	%	n	%	n	%
United Kingdom	37	24	120	76	157	100
Italy	34	11	266	89	300	100
Austria	30	20	120	80	150	100
Switzerland	9	11	76	89	85	100
Germany	44	29	109	71	153	100
<b>Total</b>	<b>154</b>	<b>18</b>	<b>691</b>	<b>82</b>	<b>845</b>	<b>100</b>

The gender balance is unequal, with a relatively lower proportion of female probands in Italy and Switzerland, and an exceptionally high proportion in Germany (Tab. 1).

*Tab. 2 Age distribution among countries*

Country	<26		26-30		31-35		>35		Total	
	n	%	n	%	n	%	n	%	n	%
United Kingdom	42	27	38	24	41	26	37	23	157	100
Italy	38	13	62	21	89	30	111	37	300	100
Austria	73	49	35	23	23	15	19	13	150	100
Switzerland	10	12	18	21	32	38	25	29	85	100
Germany	47	31	36	24	31	20	39	25	153	100
<b>Total</b>	<b>210</b>	<b>25</b>	<b>189</b>	<b>22</b>	<b>216</b>	<b>25</b>	<b>230</b>	<b>27</b>	<b>845</b>	<b>100</b>

The age distribution shows a relatively higher proportion of young probands in Austria and Germany, in contrast to low proportions in Italy and Switzerland (Tab. 2).

Tab. 3 Nationality of probands

Country	Nationals		Non-nationals		Total	
	n	%	n	%	n	%
United Kingdom	144	92	13	8	157	100
Italy	286	95	14	5	300	100
Austria	135	90	15	10	150	100
Switzerland	65	76	20	24	85	100
Germany	122	80	31	20	153	100
<b>Total</b>	<b>752</b>	<b>89</b>	<b>93</b>	<b>11</b>	<b>845</b>	<b>100</b>

Nationality of probands has been documented in detail, with a large range of countries of origin. Here we only compare the figures for nationals and non-nationals, showing relatively high proportions of non-nationals in Germany and Switzerland (Tab. 3)

Tab.4 Marital status of probands

Country	Married		Not married		Total	
	n	%	n	%	n	%
United Kingdom	15	9	142	91	157	100
Italy	43	14	257	86	300	100
Austria	18	12	132	88	150	100
Switzerland	11	12	74	88	85	100
Germany	7	4	146	95	153	100
<b>Total</b>	<b>94</b>	<b>11</b>	<b>751</b>	<b>89</b>	<b>845</b>	<b>100</b>

The large majority of probands in all participating countries are not (never or no longer) married, with a homogeneity across countries (Tab. 4).

Tab.5 Years of school education

Country					
	Mean	Med	Min	Max	Std
United Kingdom	10.3	11.0	6.0	15.0	1.5
Italy	9.0	8.0	2.0	22.0	1.8
Austria	10.6	10.0	8.0	15.0	1.8
Switzerland	9.3	10.0	0.0	16.0	1.4
Germany	10.5	10.0	6.0	15.0	1.7
<b>Total</b>	<b>9.8</b>	<b>10.0</b>	<b>0.0</b>	<b>22.0</b>	<b>2.1</b>

Educational status, measured by the number of years having been in school, is almost homogeneous across countries, with a lower medium value for Italy (Tab. 5). Obligatory school education is for 9 years in Italy and Switzerland, for 10 years in the other countries.

*Tab. 6 Occupational status (working days past month before entry)*

Site	Mean	Median	Min.	Max	Std
Kent	1.8	0.0	0.0	30.0	4.1
London	1.9	0.0	0.0	30.0	6.6
Bari	12.7	13.0	0.0	30.0	11.8
Florence	8.3	0.0	0.0	30.0	11.8
Padua	6.5	0.0	0.0	30.0	11.9
Vienna	2.8	0.0	0.0	30.0	7.5
Fribourg	10.0	0.0	0.0	30.0	14.8
Zurich	3.7	0.0	0.0	30.0	7.9
Berlin	1.8	0.0	0.0	28.0	5.4
<b>Total</b>	<b>4.5</b>	<b>0.0</b>	<b>0.0</b>	<b>30.0</b>	<b>9.5</b>

There is heterogeneity across countries and sites regarding working days last month (Tab.6).

Health status of probands covers a range of variables including chronic medical problems, psychiatric symptoms, having received psychotropic medication and having been in medical care recently. Mental health history is documented by data on serious depression, suicidal ideation, suicide attempts, problems in controlling violent behaviour, anxiety disorders, eating disorders, mental dysfunction (troubles with concentration and memory) and psychotic symptoms (hallucinations).

*Tab.7 Chronic medical problems interfering with life*

Country	Yes		No		Total	
	n	%	n	%	n	%
United Kingdom	57	37	100	63	157	100
Italy	146	49	154	51	300	100
Austria	82	55	68	45	150	100
Switzerland	43	50	42	50	85	100
Germany	93	61	60	39	153	100
<b>Total</b>	<b>421</b>	<b>50</b>	<b>424</b>	<b>50</b>	<b>845</b>	<b>100</b>

Germany and Austria show a higher proportion of probands with chronic medical problems that have a negative influence on life and quality of life (Tab. 7).

Tab.8 *Serious depression (lifetime)*

Country	Yes		No		Total	
	n	%	n	%	n	%
United Kingdom	106	68	51	32	157	100
Italy	150	50	150	50	300	100
Austria	86	57	64	43	150	100
Switzerland	41	48	42	49	83*	100
Germany	126	82	27	18	153	100
<b>Total</b>	<b>509</b>	<b>60</b>	<b>334</b>	<b>40</b>	<b>843*</b>	<b>100</b>

\* 2 missing

Serious depression was experienced by over half of the study population and was most prominent among the probands from Germany and the UK (Tab. 8).

Tab.9 *Serious thoughts of suicide (lifetime)*

Country	Yes		No		Total	
	n	%	n	%	n	%
United Kingdom	59	38	98	62	157	100
Italy	122	41	178	59	300	100
Austria	61	41	89	59	150	100
Switzerland	38	45	46	54	84*	100
Germany	103	67	50	33	153	100
<b>Total</b>	<b>383</b>	<b>45</b>	<b>461</b>	<b>55</b>	<b>844*</b>	<b>100</b>

\* 1 missing

Tab.10 *Attempted suicide (lifetime)*

Country	Yes		No		Total	
	n	%	n	%	n	%
United Kingdom	37	23	120	77	157	100
Italy	66	22	234	78	300	100
Austria	38	25	112	75	150	100
Switzerland	24	28	58	68	82*	100
Germany	83	54	70	46	153	100
<b>Total</b>	<b>248</b>	<b>29</b>	<b>694</b>	<b>71</b>	<b>842*</b>	<b>100</b>

\* 3 missing

Tab.11 Experienced troubles controlling violent behaviour (lifetime)

Country	Yes		No		Total	
	n	%	n	%	n	%
United Kingdom	51	33	106	67	157	100
Italy	114	38	186	62	300	100
Austria	43	29	107	71	150	100
Switzerland	29	34	54	63	83*	100
Germany	84	56	69	44	153	100
<b>Total</b>	<b>321</b>	<b>38</b>	<b>522</b>	<b>62</b>	<b>843*</b>	<b>100</b>

\*2 missing

Again, the rate of suicidal thoughts and of suicidal attempts is highest among the German probands (Tab. 9 & 10), as are the rates for difficulties in controlling aggressive and violent behaviour (Tab. 11).

Tab.12 Experienced anorexia, bulimia or other eating disorders (lifetime)

Country	Yes		No		Total	
	n	%	n	%	n	%
United Kingdom	32	21	125	79	157	100
Italy	31	10	269	90	300	100
Austria	26	17	124	83	150	100
Switzerland	7	8	73	86	80*	100
Germany	28	18	125	82	153	100
<b>Total</b>	<b>124</b>	<b>15</b>	<b>716</b>	<b>85</b>	<b>840*</b>	<b>100</b>

\* 5 missing

Eating disorders are relatively infrequent and especially rare among the Swiss probands (Tab. 12).

Tab.13 Experienced serious anxiety or tension (lifetime)

Country	Yes		No		Total	
	n	%	n	%	n	%
United Kingdom	97	68	50	32	157	100
Italy	183	61	117	39	300	100
Austria	74	49	76	51	150	100
Switzerland	42	49	41	48	83*	100
Germany	112	73	41	27	153	100
<b>Total</b>	<b>518</b>	<b>61</b>	<b>325</b>	<b>38</b>	<b>843*</b>	<b>100</b>

\* 2 missing

Germany and the UK have highest rates of anxiety disorders (Tab. 13).

Tab.14 Experienced trouble in understanding, concentrating or remembering (lifetime)

Country	Yes		No		Total	
	n	%	n	%	n	%
United Kingdom	105	66	52	34	157	100
Italy	122	41	178	59	300	100
Austria	74	49	76	51	150	100
Switzerland	47	55	37	44	84*	100
Germany	92	60	61	40	153	100
<b>Total</b>	<b>440</b>	<b>52</b>	<b>404</b>	<b>48</b>	<b>844*</b>	<b>100</b>

\* 1 missing

Difficulties with mental functions such as concentration and memory are to be found in slightly more than half of the study population, with highest rates in Germany and the UK (Tab. 14).

Tab.15 Experienced hallucinations (lifetime)

Country	Yes		No		Total	
	n	%	n	%	n	%
United Kingdom	20	12	137	88	157	100
Italy	34	11	266	89	300	100
Austria	44	29	106	71	150	100
Switzerland	28	33	55	65	83*	100
Germany	39	26	114	74	153	100
<b>Total</b>	<b>165</b>	<b>19</b>	<b>678</b>	<b>80</b>	<b>843*</b>	<b>100</b>

\* 2 missing

Psychotic symptoms such as hallucinations occur in a minority of probands, the lowest rates being found in the Italian and UK samples (Tab. 15).

Tab.16 Received medication for any psychiatric/emotional problem (lifetime)

Country	Yes		No		Total	
	n	%	n	%	n	%
United Kingdom	67	41	90	59	157	100
Italy	101	34	199	66	300	100
Austria	60	40	90	60	150	100
Switzerland	31	36	51	60	82*	100
Germany	37	24	116	76	153	100
<b>Total</b>	<b>296</b>	<b>35</b>	<b>546</b>	<b>65</b>	<b>842*</b>	<b>100</b>

\* 3 missing

In view of the frequent psychopathology among probands, it is noteworthy that only a minority ever received psychopharmacological medications (Tab. 16).

Tab.17 *Treated by a physician past 6 months*

Country	Yes		No		Total	
	n	%	n	%	n	%
United Kingdom	99	63	58	37	157	100
Italy	143	48	157	52	300	100
Austria	72	48	78	52	150	100
Switzerland	38	45	47	55	85	100
Germany	74	48	79	52	153	100
<b>Total</b>	<b>426</b>	<b>51</b>	<b>419</b>	<b>49</b>	<b>845</b>	<b>100</b>

The present state of health problems that need medical care is documented by asking for medical treatments in the last 6 month. The highest rate is found for the UK (Tab. 17).

Drug use is documented in detail, including information on age of first use for each drug. Here we concentrate on the main drug of abuse incl. polydrug use and on injecting behaviour, this being an indicator for being involved in more risky consumption patterns (Tab. 18 & 19).

Tab.18 *Drugs ever injected*

Country	Yes		No		Total	
	n	%	n	%	n	%
United Kingdom	106	65	51	35	157	100
Italy	220	73	79	26	299*	100
Austria	87	67	43	33	130*	100
Switzerland	56	77	17	23	73*	100
Germany	104	68	49	32	153	100
<b>Total</b>	<b>573</b>	<b>70</b>	<b>239</b>	<b>30</b>	<b>812*</b>	<b>100</b>

\*missing 33

Injecting is the major route of administration in all participating countries (Tab. 18).

Tab.19 *Main drugs of abuse*

Type of drug	UK		Italy		Austria		CH		Germany		Total	
	n	%*	n	%*	n	%*	n	%*	n	%*	n	%*
Alcohol	1	0	0	0	1	0	1	2	0	0	3	0
Alcohol intox.	6	5	23	8	10	7	1	2	2	5	42	5
Heroin	86	55	144	48	16	11	41	48	19	12	306	36
Methadone	0	0	4	1	1	0	0	0	0	0	5	1
Other opiates	0	0	0	0	13	9	1	2	1	0	15	2
Cocaine	4	2	87	29	22	15	26	31	6	4	145	17
Amphetamines	3	2	0	0	0	0	1	2	1	0	5	1
Cannabis	0	0	6	2	0	0	0	0	1	0	7	1
Crack	24	15	0	0	0	0	3	4	0	0	27	3
MDMA etc.	0	0	8	3	1	0	0	0	0	0	9	1
Barbiturates	0	0	1	0	1	0	0	0	0	0	2	0
Benzodiazepines	1	0	4	1	9	6	0	0	0	0	14	2
Other sedatives	0	0	1	0	0	0	0	0	0	0	1	0
Other drugs	0	0	0	0	1	0	0	0	1	0	2	0
Polydrug abuse	28	18	13	4	65	43	5	5	87	57	198	23
Alcohol and drugs	4	3	2	1	9	6	6	7	32	21	53	6
No drug problem	0	0	7	2	1	0	0	0	3	2	11	1
<b>Total</b>	<b>157</b>	<b>100</b>	<b>300</b>	<b>99</b>	<b>150</b>	<b>97</b>	<b>85</b>	<b>105</b>	<b>153</b>	<b>101</b>	<b>845</b>	<b>99*</b>

\* column %

Main drugs of abuse are Heroin and Cocaine, accounting together for 53% of all drugs mentioned as main drugs (59% if other opiates and crack cocaine are included).

Polydrug abuse accounts for 23%, alcohol plus drugs for another 6%.

Frequencies across countries are heterogeneous. Polydrug use received relatively higher rates, but heroin use lower rates in Austria and Germany; this may be due to a different rating by interviewers. Cocaine as a main problem drug is relatively over-represented in Italy and Switzerland. (Tab. 19).

Tab.20 *Type of treatment at intake*

Treatment type	UK		Italy		Austria		CH		Germany		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
Outpatient detox.	0	0	1	0	0	0	0	0	0	0	1	0
Residential detox.	0	0	47	16	0	0	0	0	0	0	47	5
Outpatient substitution	31	19	23	8	0	0	25	29	8	5	87	10
Outpatient drug-free	0	0	104	35	27	18	0	0	6	4	137	16
Drug-free residential	0	0	123	41	123	82	49	58	139	91	434	51
Day care	66	45	0	0	0	0	0	0	0	0	66	9
Other	60	37	2	0	0	0	2	2	0	0	64	7
Jail/prison	0	0	0	0	0	0	8	9	0	0	8	1
Probation	0	0	0	0	0	0	1	1	0	0	2	0
Custody	0	0	6	2	0	0	0	0	0	0	6	1
<b>Total</b>	<b>157</b>	<b>101</b>	<b>299</b>	<b>99</b>	<b>150</b>	<b>100</b>	<b>85</b>	<b>99</b>	<b>153</b>	<b>100</b>	<b>845</b>	<b>100</b>

Residential drug-free treatment is the most frequently used approach, especially in Austria, Italy and Germany; it is not used in the UK. Day care is exclusively used in the UK. Outpatient treatment is less frequently used than inpatient treatment, in Italy and Austria mainly as drug-free treatment and in the other countries as substitution therapy (Tab. 20).

### *Crime rates*

The data presented in Tab. 21 show the self-reported crime rates. Highest rates are given for driving violations (including driving while intoxicated), minor property crimes and dealing/trafficking with drugs. Violence and use of weapons is also mentioned frequently. Prostitution and domestic violence figure rarely, and are eventually not considered to be a crime by many. National differences occur, especially in the average crime load per proband, marked by \* (Tab. 21).

Tab.21 *Crime profiles*

Type of crime	UK		Italy		Austria		CH		Germany		Total	
	n	%*	n	%*	n	%*	n	%%	n	%*	n	%*
Nuisance	59	35	98	33	47	31	29	34	69	45	302	36
Driving intoxicated	66	40	93	31	85	57	64	75	87	57	397	47
Major driving violation	38	23	35	12	26	17	30	35	40	26	169	20
Dealing drugs	68	42	164	55	80	53	64	75	109	71	489	57
Prostitution	9	5	7	2	12	8	7	8	28	18	63	7
Forgery	56	34	26	9	12	8	26	31	72	47	192	23
Minor property crimes	127	77	126	42	86	57	55	65	125	82	519	61
Stealing cars	38	23	66	22	14	9	16	19	42	27	176	21
Burglary	84	51	46	15	6	4	31	36	70	46	237	28
Domestic violence	18	11	21	7	15	10	10	12	22	14	86	10
Firearms offence	27	16	38	13	22	15	17	20	51	33	155	18
Other weapons	45	27	28	9	14	9	11	13	29	19	127	15
Violent property crime	17	10	15	5	22	15	14	16	25	16	93	11
Other violence	59	36	25	8	39	26	23	27	60	39	206	24
Other crimes	55	34	63	21	1	1	10	12	28	18	177	21
<b>Total</b>	<b>766</b>	<b>4.7*</b>	<b>851</b>	<b>2.8*</b>	<b>481</b>	<b>3.2*</b>	<b>407</b>	<b>4.8*</b>	<b>857</b>	<b>5.6*</b>	<b>4888</b>	<b>5.7*</b>

\*percentage of national samples /total sample \*\* average number of crime types per proband

Tab. 22 *Victimisation*

Type of offence	UK	Italy	Austria	CH	Germany	Total
Burglary, breaking in	26	27	15	11	23	102
Vehicle stolen	18	36	6	10	8	78
Other theft	29	37	36	19	28	149
Any theft	47	56	51	33	58	245
Attacked, molested	61	62	55	36	79	293
Other crimes	9	25	12	7	39	92
Insulted, pestered	36	85	47	23	61	252
<b>Total</b>	<b>226</b>	<b>328</b>	<b>222</b>	<b>139</b>	<b>296</b>	<b>1211</b>

There are minor differences in the victimisation profile between countries (Tab. 22).

Tab. 23 Perception of pressures by others and by oneself

Perceived pressures by others	UK		Italy		Austria		CH		Germany		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
Slightly	39	24	89	30	56	37	43	51	65	42	292	34
Moderately	31	19	153	51	48	32	28	33	61	40	524	62
Considerably	32	20	78	26	115	12	24	28	40	26	289	34
Extremely	29	18	135	45	36	24	16	19	40	26	256	30
Missing	1		0		0		2		1			
Pressure by oneself												
Slightly	10	6	21	7	6	4	10	12	9	6	56	6
Moderately	19	12	51	17	26	17	14	16	20	13	130	15
Considerably	55	33	50	17	38	25	15	18	45	29	203	24
Extremely	41	25	103	34	50	33	29	34	63	41	286	34
Missings	1		0		0		1		0			

Pressures by others are more frequently mentioned than pressure felt by oneself. This is the case for all countries. Considerable and extreme pressure by others is more prevalent in the Italian sample, by oneself in the German sample (Tab.23).

Tab. 24 Values for Self-efficacy (range 1-5)

Country	Mean	Med	Min	Max	Std
United Kingdom	3.1	3.1	1.7	4.8	0.7
Italy	3.5	3.5	2.1	4.7	0.4
Austria	3.4	3.4	1.3	4.9	0.7
Switzerland	3.6	3.6	2.3	4.5	0.5
Germany	3.4	3.4	2.2	5.0	0.5
Total	3.4	3.4	1.3	5.0	0.6

There are no national differences in values for self-reported self-efficacy (Tab. 24).

Tab. 25 Values for readiness to change

Country	Precontem- plation		Contem- plation		Action	
	Mean	Med	Mean	Med	Mean	Med
United Kingdom	3.8	4.0	3.3	4.0	4.7	4.5
Italy	3.2	4.0	3.8	4.0	4.1	4.0
Austria	4.5	5.0	4.6	5.0	3.5	4.0
Switzerland	4.1	5.0	4.1	5.0	3.2	3.0
Germany	3.8	4.0	5.1	6.0	4.1	4.0
<i>Total</i>	<i>3.8</i>	<i>4.0</i>	<i>4.1</i>	<i>5.0</i>	<i>4.0</i>	<i>4.0</i>

Regarding readiness to change, we find the highest score for the contemplation stage in the overall cohort. Some national differences occur, with lowest values for the action stage in Austria and Switzerland and highest values for the action stage in the UK and Italy (Tab. 25)

**A summary of the country comparisons shows the following :**

- Demographics : homogeneity of national samples regarding some details (marital status, mean years of school education), but major discrepancies regarding gender, age, rate of non-nationals
- Health : past problems including mental health and treatment for mental health problems show major heterogeneity across national samples
- Drugs of abuse : differences in the prevalence of main drugs and of polydrug use; no differences regarding injecting behaviour
- Crime : some national differences regarding the frequencies for various types of crime, differences in crime load per proband
- National differences are found with regard to perceived pressure and for readiness to change, but not for self-reported self-efficacy
- Treatment provided to probands cover a range of approaches with major differences across participating countries

As a consequence, national differences will have to be considered in testing the predictor hypotheses.

#### 6.4 Descriptive analysis : comparing groups

Second, experimental group (QCT group) and control group are to be compared. Only control group 1 is analysed here (voluntary probands treated in the same institutions as the QCT probands).

Tab.26 *Group distribution across sites*

Site	QCT						Controls						Total	
	male		female		Total		male		female		Total			
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
<b>Kent</b>	40	46	5	6	45	51	26	29	16	18	42	48	87	99*
<b>London</b>	39	55	5	6	44	61	15	22	11	17	26	39	70	100
<b>Bari</b>	26	52	3	6	29	58	18	36	3	6	21	42	50	100
<b>Florence</b>	43	43	7	7	50	50	45	45	5	5	50	50	100	100
<b>Padua</b>	60	40	6	4	66	44	74	49	10	7	84	56	150	100
<b>Vienna</b>	48	31	6	4	53	35	72	49	24	16	97	65	150	100
<b>Fribourg</b>	12	92	1	8	13	100	0	0	0	0	0	0	13	100
<b>Zurich</b>	32	46	4	6	37	51	32	43	4	6	35	49	72	100
<b>Berlin</b>	69	44	23	14	92	59	40	27	21	14	63	41	153	100
<b>Total</b>	369	44	60	7	429	50	322	38	94	11	416	50	845	100

\* rounding error

While in the overall sample the two groups are evenly represented, there are major discrepancies across sites, with London, Bari and Berlin having an especially high and Vienna an especially low number in the experimental group. Also, the gender distribution among groups and sites is unequal (Tab. 26).

Tab.27 *Gender distribution in QCT group vs. controls*

Gender	QCT group		Control group		Total	
	n	%	n	%	n	%
<b>Female</b>	60	38	94	62	154	18
<b>Male</b>	369	53	322	47	691	82
<b>Total</b>	429	50	416	50	845	100

$X^2 = 12.22$ ;  $p < 0.001$ .

Male probands are as expected in larger numbers compared to females. Females have a significantly higher proportion in the control group than in the experimental group (Tab. 27).

Tab.28 Mean age in QCT group vs. controls

Group	n	Mean	Med	Min	Max	Std
QCT	429	31.7	32.0	17.0	68.0	7.5
Controls	416	31.0	30.0	17.0	54.0	7.6
Total	845	31.3	31.0	17.0	68.0	7.6

Mean age in the two groups is almost the same (Tab. 28).

Marital status also is evenly distributed (rate of married persons in QCT group 11%, in control group 11%).

Tab.29 Mean years of school education in QCT group vs. controls

Group	n	Mean	Med	Min	Max	Std
QCT	428	9.6	10.0	0.0	16.0	2.1
Controls	416	10.1	10.0	5.0	22.0	2.2
Missing	1					
Total	845	9.8	10.0	0.0	22.0	2.1

Educational status is the same in the two groups (Tab. 29).

Tab. 30 Longest period past employment in QCT group vs. controls by sites

	Group	Site									Total
		Kent	London	Bari	Florence	Padua	Vienna	Fribourg	Zurich	Berlin	
missing	QCT							1			1
0-3 years	QCT	33	37	16	27	34	34	3	16	49	250
	Control	9	14	4	17	14	11	6	10	31	204
>3-6 years	QCT	9	5	4	17	14	11	6	10	29	106
	Control	3	4	2	7	21	29	0	11	21	97
>6-9 years	QCT	1	2	2	3	8	2	1	4	3	27
	Control	4	3	1	5	10	5	0	6	4	37
>9 years	QCT	2	0	7	3	10	6	2	7	9	45
	Control	8	5	3	18	17	8	0	11	7	78
Total		87	70	50	100	150	150	13	72	153	845

Tab. 31 Longest period past employment in QCT group vs. controls

Period	QCT	Control	Total
0-6 years	356	301	657
>6 years	72	115	188
Missing	1	0	1
Total	429	416	845

$X^2 = 14,2; p < 0.001$

*Tab.32 Days working past 30 days in QCT group vs. controls*

Group	n	Mean	Med	Min	Max	Std
QCT	428	5.6	0.0	0.0	30.0	10.6
Controls	416	3.3	0.0	0.0	30.0	8.0
Missing	1					
Total	845	4.5	0.0	0.0	30.0	9.5

In the control group we find longer periods of employment in the past (Tab. 30). It reaches highly significant proportion (Tab. 31). However, in the last month before entering treatment, the control group shows a lower number of working days (Tab. 32).

*Tab. 33 Health status in QCT group vs. controls*

	QCT		Controls	
	n	%	n	%
Chronic medical problems interfering with life	223	51.9	198	47.6
Treated by a physician last 6 months	201	46.8	225	54.1

Health status, measured by asking for chronic medical problems that are interfering with everyday life and for medical treatments during the last 6 months, shows minor differences among the two groups: more health problems in the experimental group, more medical care in the control group (Tab. 33).

*Tab. 34 Mental health problems (lifetime) in QCT group vs. controls*

Symptoms	QCT	Controls	missing
Serious depression	244	265	2
Serious anxiety or tension	252	266	2
Troubles concentrating, remembering	218	222	1
Hallucinations	89	76	2
Troubles controlling violent behaviour	174	147	2
Thoughts of suicide	180	203	1
Suicidal attempts	111	137	3
Eating disorders	48	77	5

Tab. 35 Treatment mental health problems (lifetime) in QCT group vs. controls

Treatment	QCT		Controls		Total	
	Mean	Med	Mean	Med	Mean	Med
Episodes in outpatient treatment for psychological or emotional problems	0.4	0.0	1.0	0.0	0.7	0.0
Episodes in inpatient treatment for psychological or emotional problems	0.4	0.0	0.6	0.0	0.5	0.0
Medication for psychological or emotional problems	n=129 30.1%*		n=167 40.1%*		n=296 35.0%**	

\* percentage of group totals

\*\* percentage of total probands

In the control group, we find a higher load of mental health problems, although not significant, and more treatment for psychological or emotional problems in the past (Tab. 34, Tab. 35).

Tab. 36 Main drug of abuse in QCT group vs. controls

Drug	Group	Site									
		Kent	London	Bari	Florence	Padua	Vienna	Fribourg	Zurich	Berlin	Total
No drug problem	QCT	0	0	2	3	0	0	0	0	2	7
	Control	0	0	2	0	0	1	0	0	1	4
Alcohol	QCT	0	0	0	0	0	1	0	0	0	1
	Control	1	0	0	0	0	0	0	1	0	2
Alcohol intoxic.	QCT	2	0	0	5	3	4	0	1	0	15
	Control	2	2	0	6	9	6	0	0	2	27
Heroin	QCT	28	21	12	27	28	4	8	14	8	150
	Control	28	9	7	26	44	12	0	19	11	156
Methadone	QCT	0	0	0	1	1	0	0	0	0	2
	Control	0	0	0	0	2	1	0	0	0	3
Other opiates	QCT	0	0	0	1	1	6	0	0	0	8
	Control	0	0	0	0	2	7	0	1	1	9
Cocaine	QCT	0	0	14	6	27	12	4	13	5	81
	Control	2	2	11	7	22	10	0	9	1	64
Amphetamines	QCT	1	1	0	0	0	0	1	0	1	4
	Control	0	1	0	0	0	0	0	0	0	1
Cannabis	QCT	0	0	1	0	3	0	0	0	1	5
	Control	0	0	0	0	2	0	0	0	0	2
Crack	QCT	4	11	0	0	0	0	0	2	0	17
	Control	0	9	0	0	0	0	0	1	0	10
MDMA etc.	QCT	0	0	0	1	4	1	0	0	0	6
	Control	0	0	0	0	3	0	0	0	0	3
Barbiturates	QCT	0	0	0	0	0	1	0	0	0	1
	Control	0	0	0	0	1	0	0	0	0	1
Benzodiazepines	QCT	0	0	0	2	0	4	0	0	0	6
	Control	1	0	1	0	1	5	0	0	0	8
Other drugs	QCT	0	0	0	1	0	0	0	0	0	1
	Control	0	0	0	0	0	1	0	0	1	2
Polydrug	QCT	8	11	0	4	0	19	0	4	61	107
	Control	7	2	0	9	0	46	0	1	26	91
Alcohol & drugs	QCT	2	1	0	1	0	1	0	3	13	21
	Control	1	1	0	1	0	7	0	3	19	32
Total	QCT	45	44	29	50	66	53	13	37	90	429
	Control	42	26	21	50	84	97	0	35	63	416

Main drugs of abuse at time of entering treatment in both groups are Heroin and Cocaine. For Heroin and for polydrug use we find similar rates among groups, for Cocaine use a larger proportion in the experimental group. Differences among sites may be due in part to problems of interpretation, especially in the case of polydrug use (overview Tab. 36).

Tab. 37 Polydrug use (ever) in QCT group vs. controls across sites

Group	Kent		London		Bari		Florence		Padua		Vienna		Fribourg		Zurich		Berlin	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
<b>QCT</b>	41	47	44	57	29	58	32	32	64	43	53	35	7	54	35	49	84	55
<b>Controls</b>	38	44	24	32	21	42	36	36	84	56	97	65	0	0	30	42	55	36
<b>Missings</b>	8		4		0		32		2		0		6		7		14	
<b>Total</b>	87		70		50		100		150		150		13		72		153	

Tab 38 Polydrug use (ever) in QCT group vs. controls

Polydrug use	QCT	Control	Total
<b>yes</b>	389	385	774
<b>no</b>	9	14	23
<b>Missing</b>	32	23	55
<b>Total</b>	429	416	845

$X^2 = 1.2$ ; n.s.

Overall, polydrug use is as frequent in the experimental group as in the control group. In most sites however it is more frequent in the experimental group, with the exception of Vienna where polydrug use is found almost twice as often in the control group due to interpretation problems (Tab.37, Tab. 38).

Tab.39 Drug injecting past 6 months in QCT group vs. controls

Group	n	Mean	Med	Min	Max	Std
<b>QCT</b>	329	2.9	3.0	0.0	6.0	2.8
<b>Controls</b>	320	3.3	4.0	0.0	6.0	2.5
<b>Missing</b>	196					
<b>Total</b>	845	3.1	3.0	0.0	6.0	2.7

There is no group difference regarding recent injecting behaviour. This finding is restricted due to a high number of missings (Tab. 39).

Tab. 40 Living with a drug user, in QCT group vs. controls

		Site									
		Kent	London	Bari	Florence	Padua	Vienna	Fribourg	Zurich	Berlin	Total
Group											
missing	QCT	1	0	0	0	0	0	0	1	0	2
	Control	1	0	0	0	0	0	0	0	0	1
No	QCT	37	36	28	42	60	47	10	24	63	348
	Control	33	23	21	47	78	78	0	29	51	361
Yes	QCT	7	8	1	7	6	7	3	11	29	79
	Control	8	3	0	2	6	18	0	7	10	54
Total		87	70	50	100	150	150	13	72	153	845

A small minority in both groups is living with an active drug user (Tab. 40).

Tab.41 Crime profiles across sites in QCT group vs. controls

		Site									
		Kent	London	Bari	Florence	Padua	Vienna	Fribourg	Zurich	Berlin	Total
Type of Crime											
Group											
Nuisance	QCT	20	6	12	20	15	17	6	13	48	157
	Control	26	5	10	25	16	30	0	10	21	143
Driving intoxic.	QCT	28	7	15	11	16	28	8	29	545	197
	Control	23	7	12	22	17	57	0	29	32	199
Traffic violation	QCT	15	8	4	8	7	7	3	17	28	97
	Control	12	3	3	8	5	19	0	10	12	72
Dealing drugs	QCT	25	11	17	37	49	32	10	32	76	289
	Control	23	7	8	26	27	48	0	22	33	194
Prostitution	QCT	2	1	0	0	2	2	0	5	19	31
	Control	2	3	1	2	2	10	0	2	9	31
Forgery	QCT	25	9	6	10	4	16	5	15	55	145
	Control	16	5	3	6	6	27	0	6	17	86
Property crimes	QCT	42	36	21	31	18	30	5	28	80	291
	Control	27	17	12	16	28	56	0	22	45	223
Stealing cars	QCT	19	7	7	13	20	5	2	13	32	118
	Control	10	2	8	7	11	9	0	1	10	58
Burglary	QCT	31	25	13	17	20	12	7	16	51	192
	Control	14	10	1	7	3	10	0	8	19	82
Domestic violence	QCT	4	2	4	5	3	2	1	5	18	44
	Control	9	3	3	2	4	13	0	4	4	42
Firearms offence	QCT	11	3	2	10	15	12	0	12	40	105
	Control	11	2	3	3	5	10	0	5	11	50
Other weapons	QCT	22	8	2	7	9	4	1	7	21	81
	Control	15	0	1	5	4	10	0	3	8	46
Violent crimes	QCT	25	11	1	13	11	27	5	20	66	183
	Control	25	11	2	8	5	32	0	12	19	116
Other crimes	QCT	23	12	13	22	18	1	5	4	24	122
	Control	14	5	8	11	11	0	0	1	4	54
Total		87	70	50	100	150	150	13	72	153	845

A number of crime types occurred more frequently in the experimental group, especially dealing / trafficking with drugs, forgery, property crimes and burglary, use of weapons and use of violence (Tab. 41)

The overall crime load (total number of reported crimes) is considerably higher with the experimental group (1704) than with the control group (1178).

Tab. 42 Severity of offences in QCT group vs. controls

Severity of offences	QCT	Controls	Total
High	939	555	1494
Medium	613	415	1028
Low	476	408	884
<b>Total</b>	<b>2028</b>	<b>1378</b>	<b>3406</b>

When comparing the severity of offences (according to the operationalisation described in the analysis plan), the crime load is higher in the experimental group for all 3 categories of severity. The difference is greatest in the high severity category, the lowest in the low severity category (Tab. 42).

Tab. 43 Victimization in QCT group vs. controls

Type of offence	QCT		Controls		Total	
	n	%*	n	%*	n	%**
Burglary, breaking in	58	13	44	11	102	12
Vehicle stolen	43	10	35	8	78	9
Other theft	62	14	89	21	151	18
Any theft	129	30	116	27	245	29
Attacked, molested	147	34	146	35	193	23
Other crimes	46	11	46	11	92	11
Insulted, pestered	125	29	137	32	262	31
<b>Total</b>	<b>610</b>		<b>613</b>		<b>1223</b>	

\*percentages of groups \*\* percentages of total probands

The frequencies of claims for victimisation show some differences between groups regarding the various types of offence, but the overall number of claims is equal (Tab. 43).

### Treatment received

Table 44 shows a number of important differences in treatment provision across groups and countries :

Drug-free outpatient treatments are more frequently documented in the experimental group in comparison to the control group. This is mainly due to the Italian cohort; in contrast, the Austria cohort shows more of this treatment applied in the control group.

On the other side, out-patient substitution treatment is more often applied in the control group, in total and in all cohorts except the German one.

Day care is exclusively used in the UK cohort.

These differences reflect the different priorities for treatments in the participating countries, but also the selection of services co-operating in the study. There is no generalisable

difference to be found across countries and sites when it comes to choose treatment approaches for QCT clients.

Tab. 44 Type of treatment at intake in QCT group vs. controls

Type of treatment		Site									
		Kent	Lon- don	Bari	Flo- rence	Pa- dua	Vien- na	Fri- bourg	Zu- rich	Ber- lin	Total
Out-patient detox.	Control	0	0	1	0	0	0	0	0	0	1
	QCT	0	0	0	0	0	0	0	0	0	0
Inpatient detox.	Control	0	0	0	21	26	0	0	0	0	47
	QCT	0	0	0	0	0	0	0	0	0	0
Out-patient substit.	Control	29	0	6	14	3	0	0	13	1	66
	QCT	2	0	0	0	0	0	2	10	7	21
Outpat. drugfree	Control	0	0	11	1	0	25	0	13	1	37
	QCT	0	0	29	24	39	2	0	0	6	100
Inpatient drugfree	Control	0	0	3	12	55	71	0	23	60	224
	QCT	0	0	0	26	27	52	9	17	79	210
Day care	Control	10	17	0	0	0	0	0	0	0	27
	QCT	13	26	0	0	0	0	0	0	0	39
Other	Control	3	9	0	2	0	0	0	0	0	14
	QCT	30	18	0	0	0	0	2	0	0	50
Jail / prison	Control	0	0	0	0	0	0	0	0	0	0
	QCT	0	0	0	0	0	0	0	8	0	8
Probation	Control	0	0	0	0	0	0	0	0	0	0
	QCT	0	0	0	0	0	0	0	1	0	1
<b>Total</b>		<b>87</b>	<b>70</b>	<b>50</b>	<b>100</b>	<b>150</b>	<b>150</b>	<b>13</b>	<b>72</b>	<b>153</b>	<b>845</b>

Tab.45 Values for perceived pressure in QCT group vs. controls

Type of pressure	QCT group		Controls		Total	
	Mean	Median	Mean	Median	Mean	Median
Medical authority	1.5	1.0	1.4	1.0	1.4	1.0
Family/friends	2.0	1.0	2.3	2.0	2.2	1.0
Employer	1.1	1.0	1.1	1.0	1.1	1.0
Legal authorities	2.9	3.0	1.4	1.0	2.2	1.0
Client him-/herself	3.5	4.0	3.7	4.0	3.6	4.0
Others	1.3	1.0	1.3	1.0	1.3	1.0

The values for perceived coercion show that in the experimental group there is more pressure felt from legal authorities, as expected, while in the control group there is some more pressure from families and friends. The urge felt by themselves to go for treatment is similar in both groups (Tab. 45).

Tab.46 Values for self-efficacy in QCT group vs. controls (Range 1-5)

Value	QCT group		Controls		Total	
	Mean	Median	Mean	Median	Mean	Median
Positive values	3.5	3.8	3.4	3.6	3.5	3.6
Negative values	2.9	3.0	2.8	3.0	2.9	3.0

Probands in both groups show similar overall ratings of self-efficacy (Tab. 46).

Tab.47 Values for readiness to change in QCT group vs. controls

Phase of motivation	QCT group		Controls		Total	
	Mean	Median	Mean	Median	Mean	Median
Precontemplation	2.1	1.8	2.0	1.5	2.0	1.5
Contemplation	4.0	4.2	4.0	4.2	4.0	4.2
Action	4.0	4.0	4.0	4.0	4.0	4.0

With regard to stages of motivation for changing one's drug taking behaviour, the first stage (precontemplation) is scoring lower than the advanced stages (contemplation and action), indicating a satisfactory readiness for behaviour change in both groups (Tab.47).

**A summary of the group comparisons shows the following :**

- The sample size in the two groups is almost the same
- Demographics : homogeneity of samples in the experimental and control groups regarding age, marital status and school education, but more females in the control group
- Health : no difference in somatic health status, but more problems with mental health in the control group
- Drugs of abuse : no differences in the prevalence of heroin use and polydrug use, minor differences regarding cocaine, methadone and alcohol intoxication
- Crime : differences regarding the frequencies for various types of crime and an overall heavier crime load in the experimental group
- No difference in the number of victimisation claims
- No group differences regarding self-efficacy and motivation for change, but more legal pressure in the experimental group and more pressure from families and friends in the control group.

As a consequence, group differences will have to be considered in testing the predictor hypotheses.

## 6.5 Testing of hypotheses

Intake data offer a basis for testing the following 2 hypotheses (see analysis plan chapter 6.1) :

Hypothesis 6a: Legal status at entry predicts perceived coercion (P1c/6-7; P3)

*Tab. 48 External pressure in QCT group vs. controls*

Type of pressure	QCT	Controls	Total	Sign.
<b>Legal pressure</b>				
Not at all-slightly- moderately	248	398	646	P<0.001
Considerably - extremely	181	23	204	
Missing	1	1	2	
<b>Any other pressure except from oneself</b>				
Not at all-slightly-moderately	1558	1517	3075	n.s.
Considerably - extremely	148	167	315	
Missing	3	1	4	
<b>Pressure from oneself</b>				
Not at all- slightly- moderately	175	145	320	n.s.
Considerably – extremely	254	276	530	
Missing	1	1	2	
<b>Any pressure</b>				
Not at all-slightly-moderately	1806	1915	3721	P<0.001
Considerably- extremely	329	190	519	
Missing	3	1	4	

The experimental group perceived more legal pressure, but less other forms of external pressure in comparison with controls, when all persons mentioning the respective items are calculated. The experimental group experienced a significantly higher total sum of pressures (Tab. 48).

*Hypothesis 6a therefore can be confirmed, due to higher values for legal pressure.*

**Hypothesis 6b: High perceived coercion at entry correlated to low motivation (P3; P5)**

*Tab. 49 Perceived coercion vs. stage of motivation for change*

Stage of motivation for change	Type of pressure									
	Medical authority		Family / friends		Employer		Legal authority		Yourself	
	low	high	low	high	low	high	low	high	low	high
<b>Pre-contemplation</b>										
N	796	50	651	196	830	15	644	202	319	527
Mean	3.8	2.8	3.8	3.8	3.8	3.2	3.9	3.5	3.3	4.0
Std	3.3	3.1	3.2	3.4	3.3	2.1	3.3	3.2	3.4	3.1
S.E. mean	0.1192	0.4384	0.1254	0.2428	0.1154	0.5422	0.1300	0.2251	0.1903	0.1350
95% C.I. low	5.5663	1.9407	3.5541	3.324	3.5754	2.1372	3.6451	3.0587	2.9268	3.7353
95% C.I. high	4.0336	3.6592	4.0458	4.276	4.0245	4.2627	4.1548	3.9412	3.6731	4.2646
<b>Contemplation</b>										
N	796	50	651	196	830	15	644	202	319	527
Mean	4.1	3.8	4.1	4.3	4.1	4.5	4.1	4.2	3.6	4.5
Std	3.	3.7	3.2	3.0	3.1	3.6	3.1	3.2	3.3	3.0
S.E. mean	0.1098	0.5232	0.1254	0.2142	0.1076	0.9295	0.1221	0.2251	0.1847	0.1306
95% C.I. low	3.8846	2.7744	3.8541	3.88	3.8890	2.6781	3.8605	3.7587	3.2378	4.2438
95% C.I. high	4.3153	4.8255	4.3458	4.72	4.3109	6.3218	4.3394	4.6412	3.9621	4.7561
<b>Action</b>										
N	796	50	651	196	830	15	644	202	319	527
Mean	4.0	3.9	4.0	4.0	4.0	3.0	4.1	3.8	3.6	4.3
Std	3.1	3.3	3.2	3.0	3.1	3.7	3.1	3.1	3.3	3.0
S.E. mean	0.1098	0.4666	0.1254	0.2142	0.1076	0.9553	0.1221	0.2181	0.1847	0.1306
95% C.I. low	3.7846	2.9852	3.7541	3.58	3.7890	1.1275	3.8605	3.3724	3.2378	4.0438
95% C.I. high	4.2153	4.8147	4.2458	4.42	4.2109	4.8724	4.3394	4.2275	3.9621	4.5561

Significance : no overlapping of confidence intervals only for „pressure by yourself“. No significant relation to all other types of pressure.

*Hypothesis 6b can not be confirmed. The extent of pressure from others does not correlate with low motivation for change*

## 6.6 Service description

Information on the treatment services involved in the study have been collected on the basis of the Treatment Unit Form TUF (EMCDDA 1997), in a revised version (revision by the QCT team in 2003). Out of 65 services, 45 have filled in this questionnaire. In the following, the missing data which vary across items, are given in brackets. A detailed analysis of data will be presented in a special paper.

The data show an rather equal distribution between residential programmes (n=26) and non-residential programmes (n=24), with only 5 institutions offering both types of programmes. 25 of 30 institutions (missing data from 12 institutions) offer after-care. The treatment capacity differs widely with a range from 8-18 treatment slots/beds per institution (missing data from 3 institutions).

There are communalities, but also large differences in treatment provision:

- An intake or initial assessment service or procedure is noted by 86% of institutions (no missing data); this is performed in 24 institutions by an open interview, in 19 institutions by a structured interview, in 17 institutions by use of a standard check-list
- All responding institutions have a programme with individual treatment planning, and in 90% of institutions the clients have a role in determining this plan (missing data from 4)
- Expected treatment duration varies between 91-913 days. 11 institutions expect a treatment duration of > 1 year, and only 1 institution a duration of <1 month (missing data from 12 institutions)
- Group therapy and group counselling are provided within a range of 0-80 hours per month. No such activities are listed by 5 institutions, more than 12 hours a month by 10 institutions (missing data from 7 institutions)
- Individual therapy and counselling are provided within a range of 0-16 hours per month. No such activity is listed by 1 institution, more than 5 hours per month by 24 institutions (missing data from 6 institutions)
- There is more emphasis on training social skills (great emphasis in 64% of institutions) and self-awareness (67%) than on school education (7%) and job preparation (29%)(missing data from 5 institutions)
- Great emphasis on abstinence from all drugs is noted by 60%, on HIV prevention by 71% of institutions (missing data from 4 institutions)
- Primary medical care is offered by 93% of institutions, mostly on-site (missing data from 1 institution)
- Psychiatric care is offered by 92% of institutions, mostly on-site (missing data from 4 institutions)
- Housing assistance is offered by 80% of institutions (missing data from 3 institutions)
- School/academic training is offered by 72% of institutions (missing data from 2 institutions)
- Vocational training is offered by 85% of institutions (missing data from 1 institution)
- Financial assistance is offered by 81% of institutions (missing data from 1 institution)
- Job finding assistance is offered by 90% of institutions (missing data from 1 institution)
- Aftercare is offered by 90% of institutions (missing data from 4 institutions)
- The figures for deficient programme elements are : no provision of aftercare (10% of services), no vocational training (15%), no job finding (10%), no financial assistance (19%) and no school education (26%).

Termination of treatment shows a wide variance:

- Programme completion ranges from 0%-99%; completion rates of >5% are mentioned by 5 institutions (missing data from 15 institutions)
- Premature discharge including dropping-out ranges from 0%-83%; rates of >50% are mentioned by 3 institutions
- Dropping-out alone ranges from 0%-45% (missing data from 18 institutions).

## Staff

The overall number of staff varies between 2-56; <10 staff in 11 institutions (missing data from 7 institutions)

Tab. 50 *Proportion of staff to clients*

Site	Number of services	Services responding to TUF	Nr. of Clients total during the reference year	Nr of QCT probands at intake	Nr of staff	Proportion All Clients : Staff	Proportion Nr of QCT probands: Staff
Kent	7	6	98	45	20	4.90:1	2.25:1
London	3	3	351	44	16	21.94:1	2.75:1
Padua	9	8	766	66	212	3.61:1	0.31:1
Bari	1	1	n.a.	29	19	n.a.	1.53:1
Florence	12	0	n.a.	50	n.a.	n.a.	n.a.
Berlin	9	9	1012	92	61	16.59:1	1.51:1
Fribourg	5	3	128	13	37	3.46:1	0.35:1
Zurich	13	13	1269	37	128	9.91:1	0.29:1
Vienna	6	2	79	53	47	1.68:1	1.13:1
Total	65	45	3703	429	449	8.25:1	0.95:1

n.a. = no answer

There are major differences in case-loads per staff member, with highest figures in London, Berlin and Zurich, and lowest ones in Vienna. The respective figures for QCT probands only show again a disproportionally higher rate in London and Kent in comparison to the rest (Tab. 50). Taking into account that in London and Kent the rate of probands in in-patient treatment at intake is zero (see Tab. 44), and considering the higher need for staff in in-patient treatment, this finding is not surprising. However, the comparatively low response rate of probands at follow-up (52.9% at FU3, see Tab. 55) makes it difficult to check on a correlation between case-load and outcome, while in-patient treatment in general is found to be followed by a higher reduction of drug use when compared to out-patient treatment (Fig. 3). The available data show, that sites with an elevated case-load document a similar reduction in main substance use (measured by number of consumption days during last 30 days) as other sites (Fig. 5).

## Proportion of voluntary clients and QCT clients

- 29 of 40 institutions (missing data from 5) admit probationers as clients. The percentage of probationers /parolees varies from 0%-75% (missing data from 9 institutions). The percentage during the reference year varies from 0%-80%; more than half of the clientele -50% or more – belong to this group in 8 institutions.
- The estimated percentage of referrals from court, parole and probation services differs also from 0%-100%; more than 50% referrals come from these sources according to 4 institutions, 100% according to 2 institutions (no missing data). 21 institutions state that they do not receive referrals from this type of source.

Tab. 51 *Proportion of voluntary clients and QCT clients at intake*

Site	% of QCT probands at intake	% of control probands at intake	Proportion QCT:CG
Kent	51	48	1.06:1
London	61	39	1.56:1
Padua	44	56	0.79:1
Bari	58	42	1.38:1
Florence	50	50	1:1
Berlin	59	41	1.44:1
Fribourg	100	0	100:0
Zurich	51	49	1.04:1
Vienna	35	65	0.54:1
<i>Total</i>	50	50	1:1

London, Berlin and Bari have the highest proportions of QCT probands (Tab. 51), but we cannot infer a relationship between this proportion and outcome, due to the low response rate of probands (see above).

## 7 FOLLOW-UP DATA ON PROBANDS

### 7.1 Data quality and missing data

The follow-up data were collected as planned, but with some delay according to the prolongation of the recruitment period.

*Control and correction process:*

In a first step, all data were controlled concerning

- dual entry of the same proband
- errors in proband identification
- changes from one treatment service to another
- missing probands
- correct declaration of follow-up data.

In a second step, all data were checked for missing values and content errors. A special 'query procedure' was developed in order to systematically collect corrections and enter those in the data bank. In many cases, 2-3 attempts had to be made until all corrections were delivered. This time-consuming procedure resulted in clarifying and correcting almost all errors. The overall quality of data in the final data bank is considered to be good.

*Missing data:*

Probands who dropped out of the study could not be interviewed for follow-up. Data from interviews were included in the analysis if not more than 5 items were missing. Based on this procedure, completed and missing interviews amounted to the following values :

Tab. 52 Valid items across measurement points

				N	%
TOTAL valid items	FU1: TOTAL valid items	FU2: TOTAL valid items	FU3: TOTAL valid items		
INTAKE done	FU1 not done	FU2 not done	FU3 not done	222	26.3
			FU3 done	10	1.2
		FU2 done	FU3 not done	7	0.8
			FU3 done	31	3.7
	FU1 done	FU2 not done	FU3 not done	112	13.3
			FU3 done	13	1.5
		FU2 done	FU3 not done	57	6.7
			FU3 done	393	46.5
All			845	100.0	

After 6 months, 575 interviews could be accomplished (68.0% of the original cohort). After 12 months, the number was reduced to 450 (53.2%), and after 18 months to 393 (46.5%) (Tab. 52).

Tab. 53 Rates of missing data in in- and out-of-treatment probands

	Probands still in treatment		Probands out of treatment & untraceable		Total	
	n missing	% missing*	n missing	% missing*	n missing	% missing*
FU1	33	3.9	237	28.0	270	32.0
FU2	29	3.4	238	38.8	357	42.2
FU3	39	4.6	359	42.5	398	47.1

\*Percentages of all probands at intake (n=845)

There are major differences between missing data from probands still in treatment and those out of treatment, those out of treatment having much higher missings (Tab. 53).

Tab. 54 Rates of missing data in study groups

	QCT group		Control group		Total	
	n missing	% **	n missing	%**	n missing	%*
FU1	132	30.8	138	33.2	270	31.9
FU2	176	41.0	181	43.5	357	42.2
FU3	204	47.6	194	46.6	398	47.1

\*Percentages of all probands at intake (n=845)

\*\*Percentages of all probands at intake in this group (QCT n=429 / Control n=416)

No major differences in missings were found between experimental and control group during and at the end of follow-up (Tab. 54).

Tab. 55 Completed and missing interviews across countries

	UK		Italy		Austria		CH		Germany		Total	
	made	Not made	made	Not made	made	Not made	made	Not made	made	Not made	made	Not made
Intake	157	-	300	-	150	-	5	-	153	-	845	-
FU1	106	51	216	84	83	67	74	11	96	57	575	270
FU2	100	57	179	121	74	76	73	12	62	91	488	357
FU3	94	63	160	140	67	83	67	18	59	94	447	398

Fig. 1 Completed interviews across measurement points and countries

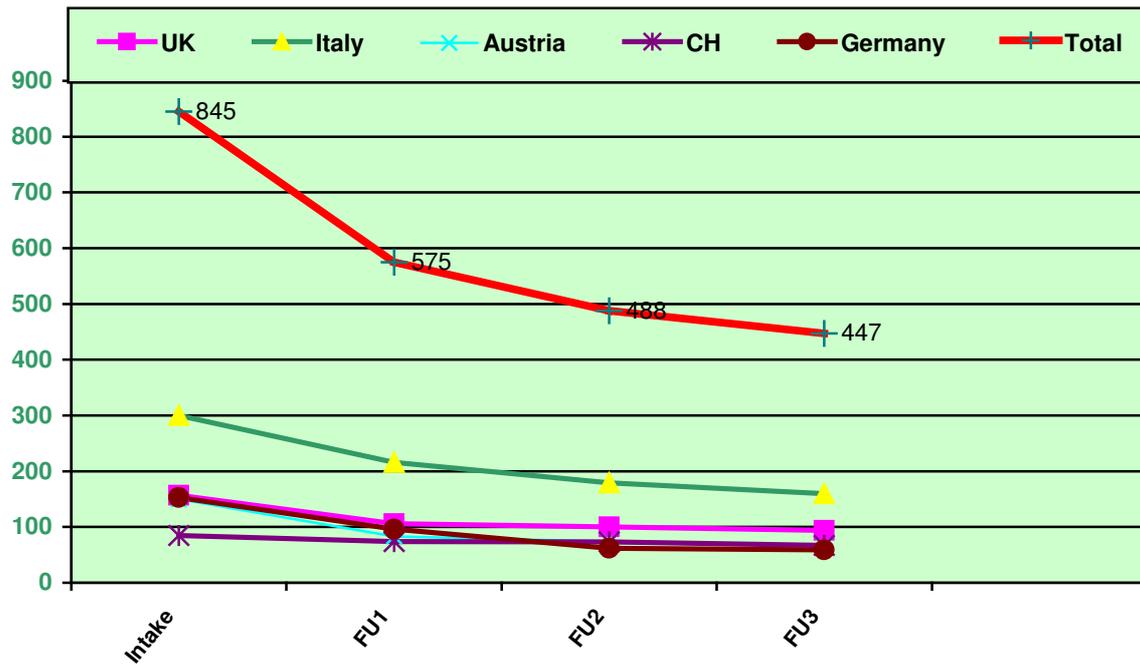
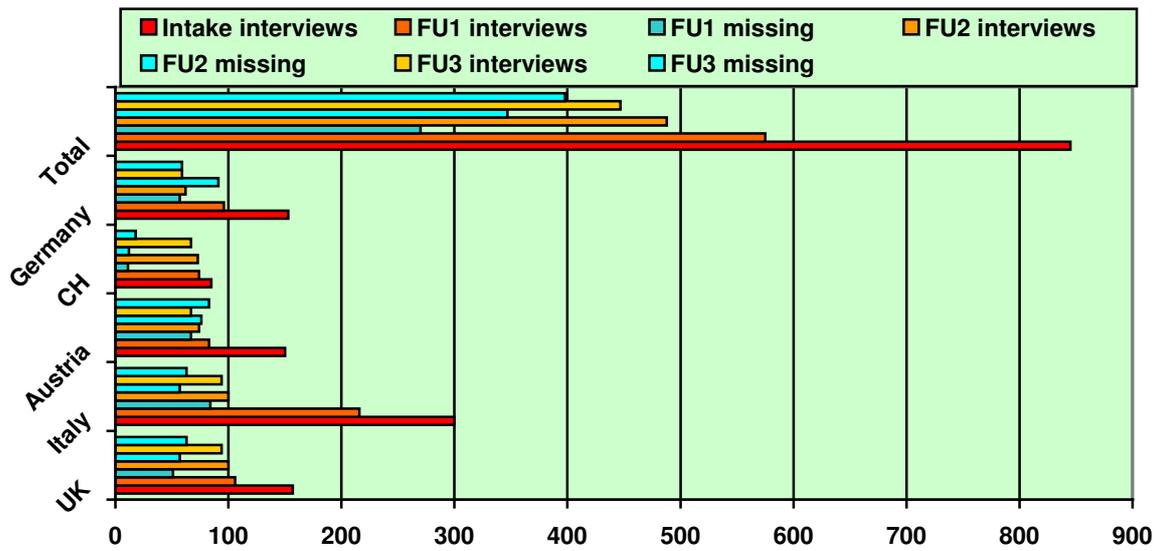


Fig. 2 Completed and missing interviews across countries



The number of valid interviews show us the following retention rates (in the study, not necessarily in treatment) :

Table 56 Study retention rates in QCT group vs. controls by country

	UK			Italy			Austria			Switzerland			Germany			Total		
	QCT	CG1	Total	QCT	CG1	Total	QCT	CG1	Total	QCT	CG1	Total	QCT	CG1	Total	QCT	CG1	Total
<b>Intake</b>	89	68	157	145	155	300	54	96	150	49	36	85	92	61	153	429	416	845
<b>%</b>	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
<b>FU1</b>	64	42	106	99	117	216	35	48	83	40	34	74	59	37	96	297	278	575
<b>%</b>	71.9	61.8	67.5	68.3	75.5	72.0	64.8	50.0	55.3	81.6	94.4	87.1	64.1	60.7	62.7	69.2	66.8	68.0
<b>FU2</b>	56	44	100	82	97	179	34	40	74	42	31	73	39	23	62	253	235	488
<b>%</b>	62.9	64.7	63.7	56.6	62.6	59.7	63.0	41.7	49.3	85.7	86.1	85.9	42.4	37.7	40.5	59.0	56.5	57.8
<b>FU3</b>	47	47	94	74	86	160	30	37	67	37	30	67	37	22	59	225	222	447
<b>%</b>	52.8	69.1	59.9	51.0	55.5	53.3	55.6	38.5	44.7	75.5	83.3	78.8	40.2	36.1	38.6	52.4	53.4	52.9

Table 57 Overall study retention rates in QCT group vs. controls by country

Group	England		Italy		Austria		Switzerland		Germany		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
QCT	47	52.8	74	51.0	30	55.6	37	75.5	37	40.2	225	52.4
CG1	47	69.1	86	55.5	37	38.5	30	83.3	22	36.1	222	53.4
Total	94	59.9	160	53.3	67	44.7	67	78.8	59	38.6	447	52.9

The findings are quite diverse. The highest drop-out rates occur during the first 6 months (intake-FU1). In most countries, we find higher retention rates in the control group, while Austria and Germany have a better retention of QCT probands in the study. Also, there are major differences in overall retention rates, with highest values in Switzerland and lowest in Germany and Austria (Tab. 57).

One might hypothesize that study drop-outs have an inferior prognosis. The 'last-observation-carried forward' method in the analysis of outcome data (see chapter 7.5) use FU1 or FU2 data where no FU3 data are available. On this basis, we cannot know if the higher drop-out rates influence the outcome and if so, in which direction.

Tab. 58 Retention rates by sites during follow-up

Site	TOTAL valid items		FU1: TOTAL valid items				FU2: TOTAL valid items				FU3: TOTAL valid items			
	INTAKE done		FU1 not done		FU1 done		FU2 not done		FU2 done		FU3 not done		FU3 done	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Bari	50	6	13	5	37	6	20	6	30	6	21	5	29	6
Berlin	153	18	57	21	96	17	91	25	62	13	94	24	59	13
Firenze	100	12	33	12	67	12	37	10	63	13	41	10	59	13
Fribourg	13	2	4	1	9	2	2	1	11	2	5	1	8	2
Kent	87	10	33	12	54	9	42	12	45	9	41	10	46	10
London	70	8	18	7	52	9	15	4	55	11	22	6	48	11
Padua	150	18	38	14	112	19	64	18	86	18	78	20	72	16
Vienna	150	18	67	25	83	14	76	21	74	15	83	21	67	15
Zurich	72	9	7	3	65	11	10	3	62	13	13	3	59	13
All	845	100	270	100	575	100	357	100	488	100	398	100	447	100

The highest reduction of probands is observed in Berlin, followed by Padua and Vienna (Tab. 58).

It is of interest to check on proband characteristics at entry, and study how these characteristics are over- or underrepresented at follow-up, thereby indicating characteristics which might predict a higher risk for dropping-out from the study.

Tab. 59 *Differences in proband retention in relation to gender*

	TOTAL valid items		FU1: TOTAL valid items				FU2: TOTAL valid items				FU3: TOTAL valid items			
	INTAKE done		FU1 not done		FU1 done		FU2 not done		FU2 done		FU3 not done		FU3 done	
	N	%*	N	%*	N	%*	N	%*	N	%*	N	%*	N	%*
<b>Gender</b>														
<b>Male</b>	691	82	209	77	482	84	283	79	408	84	326	82	365	82
<b>Female</b>	154	18	61	23	93	16	74	21	80	16	72	18	82	18
<b>All</b>	845	100	270	100	575	100	357	100	488	100	398	100	447	100

\*percentages of columns

There is no change in gender rates from intake to FU3; retention is equal among men and women (Tab. 59).

Tab. 60 *Differences in proband retention in relation to age*

	TOTAL valid items		FU1: TOTAL valid items				FU2: TOTAL valid items				FU3: TOTAL valid items			
	INTAKE done		FU1 not done		FU1 done		FU2 not done		FU2 done		FU3 not done		FU3 done	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b>Age:</b>														
<b>&lt;= 25</b>	210	25	75	28	135	23	109	31	101	21	113	28	97	22
<b>26-30</b>	189	22	65	24	124	22	82	23	107	22	97	24	92	21
<b>31-35</b>	216	26	64	24	152	26	80	22	136	28	89	22	127	28
<b>&gt;= 36</b>	230	27	66	24	164	29	86	24	144	30	99	25	131	29
<b>All</b>	845	100	270	100	575	100	357	100	488	100	398	100	447	100

There is practically no change in the rates of different age groups from intake to FU3 (Tab. 60).

Tab. 61 *Differences in proband retention in relation to mean age*

		TOTAL valid items		FU1: TOTAL valid items		FU2: TOTAL valid items		FU3: TOTAL valid items	
		INTAKE done		FU1 not done	FU1 done	FU2 not done	FU2 done	FU3 not done	FU3 done
Age:	N	845		270	575	357	488	398	447
	Mean	31.3		30.6	31.7	30.4	32.0	30.5	32.0
	Median	31		30	32	30	32	30	32
	Min	17		17	17	17	17	17	17
	Max	68		68	60	68	60	68	60
	Std	7.6		7.7	7.5	7.7	7.4	7.6	7.5

Mean and median age show no difference from intake to FU3 (Tab. 61).

Tab. 62 *Differences in proband retention in relation to citizenship*

	TOTAL valid items		FU1: TOTAL valid items				FU2: TOTAL valid items				FU3: TOTAL valid items			
	INTAKE done		FU1 not done		FU1 done		FU2 not done		FU2 done		FU3 not done		FU3 done	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
domestic														
no	93	11	32	12	61	11	41	11	52	11	47	12	46	10
yes	752	89	238	88	514	89	316	89	436	89	351	88	401	90
All	845	100	270	100	575	100	357	100	488	100	398	100	447	100

The overall rate of non-nationals among study probands has not changed from intake to FU3 (Tab. 62).

Tab. 63

*Differences in proband retention in relation to mean length of drug career*

		TOTAL valid items	FU1: TOTAL valid items		FU2: TOTAL valid items		FU3: TOTAL valid items	
		INTAKE done	FU1 not done	FU1 done	FU2 not done	FU2 done	FU3 not done	FU3 done
Length of drug career (years)	N	844	270	574	357	487	398	446
	Mean	16.7	16.2	16.9	16.1	17.2	16.2	17.1
	Median	16	15	16	15	17	15	17
	Min	2	2	3	2	3	2	3
	Max	51	51	45	51	45	51	45
	Std	7.3	7.7	7.2	7.6	7.1	7.5	7.2

There is no change in the average length of drug career, meaning that probands with longer careers have not left disproportionately often the study from intake to FU3 (Tab. 63).

Tab. 64

*Differences in proband retention in relation to mean length of criminal career*

		TOTAL valid items	FU1: TOTAL valid items		FU2: TOTAL valid items		FU3: TOTAL valid items	
		INTAKE done	FU1 not done	FU1 done	FU2 not done	FU2 done	FU3 not done	FU3 done
Length of criminal career	N	789	248	541	331	458	370	419
	Mean	13.6	13.2	13.8	12.8	14.2	13.2	14.0
	Median	13	12	13	12	14	12	13
	Min	0	0	0	0	0	0	0
	Max	38	34	38	35	38	35	38
	Std	7.7	7.5	7.7	7.4	7.8	7.5	7.8

Probands with a longer criminal career have not left the study more frequently than those with shorter careers, as there is no change in the mean length of criminal career from intake to FU3 (Tab. 64).

Tab. 65 *Changes in proband retention in relation to primary delinquency*

	<b>Intake</b>		<b>FU1</b>		<b>FU2</b>		<b>FU3</b>	
<b>Sequence</b>	n	%	n	%	n	%	n	%
<b>Crimes before drugs</b>	<b>154</b>	<b>18</b>	<b>97</b>	<b>17</b>	<b>90</b>	<b>19</b>	<b>80</b>	<b>18</b>
<b>Drugs before crimes</b>	<b>559</b>	<b>67</b>	<b>380</b>	<b>66</b>	<b>317</b>	<b>65</b>	<b>296</b>	<b>67</b>
<b>Simultaneous start</b>	<b>128</b>	<b>15</b>	<b>96</b>	<b>17</b>	<b>78</b>	<b>16</b>	<b>68</b>	<b>15</b>
<b>Total</b>	<b>841</b>	<b>100</b>	<b>573</b>	<b>100</b>	<b>485</b>	<b>100</b>	<b>444</b>	<b>100</b>
<b>Missing values</b>	<b>4</b>		<b>272</b>		<b>360</b>		<b>401</b>	

The rate of primary delinquency (crimes before drugs) does not change from intake to FU3; probands with primary delinquency do not have higher drop-out rates at follow-up (Tab. 65).

*Major findings :*

*Retention in the study is 52.9 % over 18 months. Major drop-out rates occur during the first 6 months. The only differences in attrition rates are related to country and type of treatment. Other proband characteristics at intake are not found to be predictive to attrition from the study.*

## **7.2 Analysis of follow-up data : overview**

### Description of follow-up data

Retention in treatment  
Changes across time points

### Testing the adapted set of hypotheses (see chapter 5.1)

Primary hypotheses  
Secondary hypotheses and predictors

### 7.3 Descriptive analysis : retention in treatment

Retention in treatment is frequently considered to be an intermediate goal for good outcome. The overall retention rates can be seen from the following table (Tab. 66).

Tab. 66 *Patients still in treatment at time of interview (overall retention rates)*

Treatment status	Intake		FU1		FU2		FU3	
	n	%	n	%	n	%	n	%
In treatment	845	100	474	56	348	46	291	34
Not in treatment	0	0	371	44	402	54	491	63
<b>Total</b>	<b>845</b>	<b>100</b>	<b>845</b>	<b>100</b>	<b>750</b>	<b>100</b>	<b>782</b>	<b>100</b>
<i>Missing values</i>	<i>0</i>		<i>0</i>		<i>95</i>		<i>63</i>	

The majority of probands, almost two thirds, have left treatment during the follow-up period (Tab. 67).

The next table shows retention rates across countries; probands still in treatment, but without interview, are included in the retention rate (Tab. 67).

Tab. 67 *Patients still in treatment across countries*

Country	Intake		FU1		FU2		FU3	
	n	%	n	%*	n	%*	n	%*
UK	157	100	43	27	42	27	34	21
Italy	300	100	216	72	171	56	156	51
Austria	150	100	96	54	85	37	36	23
CH	85	100	71	84	52	59	36	39
Germany	153	100	66	43	93	31	92	31
<b>Total</b>	<b>845</b>	<b>100</b>	<b>474</b>	<b>56</b>	<b>348</b>	<b>48</b>	<b>291</b>	<b>34</b>
<i>Missing*</i>	<i>0</i>	<i>0</i>	<i>33</i>	<i>4</i>	<i>29</i>	<i>3</i>	<i>39</i>	<i>5</i>

\* percentage of probands at intake

Due to a misunderstanding, the interpretation of “still in treatment” differs : Italy, Austria and Germany have considered any treatment here (including new treatments), while UK and Switzerland considered only the initial treatment at intake. The interpretation has to respect this difference.

Switzerland has the highest retention over 12 months time and a much higher one than the UK which also considered only the initial treatment. In Germany and especially Austria, retention drops considerably after 6 months time, although any new treatment has been considered.

As mentioned above (chapter on service data), expected treatment duration varies between 91-913 days. However, only 35 out of 65 treatment institutions have responded to this item of expected treatment duration. It can not be interpreted here, to what extent differences in retention in treatment are linked to differences in expected retention.

Tab. 68 *Reasons for leaving treatment during follow-up*

Reasons for leaving treatment	FU1		FU2		FU3	
	N	%	N	%	N	%
1	65	19.23	128	33.25	163	35.51
2	42	12.43	37	9.61	41	8.93
3	169	50.00	156	40.52	186	40.52
4	23	6.80	29	7.53	28	6.10
5	39	11.54	35	9.09	41	8.93
<b>Total</b>	<b>338</b>	<b>100</b>	<b>385</b>	<b>100</b>	<b>459</b>	<b>100</b>
<b>missing</b>	<b>33</b>		<b>17</b>		<b>32</b>	

Reasons :

- 1 finished planned treatment
- 2 excluded from treatment
- 3 has chosen to leave
- 4 QCT revoked
- 5 Other

*Major finding : almost two thirds of probands have left treatment during follow-up. Differences in treatment length are found among countries. The main reason for leaving treatment was dropping-out, with a highest rate during the first 6 months (Tab. 68).*

#### 7.4 Descriptive analysis : changes across time points

Comparing intake and follow-up data are used for measuring change during treatment and the observation period.

Tab. 69 *Changes in employment status during follow-up*

Days working during the past 30 days	Intake	FU1	FU2	FU3
<b>N</b>	844	575	488	449
<b>Mean</b>	4.5	9.7	10.1	11.0
<b>Median</b>	0	0	2	6
<b>Min</b>	0	0	0	0
<b>Max</b>	30	30	30	30
<b>Std</b>	9.5	12.0	11.4	11.7

An overall increase in working days during the last month is recorded from intake to FU3 (Tab. 69).

Tab. 70 *Changes in employment status in study groups*

	Intake			FU1			FU2			FU3		
Working days past 30 days	QCT	CG1	Total	QCT	CG1	Total	QCT	CG1	Total	QCT	CG1	Total
n	428	416	844	297	278	575	253	235	488	227	222	449
Mean	5.6	3.3	4.5	9.4	10.0	9.7	9.8	10.4	10.1	10.0	11.9	11.0
Median	0	0	0	0	0	0	0	2	2	0	12	6
Min	0	0	0	0	0	0	0	0	0	0	0	0
Max	30	30	30	30	30	30	30	30	30	30	30	30
std	10.6	8.0	9.5	11.8	12.2	12.0	11.3	11.6	11.4	11.5	11.8	11.7
Missing values	1	0	1	0	0	0	0	0	0	0	0	0

Improvements in employment status tend to be superior in the control group during follow-up (Tab. 70).

Tab. 71 *Changes in overall health status during follow-up*

Days sick-listed during past 30 days	Intake	FU1	FU2	FU3
N	840	575	488	449
Mean	4.2	5.4	2.8	2.8
Median	0	0	0	0
Min	0	0	0	0
Max	30	30	30	30
Std	9.9	11.2	7.9	8.0

Health status (measured by number of days sick-listed during the last month) increased from intake to FU3 (Tab. 71).

Tab. 72 *Changes in health status in study groups*

Days sick listed past 30 days	Intake			FU1			FU2			FU3		
	QCT	CG1	Total	QCT	CG1	Total	QCT	CG1	Total	QCT	CG1	Total
n	426	414	840	297	278	575	253	235	488	227	222	449
Mean	2.9	5.5	4.2	4.3	6.6	5.4	2.5	3.1	2.8	2.2	3.4	2.8
Median	0	0	0	0	0	0	0	0	0	0	0	0
Min	0	0	0	0	0	0	0	0	0	0	0	0
Max	30	30	30	30	30	30	30	30	30	30	30	30
std	8.6	10.9	9.9	10.1	12.2	11.2	7.4	8.5	7.9	7.0	8.8	8.0
Missing values	3	2	5	0	0	0	0	0	0	0	0	0

Tab. 73 *Changes in mental health status during follow-up*

Psychiatric Diagnosis (past 6 months)	INTAKE		FU1		FU2		FU3	
	N	%	N	%	N	%	N	%
no	99	11.7	179	27.2	156	36.7	167	37.4
yes	746	88.3	309	72.8	418	63.3	280	62.6
All	845	100	488	100	574	100	447	100

A major reduction of psychiatric diagnoses among probands is observed from intake to FU3 (Tab. 73).

Tab. 74 *Changes in mental health in study groups*

Psychiatric diagnose		Intake			FU1			FU2			FU3		
		QCT	CG1	Total	QCT	CG1	Total	QCT	CG1	Total	QCT	CG1	Total
No	n	53	46	99	84	72	156	100	79	179	84	83	167
	%	12	11	12	28	26	27	40	34	37	37	37	37
Yes	n	376	370	746	212	206	418	153	156	309	141	139	280
	%	88	89	88	72	74	73	60	66	63	63	63	63
Total	n	429	416	845	296	278	574	253	235	488	225	222	447
	%	100	100	100	100	100	100	100	100	100	100	100	100
Missing values		0	0	0	1	0	1	0	0	0	0	0	0

There is a reduction in psychiatric morbidity in both groups, with only intermediate differences and similar outcomes after 18 months (Tab. 74).

Tab. 75

*Changes in main problem drugs (intake-FU3)*

Major problem drug	Intake		FU 3	
	N	%	N	%
No problem	11	1.30	194	43.40
Alcohol - any us	3	0.36	24	5.37
Alcohol - over threshold	42	4.97	11	2.46
Heroin	306	36.21	87	19.46
Methadone/LAAM	5	0.59	7	1.57
Other opiates/analgesics	15	1.78	8	1.79
Cocaine	145	17.16	40	8.95
Amphetamines	5	0.59	1	0.22
Cannabis	7	0.83	15	3.36
Crack	27	3.20	8	1.79
MDMA etc.	9	1.07	0	0.0
Barbiturates	2	0.24	0	0.0
Benzodiazepines	14	1.66	8	1.79
Other hypnotics/sedatives	1	0.12	0	0.0
Other	2	0.24	2	0.45
Polydrug	198	23.43	31	6.94
Alcohol & Drug	53	6.27	11	2.46
<i>Total</i>	845	100	447	100

The rate of probands with “no drug problem” shows a major increase, while especially the rates of heroin, of cocaine and of polydrug use have decreased substantially. Slight increases are noted in alcohol and cannabis as a main problem drug (Tab. 75).

Tab. 76

*Changes in drug use in study groups*

Nr of days past 30 days	Intake			FU1			FU2			FU3		
	QCT	CG1	Total	QCT	CG1	Total	QCT	CG1	Total	QCT	CG1	Total
<b>n</b>	425	412	837	294	278	572	250	235	485	224	222	446
<b>Mean</b>	16.4	13.9	15.2	5.2	4.7	5.0	5.4	5.5	5.5	6.0	5.4	5.7
<b>Median</b>	20	10	14	0	0	0	0	0	0	0	0	0
<b>Min</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Max</b>	30	30	30	30	30	30	30	30	30	30	30	30
<b>std</b>	13.6	12.1	12.9	10.3	10.1	10.2	10.1	10.4	10.2	10.6	10.4	10.5
<b>Missing values</b>	4	4	8	3	0	3	3	0	3	1	0	1

In the experimental group, the higher consumption rates at intake are reduced during follow-up and become comparable to those in the control group (Tab. 76). QCT probands profit from treatment as much as control probands.

Tab. 77 *Changes in drug use by probands in and out of treatment*

No of days past 30 days	Intake			FU1			FU2			FU3		
	still in treatment			still in treatment			still in treatment			still in treatment		
	no	yes	Total	no	yes	Total	no	yes	Total	no	yes	Total
n	-	837	837	131	441	572	166	319	485	194	252	446
Mean	-	15.2	15.2	10.5	3.3	5.0	7.3	4.5	5.5	6.3	5.2	5.7
Median	-	14	14	1	0	0	0	0	0	0	0	0
Min	-	0	0	0	0	0	0	0	0	0	0	0
Max	-	30	30	30	30	30	30	30	30	30	30	30
std	-	12.9	12.9	13.2	8.4	10.2	11.4	9.5	10.2	10.9	10.1	10.5

Probands who were still in treatment at the time of follow-up interviews, had less consumption days in comparison to those out of treatment. However the difference is continuously diminishing and is not significant (Tab. 77)

Tab. 78 *Changes in rates of delinquency (intake-FU3)*

Nr of crime types (last 6 mths)	Intake		FU1		FU2		FU3	
	N	%	N	%	N	%	N	%
0	411	48.81	491	85.39	393	80.53	348	77.85
1	184	21.85	51	8.87	60	12.30	65	14.54
2	99	11.76	17	2.96	22	4.51	22	4.92
3	72	8.55	10	1.74	7	1.43	8	1.79
4	40	4.75	3	0.52	3	0.61	3	0.67
5	15	1.78	2	0.35	1	0.20	1	0.22
6	11	1.31	0	0.0	0	0.0	0	0.0
7	4	0.48	0	0.0	1	0.20	0	0.0
8	3	0.36	1	0.17	0	0.0	0	0.0
9	1	0.12	0	0.0	1	0.20	0	0.0
10	2	0.24	0	0.0	0	0.0	0	0.0
<b>Total</b>	<b>842</b>	<b>100</b>	<b>575</b>	<b>100</b>	<b>488</b>	<b>100</b>	<b>447</b>	<b>100</b>
<b>missing</b>	<b>3</b>		<b>270</b>		<b>357</b>		<b>398</b>	

The number of probands with multiple crime types decreases constantly over time from intake to FU3; the proportion of probands without crime increases during the first 6 months with a slight subsequent decrease (Tab. 78).

Tab. 79 *Changes in delinquency in study groups*

Number of Crime types	Intake			FU1			FU2			FU3			
	QCT	CG1	Total	QCT	CG1	Total	QCT	CG1	Total	QCT	CG1	Total	
0	n	172	239	411	239	252	491	190	203	393	166	182	348
	%	40	58	49	80	91	85	75	86	81	74	82	78
>= 1	n	257	174	431	58	26	84	63	32	95	59	40	99
	%	60	42	51	20	9	15	25	14	19	26	18	22
Total	n	429	413	842	297	278	575	253	235	488	225	222	447
	%	100	100	100	100	100	100	100	100	100	100	100	100
Missing values		0	3	3	0	0	0	0	0	0	0	0	0

QCT probands show higher rates of delinquency at follow-up in comparison with the control group, but the difference between groups has diminished considerably. There is a minor secondary increase in crime rates to be noted in both groups, after the initial massive reduction during the first 6 months (Tab. 79).

Tab. 80 *Changes in delinquency by probands in and out of treatment*

Number of Crime types		Intake			FU1			FU2			FU3		
		<i>still in treatment</i>			<i>still in treatment</i>			<i>still in treatment</i>			<i>still in treatment</i>		
		no	yes	Total									
<=0	n	-	411	411	80	411	491	112	281	393	126	222	348
	%	-	49	49	60	93	85	66	88	81	65	88	78
>= 1	n	-	431	431	54	30	84	57	38	95	69	30	99
	%	-	51	51	40	7	15	34	12	19	35	12	22
Total	n	-	842	842	134	441	575	169	319	488	195	252	447
	%	-	100	100	100	100	100	100	100	100	100	100	100
Missing values			3	3	237	33	270	233	29	262	296	39	335

Probands who are still in treatment show significantly less delinquent behaviour in comparison to those out of treatment. These however have also reduced delinquency to a considerable extent (Tab. 80).

Tab. 81 *Changes in rates of perceived coercion (intake-FU3)*

Perceived coercion	Intake		FU1		FU2		FU3	
	n	%	n	%	n	%	n	%
middle	357	42.30	249	45.03	74	35.75	66	37.71
high	246	29.15	143	25.86	57	27.54	45	25.71
no coercion	241	28.55	161	29.11	76	36.71	64	36.57
<b>Total</b>	<b>844</b>	<b>100</b>	<b>553</b>	<b>100</b>	<b>207</b>	<b>100</b>	<b>175</b>	<b>99</b>
<i>Missing values</i>	<i>1</i>		<i>292</i>		<i>638</i>		<i>670</i>	

The rate of probands without perceived coercion is increasing from intake to FU3, while the rate of high perceived coercion remains stable (Tab. 81)

Tab. 82 *Changes in intervention types during follow-up*

Intervention type	Intake		FU1		FU2		FU3	
	n	%	n	%	n	%	n	%
No treatment	0	0	272	32.19	253	34.56	301	40.79
Outpat. Detox.	1	0.12	3	0.36	4	0.55	2	0.27
Residential detox.	47	5.56	12	1.42	7	0.96	12	1.63
Outpat. substitution	87	10.30	99	11.72	116	1.85	119	16.12
Outpat. drugfree	137	16.21	47	5.56	71	9.70	49	6.64
Residential drugfree	434	51.36	264	31.25	200	27.32	183	24.80
Day care	66	7.81	7	0.83	11	1.50	4	0.54
Psychiatric ward	0	0.0	0	0	1	0.14	0	0
Hospital ward	0	0.0	0	0	0	0	1	0.14
Other ward	64	7.57	27	3.20	6	0.82	4	0.54
Jail/prison	8	0.95	19	2.25	18	2.46	17	2.30
Probation	1	0.12	83	9.82	18	2.46	11	1.49
Custody	0	0.0	2	0.24	2	0.27	1	0.14
Other	0	0.0	10	1.18	25	3.42	34	4.61
<b>Total</b>	<b>845</b>	<b>100</b>	<b>845</b>	<b>100</b>	<b>732</b>	<b>100</b>	<b>738</b>	<b>100</b>
<i>Missing values</i>	<i>0</i>		<i>0</i>		<i>113</i>		<i>107</i>	

Almost half of probands are no longer in treatment at FU3. There is some increase in probands in outpatient substitution treatment and in jail or probation, while residential drug-free treatment, day care and drug-free outpatient treatment are less frequently mentioned at follow-up (Tab.82).

*Main findings :*

*Major changes during follow-up concern reductions in drug use and crime, and improvements in health and employment status. These positive changes are consistent over time.*

*Reductions in substance use and in delinquency are marked in both the experimental and in the control group. QCT probands have profited from treatment as much as the control probands.*

*Probands who have left treatment show inferior reductions in substance use and crime, when compared to those still in treatment after 18 months. This may be due to less need, less opportunity and higher social control especially in residential treatments, but also in substitution therapies.*

*We further note a shift from inpatient to outpatient treatment in those who are still or again in treatment after 18 months. Probands feel less coerced at follow-up than at intake.*

## **7.5 Testing hypotheses : reductions in drug use**

The reduction of substance use is measured by comparing substance use during the last 30 days at intake and across follow-up measurements. The LOCF (last observation carried forward) model applies.

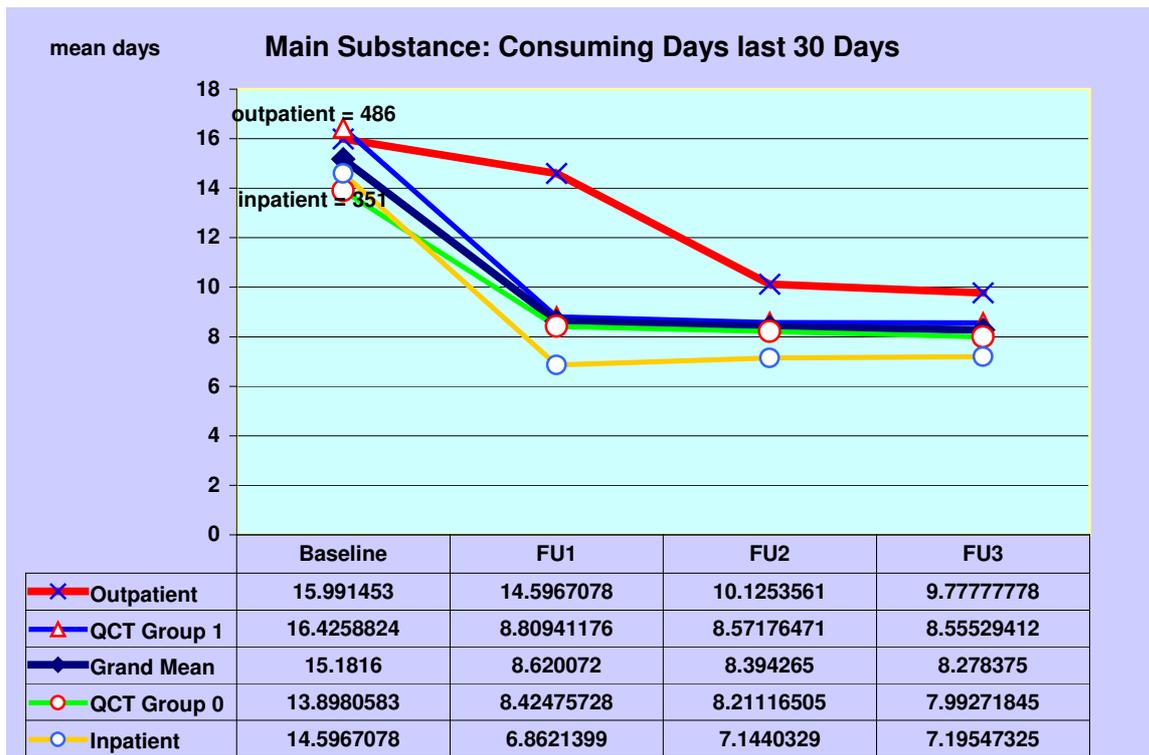
On average (grand mean), there is a steep reduction of use within the first 6 months, and then a levelling off during the following 12 months.

*Reduction of use across groups and intervention types*

A significant reduction in drug use is observed for the QCT group as well as for the voluntary control group CG1. In both groups, the major reduction occurs during the first 6 months (between intake and FU1), while later on the level of use remains almost unchanged (Fig.3).

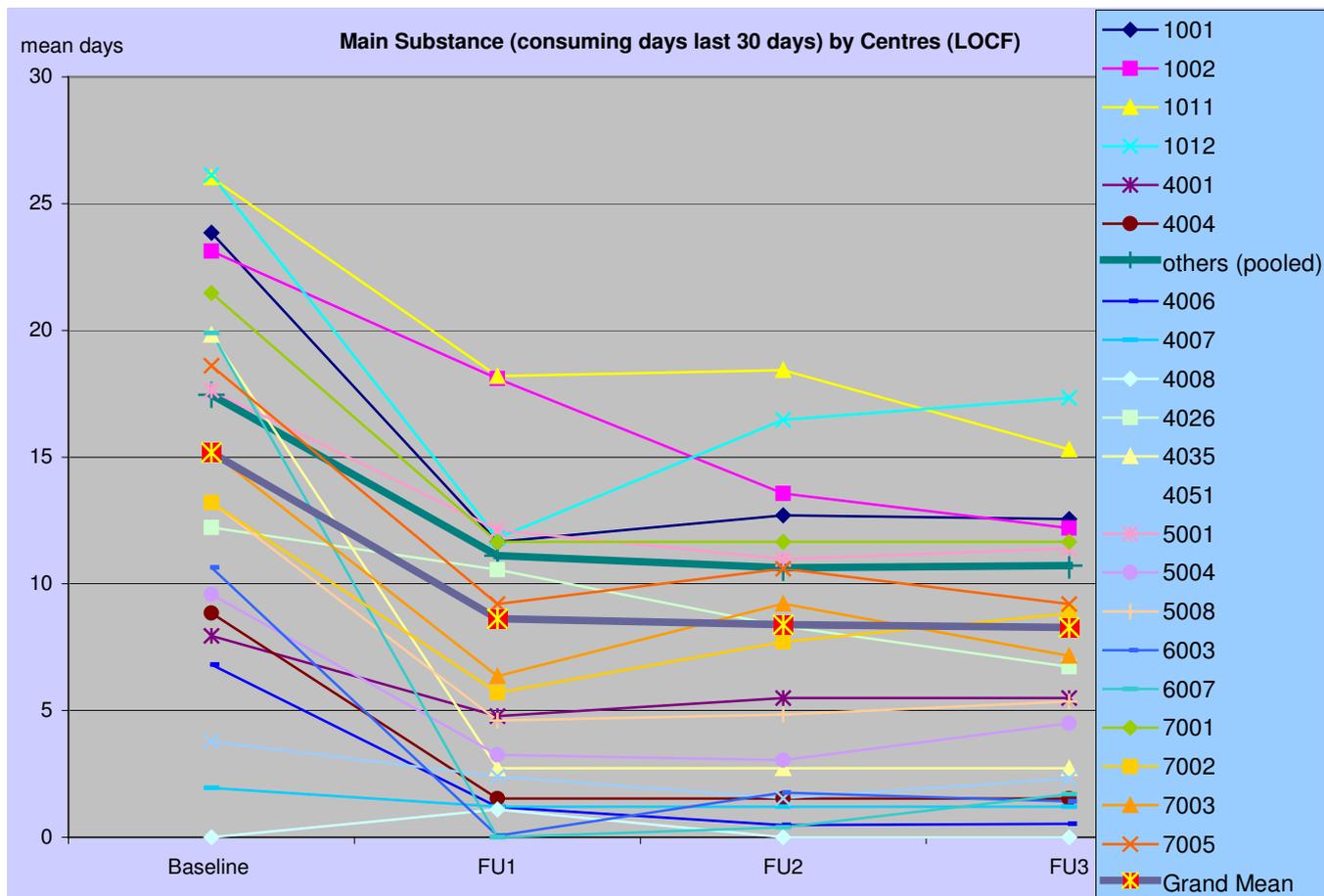
The reduction follows different patterns in probands receiving in- and outpatient treatment. While inpatients show a major reduction during the first 6 months, outpatients take more time to recover and reach major reductions between the 6<sup>th</sup> and 12<sup>th</sup> month (Fig.3).

Fig. 3 Reduction in main substance use by groups and intervention type (LOCF)



The analysis is based on data from 34 treatment institutions. Institutions are coded by numbers, the initial digit indicating the country (1=UK, 4=Italy, 5=Austria, 6=CH, 7=Germany). For the following, 13 institutions with low frequencies have been pooled as "other" (Fig. 4).

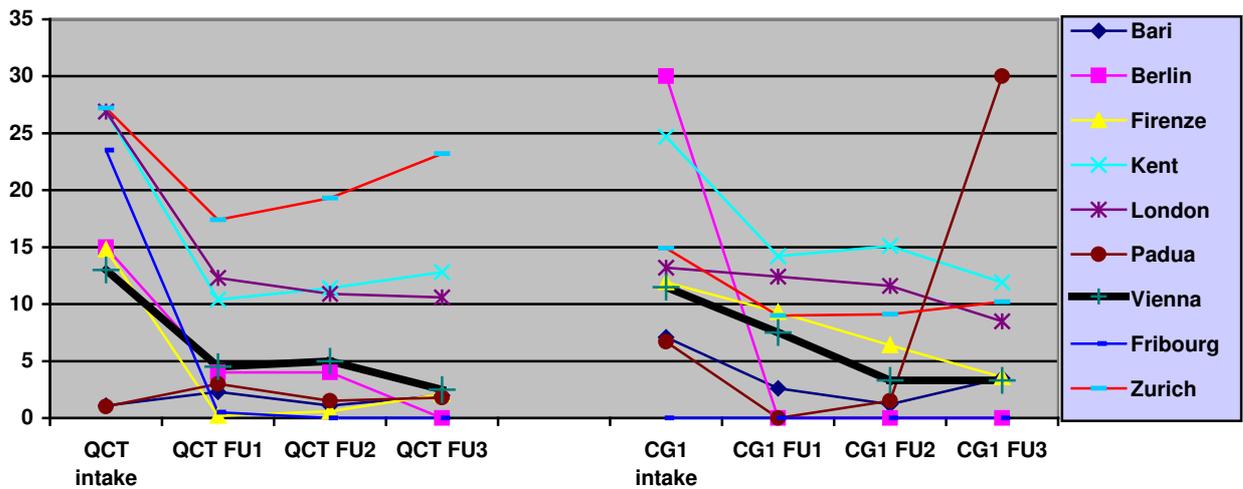
Fig. 4 Reduction in main substance use by treatment centres (LOCF)



The various treatment centres show some differences in reduction rates and patterns which are independent from differences in the initial level of use. A steep early reduction is the most striking finding across most institutions (Fig. 4).

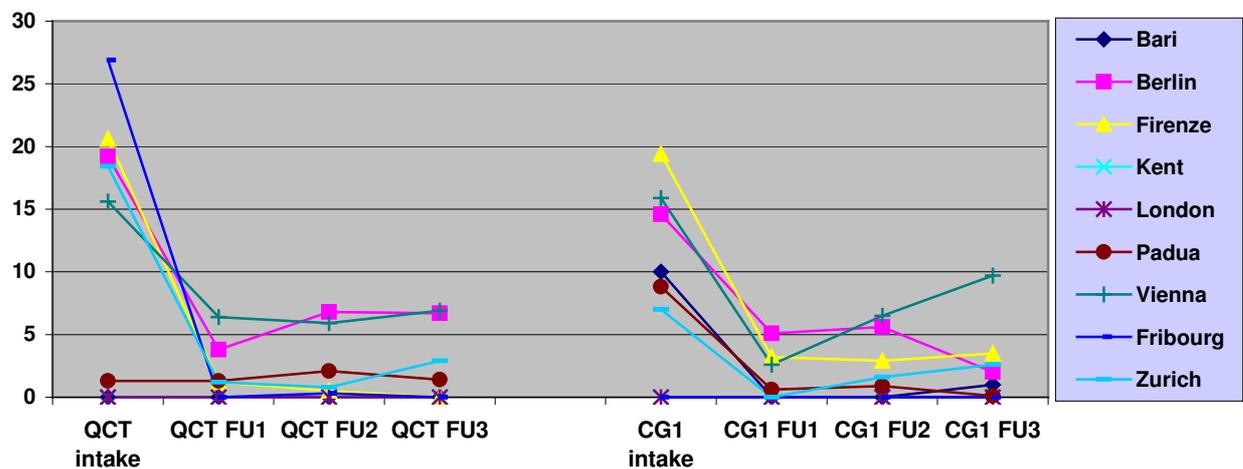
Probands from 7 centres show an increase in drug use after an initial reduction, between months 6 and 12 of the follow-up period (Fig. 4).

Fig. 5 Reductions in drug use by probands from out-patient treatment across groups and sites



Probands from out-patient services show some differences between experimental and control group in average consumption days during follow-up. Differences however tend to diminish, with the exception of probands from Zurich where the differences increase over time, and with the exception of Padua where a steep increase of use after 12 months can be noted, but only in the control group (Fig. 5).

Fig. 6 Reductions in drug use by probands from in-patient treatment across groups and sites



Reduction rates in probands coming from in-patient treatment show no great differences in general between the QCT group and the control group during follow-up, inspite of some major differences in drug use at intake (Fig. 6).

*Main findings :*

*The Hypothesis of reduction in substance use from intake to follow-up is well confirmed. Probands in the experimental group show equally important reductions as control probands.*

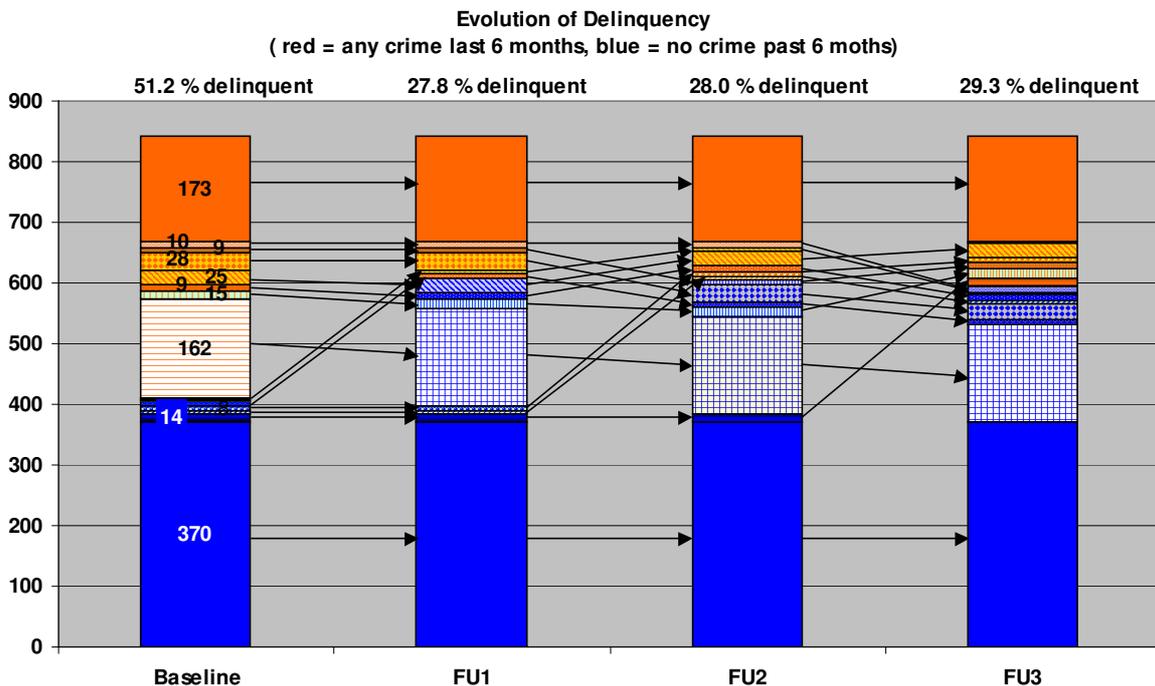
*Major differences in reduction rates and in reduction speed are to be found across countries, sites and treatment institutions; highest reduction rates are seen in probands who received in-patient treatment.*

**7.6 Testing hypothesis : reductions in crime**

Reduction of crime is measured by comparing delinquency during the last 6 months at intake and at follow-up interviews. As follow-up periods may not coincide with the 6 month period, only delinquency committed during the entire follow-up is compared to the value at intake. The values are dichotomous : no criminal event=0, any number of criminal events=1.

Delinquency is reduced during follow-up from 51.2% to 29.3% after 18 months. Small numbers of probands only have moved from the no delinquency group (blue columns) to the delinquent group (orange columns). About half of the delinquent group at intake was found to have no delinquent behaviour already after 6 months, with some few recidivist after 12 and 18 months (Fig. 7).

*Fig. 7 Reduction of crime across follow-up time points (LOCF)*



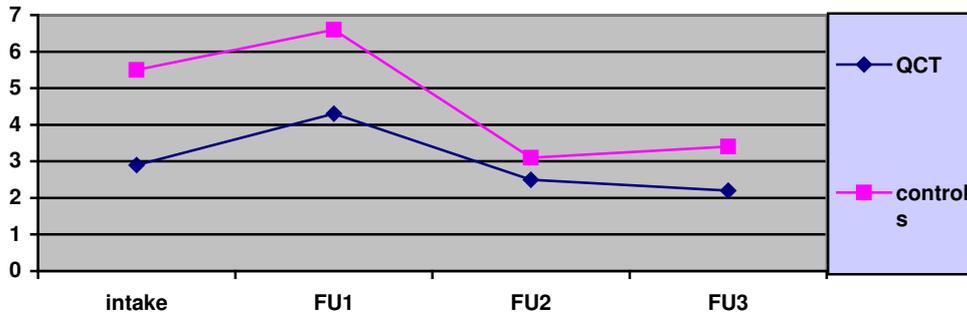
*Main finding :*

*The hypothesis regarding a major reduction of crime during follow-up can be confirmed. The reduction holds for both groups. Reduction rates are higher in the experimental group, given it's high initial values at intake. Only few recidivisms are observed.*

### 7.7 Testing hypothesis : improvements in health

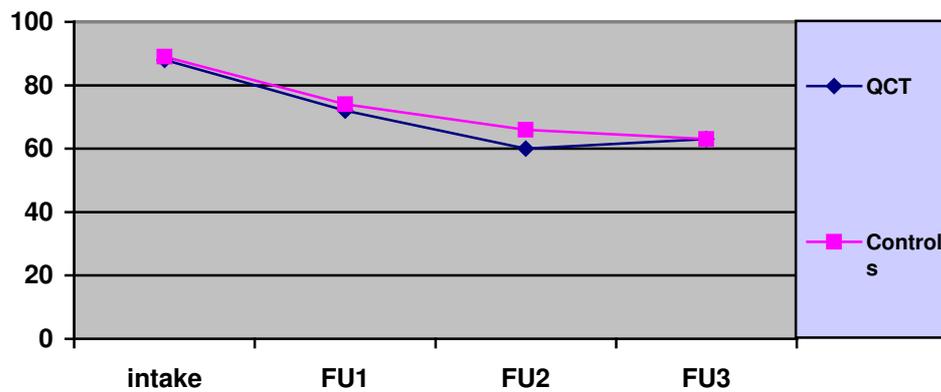
An almost continuous improvement of health status is documented by  
- a decrease of days sick-listed during the last month (see Tab. 72, Fig. 8)

Fig. 8 Improvements in overall health in both groups



A decrease of psychiatric diagnoses during the last 6 months (see Tab. 74, Fig. 9).

Fig. 9 Improvements in mental health in both groups (% of probands with psychiatric diagnosis)

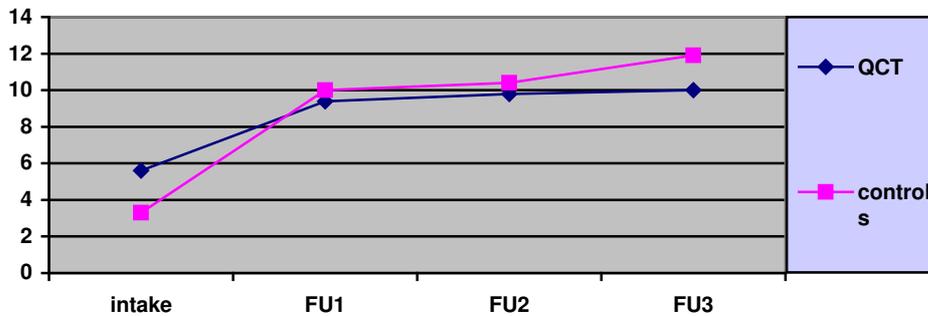


The hypothesis regarding an improvement in health status and in mental health can be confirmed for both groups.

## 7.8 Testing hypothesis : improvements in social integration

A steady increase in average working days per last month can be observed (see Tab. 69, Fig. 10).

Fig. 10 Improvements in employment status in both groups (mean working days)



The hypothesis regarding an improvement in social integration, measured by employment status, can be confirmed for both groups, but more importantly in the control group (Tab. 70).

## 7.9 Testing hypotheses : outcome predictors

### Predictors for a reduction of substance use

The reduction of substance use is measured by comparing substance use during the last 30 days at intake and across follow-up measurements. The LOCF (last observation carried forward) model applies.

Various models have been used in order to test the hypotheses on predictors. The first model included the variables QCT, inpatient treatment and country. In the second model, first order interactions were included. The third model contained the variables QCT, inpatient treatment and large centres including interactions between QCT and centres. The resulting basic model is based on the variables QCT, centre and interaction without inpatient treatment (inpatient treatment not being significant in the third model). Including centres is empirically justified, including QCT group as a variable is theoretically justified.

Using the basic model, the following results are obtained :

Significant predictors in bivariate analysis :

- The initial level of drug use : the higher the initial level of use, the higher the probability of a significant reduction (this being a statistical artefact)
- Delinquency score at intake : the higher the initial delinquency score, the lower the probability of a significant reduction
- The number of days in treatment : the longer the treatment period, the higher the probability of a significant reduction (the QCT variable is not relevant for this finding as one could presume)

- Country is a significant predictor : highest values for substance use at intake and follow-ups in th UK cohort, lowest ones at intake and follow-ups in the Italian cohort; comparable values in the Austrian, German and Swiss cohorts
- Being a national : nationals have a lower probability of a significant reduction at FU2 and FU3 only (this might be due to repatriating non-nationals, but the missing values for non-nationals are not higher at these time points than those for nationals)
- Injecting drugs : injectors have a lower probability of a significant reduction
- Opiates is a significant predictor (testing for opiates and injecting, opiates is the stronger predictor); opiate use as a main drug has a lower probability of a significant reduction
- Cocaine : cocaine use as a main drug has a lower probability of a significant reduction
- Polydrug use : polydrug users have a lower probability of a significant reduction (reducing opiate and cocaine use to be irrelevant as predictors)
- Self-efficacy : high scores of self-efficacy have a higher probability of a significant reduction

Not significant are the following :

- Age ; older probands do not have a higher probability of a significant reduction (no “ageing-out” effect)
- Gender : (not between any of the follow-up time points); females do not have a higher probability of a significant reduction (no “gender bonus”)
- Alcohol; alcohol as a main drug has no lower probability of a significant reduction
- Number of treatment episodes (last 6 months) is not a significant predictor
- Length of drug career (age at onset) is not a significant predictor
- Length of criminal career (age at onset) is not a significant predictor
- Score of violent crimes is not a significant predictor
- Committing crimes before taking drugs is not a significant predictor
- Motivation scores (pre-contemplation scores, contemplation scores, action scores) are no significant predictors
- Perceived coercion is not a significant predictor
- Mental health score is not a significant predictor

In the final model, using the GLM procedure and the sub substance use data according to LOCF, and when including the variables study group, large centers, polydrug use, then the significant variables are country and study group.

### Predictors for a reduction of crime

Reduction of crime is measured by comparing delinquency during the last 6 months at intake and at follow-up interviews. As follow-up periods may not coincide with the 6 month period, only delinquency committed during the entire follow-up is compared to the value at intake. The values are dichotomous : no criminal event=0, any number of criminal events=1.

Model building through forward and backward logistic regression included all variables except large centers (due to numerical problems) and days in treatment (for theoretical reasons).

The following variables came out as significant predictors for delinquency at follow-up :

- Probands in the QCT group have a higher risk to commit crimes during follow-up in comparison to voluntary probands in the control group

This finding is consistent with the higher overall crime load (total number of reported crimes) in the QCT group at intake (1704), in comparison with the control group (1178, see Tab 41).

- National probands have a higher risk to commit crimes during follow-up in comparison to non-nationals. Our data do not allow to explain this finding.
- Older probands have a lower risk to commit crimes during follow-up in comparison to younger probands

This is in line with a general tendency of reduced crime rates with growing age (ageing-out process)

- Probands receiving in-patient treatment have a lower risk to commit crimes during follow-up in comparison to probands in other treatments

Several explanations are to be considered here. A selection factor may be involved, but also a different impact of a comprehensive residential programme as compared to other types of interventions

All other variables are no significant predictors for delinquency.

### System effects

The testing of the following hypotheses is based on information from the QCT system description as delivered under work package 1 :

- that QCT systems which involve the sentencing judge in subsequent case reviews have better retention and outcome than those who do not
- that QCT systems that process drug tests and case reviews more quickly have better retention and outcome.

Tab. 83 Overview of national regulations for QCT supervision

<b>Part 1</b>	<b>Austria</b> § 35 SMG § 37 SMG	<b>Austria</b> § 39 SMG	<b>England and Wales</b> Arrest Referral Schemes	<b>England and Wales</b> Community Rehabilitation Orders	<b>England and Wales</b> Drug Testing and Treatment Orders DTTO
<b>How quick is the response to a positive result of the drug test?</b>	Depends on health authorities and treatment providers	See above	N/A	Varies on the method used and drug(s) tested. Results can take five working days.	Varies depending on the method used and drug(s) tested. Results can take five working days.
<b>Who assesses treatment outcome?</b>	Remand Judge Health authorities Prosecution	Judge Based on report of Treatment provider	Treatment provider	Probation Treatment provider	Judge Probation Treatment provider
<b>What is the mode of control by the legal authorities over the treatment process? Is there a legally defined mode of cooperation between treatment providers and legal authorities?</b>	Bi-monthly Reports No legally binding mode of cooperation	Bi Monthly Reports and decision on the suspended sentence after the regular end of the treatment programme	Treatment engagement is essentially voluntary.	Enforcement (through breach proceedings and revocation).	Enforcement (through breach proceedings and revocation).
<b>Part 2</b>	<b>Germany</b> § 35 - 39 BtMG § 56 StGB	<b>Netherlands</b> VIA; IMC; Add.C.; Loc.Fac.; FVK	<b>Italy</b>	<b>Switzerland</b>	
<b>How quick is the response to a positive result of the drug test?</b>	Results can take four days		It depends, usually five days	Depends on the internal programme rules	
<b>Who assesses treatment outcome?</b>	Treatment provider Prosecution	Treatment provider	Probation (CSSA) Treatment provider (Servizio Territoriale Ser.T.)	Regulations are made by Cantonal Justice Departments	
<b>What is the mode of control by the legal authorities over the treatment process? Is there a legally defined mode of cooperation between treatment providers and legal authorities?</b>	Treatment provider and/ or offender have to write reports to the court during treatment		Periodic monitoring about one time per three months.	Regulations are made by Cantonal Justice Departments : - DJ mandates probation officer to contact treatment agency - DJ asks for a report on treatment - DJ reports to court on result of QCT	

From Werdenich, Waidner & Trinkl (2004). Quasi-compulsory treatment of drug-dependent offenders. A description of existing systems. *Verhaltenstherapie und Verhaltensmedizin* 25:71-78

As can be seen from Tab. 82, procedural details regarding the assessment of treatment and review process differ considerably between countries and inside countries. No relation to retention and outcome can be made on the available information base. More detailed information and analysis would be needed here.

The speed of reacting to positive drug tests is, as far as information is available, similar across countries. Given the national differences in retention and outcome, no relation to speed of procedure can be established.

## 8 SUMMARY

### Research protocol

The hypotheses for quantitative evaluation, the detailed protocol and the instrument set have been established, discussed with partners and revised according to the work-package schedule.

### Recruitment of probands

Recruitment into the study followed the revised protocol, but was delayed by slow intake of new clients into the participating treatment services. The recruitment period was prolonged for 6 months beyond the original deadline. Follow-up interviews are delayed accordingly.

### Data collection and data control

This task was performed along the conditions set by the adapted research protocol and with the revised instrument set. Data entry into access templates caused some problems initially which were overcome. Data control resulted in an important number of missings and errors, which invited an extensive round of corrections to be made. Follow-up data suffered from increased rates of missing data, with important variations across instruments and items. The respective figures are presented in the tables and comments.

### Analysis of intake data on clients

The analysis of intake data followed the respective analysis plan. It concentrated first on comparing national samples, and second on comparing the experimental and the control group. National samples as well as groups show a range of differences in demographic, health, drug use and crime variables. Also, the type of treatments involved is inconsistent across national samples and across groups. The analysis of outcome data and the testing of predictor hypotheses will have to deal with these differences. Two hypotheses were tested on the basis of the intake data. There is a significant correlation between the extent of perceived external (especially legal) pressure and legal status of probands at entry, but no correlation between external pressure and motivation.

### Analysis of service data

The analysis of service data revealed important differences in size and setting, in treatment provision and duration, in the proportion of QCT clients and in staffing. Out of these differences, only the setting (inpatient vs. outpatient) is a relevant factor for outcome.

### Attrition during follow-up

47.1% of probands dropped out of the study within the 18 months since intake. A major loss occurred during the first months.

Retention is best in Switzerland and lowest in Germany and Austria. There are further differences across sites. Three countries have higher retention rates in the control group,

Austria and Germany in the experimental group. Overall, there are no relevant differences in retention between experimental group and control group.

Concerning the proband characteristics at intake, they are not predictive for attrition, including demographic characteristics, substance use and criminal involvement. The only relevant factors are country and type of treatment received.

### Descriptive analysis : changes across follow-up

The descriptive analysis of follow-up data over time (across the 3 follow-up measurements) showed the following :

- 63% of probands had left treatment at month 18. Duration of treatment shows major differences between countries, with lowest values in the UK and Austria and the highest value in Italy. The major reason for discontinuation was the proband's decision to leave
- continuous improvement in employment status (measured as number of working days past month) in both groups, but more important in the control group
- major improvements in overall health status (measured as number of sick listed days last month) in both groups, with higher values for sickness throughout in the control group
- continuous major improvements in mental health status (measured by the number of psychiatric diagnosis) in both groups, without notable group differences
- substantial decrease in substance use (measured as consumption days last month). A drug-free state was mentioned by 43.3% after 18 months, compared to 1.3% at intake. The most important reduction occurred before month 6, but light re-increases are noted between month 6 and 18. Decrease is noted in both groups, resulting in similar rates after 18 months, while the experimental group started out with higher rates. It may be concluded that QCT probands profit even more from treatment in terms of substance use reduction
- substantial decrease of crime involvement (measured by the number of types of crimes committed). Crime-free status was mentioned by 77.9% after 18 months, compared to 48.8% at intake. As with substance use, a major reduction occurred during the first 6 months, with a slight re-increase thereafter. Reductions were observed in both groups, the more important ones in the experimental group with higher initial crime involvement. QCT probands therefore show comparatively better outcomes following treatment
- reductions in substance use and crime involvement are significantly higher in probands still in treatment at follow-up in comparison to those who had left treatment
- decrease in overall perceived coercion but no change in perceived high coercion
- during follow-up, there was a trend from residential to out-patient treatments in those who were still or again in treatment.

### Testing the main hypotheses on outcome

From the main hypotheses the following could be confirmed

- Reduction of substance use by probands in the QCT group
- Reduction of crime by probands in the QCT group
- Improvement in health of probands in the QCT group
- Improvement in social integration of probands in the QCT group
- Reduction of substance use by probands in the control group CG1
- Reduction of crime by probands in the control group CG1
- Improvement in health of probands in the control group CG1
- Improvement in social integration of probands in the control group CG1
- The QCT group has no better retention than CG1, if other factors are statistically controlled (e.g. mental health, perceived coercion, initial motivation, previous criminality, type of drug use, length of drug use).
- The QCT group has different outcome (crime and drug use) than CG1, if other factors are statistically controlled (e.g. mental health, perceived coercion, initial motivation, previous criminality, type of drug use, length of drug use). Reductions in crime and substance use are more important in the QCT group, given the high values of both at intake and resulting in similar rates at the end of follow-up.

### Testing predictors for outcome

Various models have been used for testing of predictors.

In bivariate analysis, significant predictors for a reduction of substance use during follow-up are : country, being a national, initial level of drug use, injecting drugs, polydrug use, delinquency score at intake, self-efficacy, number of days in treatment

- In the final model, the following variables were found to be significant predictors for a reduction of substance use during follow-up : treatment centers
- The following variables were found to be significant predictors of crime during follow-up : higher reduction in the QCT group and in national probands vs. non-nationals, lower reduction in older probands and in probands receiving inpatient treatment.

### Final conclusions :

*Quasi-compulsory treatment is effective in reducing substance use and crime, and in improving social integration through employment.*

*Quasi-compulsory treatment is as effective as voluntary treatment (if received in the same treatment services).*

*Giving drug dependent offenders an option to go to treatment is an effective alternative to imprisonment.*

**Annex : instrument set for quantitative evaluation**

*QCT Europe: Shortened EuropASI*

*P1a*

Country code<sup>1</sup> City code<sup>1</sup> Unit code<sup>1</sup> Client code<sup>1</sup> Group<sup>1</sup> Interviewer code<sup>1</sup>  
 Name left out

AA. I.D. number left out

AB. Type of treatment service:

0=No treatment	7=Psychiatric hospital
1=Outpatient detoxification	8=Other hospital/ward
2=Detoxification residential	9=Day-care & substitution
3=Outpatient substitution	10=Jail/Prison
4=Outpatient drug-free	11=Probation
5=Drug-free residential	12=Custody
6=Day care	13= other

AK. Special:

1=Patient terminated
2=Patient refused
3=Patient unable to respond

AL. Date from which last

30 days are counted\*: Y Y Y Y M M D D

AM left out

AN left out

AO. COMMENTS:

AC. Date of admission:

Y Y Y Y M M D D

AD. Date of interview:

Y Y Y Y M M D D

AE. Time begun: (HH MM)

AF. Time ended: (HH MM)

AG. Class:

1=Intake  
 2=Follow/up (||No of assessment)

AH. Contact code: 1=In person 2=Phone

AI. Gender: 1=Male 2=Female

AJ left out

\*) In the experimental group, past 30 days before being arrested (arrest that led to QCT) or (if not arrested) past 30 days before entering treatment.

## B. GENERAL INFORMATION

### B1. Current residence:

- 1=Large city (>100.000)
- 2=Medium (10.000-100.000)
- 3=Small (rural) (<10.000)

### B2. City code:

### B3. How long have you lived at this address?

Y Y M M

### B4. Is this residence owned by you or your family? 0=No 1=Yes

### B4a. Have you been homeless during the last 30 days? 0=No 1=Yes

### B4b. If yes, where did you stay during these days?

- 1=Shelter
- 2=Friends
- 3=Car/caravan
- 4=In a building
- 5=Outside
- 6=Other

### B5. Age:

### B6. Nationality: (see WHO code)

### B6a. Ethnicity

- 1= White
- 2= White British
- 3= White Irish
- 4= White other
- 5= Mixed (White and Black/ White and Asian, other)
- 6= Asian or Asian British (Indian, Pakistani, Bangladeshi, other)
- 7= Black or Black British (Caribbean, African, other)
- 8= Chinese or other Chinese or other ethnic group
- 9= all ethnic groups
- 10= not stated

### B7. Country of birth of:

- a Respondent
- b Father
- c Mother

### B8 Have you been in a controlled environment in the past 30 days?

- 1=No
- 2=Jail
- 3=Alcohol or drug treatment
- 4=Medical treatment
- 5=Psychiatric treatment
- 6=Detoxification only
- 7=Other

### B9 If 2-7 on B8, how many days?

### B13. COMMENTS

**C MEDICAL STATUS**

**C1.** How many times in your life have you been hospitalized for medical problems?  
(include o.d.'s, d.t.'s, exclude detoxification)

**C10.** Have you been treated for problems by a physician during the past 6 months? 0=No 1=Yes

**C2.** How long ago was your last hospitalization for medical problems?      Y Y M M

**C11.** How many days have you experienced medical problems in the past 30 days?

**C3.** Do you have any chronic medical problems which continue to interfere with your life?  
0=No 1=Yes

**C3a.** If Yes, specify:

**CONFIDENCE RATING**

Is the above information significantly distorted by:

**C15.** Patient's misrepresentation?  
0=No 1=Yes

**C16.** Patient's inability to understand?  
0=No 1=Yes

**C17.** COMMENTS:



**E DRUG/ALCOHOL USE**

In the experimental group, past 30 days before being arrested (arrest that led to QCT) or (if not arrested) past 30 days before entering treatment.

In the comparison group, past 30 days before entering treatment

1Age 2Lifetime 3Past 30 4Rt of  
first use Yrs. days adm\*

*E1.* Alcohol – any use

*E2.* Alcohol – over threshold

*E3.* Heroin

*E4.* Methadone/LAAM

*E5.* Other opiates/analgesics

*E7.* Cocaine

*E8.* Amphetamines

*E9.* Cannabis

~~*E10.* Hallucinogens~~

*E11.* Crack

*E12.* MDMA etc.

*E13.* Other stimulants

*E14.* Barbiturates

*E15.* Benzodiazepines

*E16.* Other hypnotics/sedatives

*E17.* LSD

*E18.* Other hallucinogens

*E19.* Other

*E20.* More than one substance  
per day (items 2 to 18)

**E21.** Have you ever injected?

0=No 1=Yes

**E21a.** (if yes on E14, concerns any injections)

a Age 1st injection. (YY)

b Lifetime. (number of years)

c Injection past 6 months. (no of mths)

d Last 30 days. (number of days)

**E21b.** If injections past 6 months:

1=Not sharing 3=Often sharing with other

2=Sometimes sharing with other

**E22.** How many times have you:

**E22a.** Had alcohol delirium tremens

**E22b.** Overdosed on drugs:

\*Route of administration:

1=Oral 2=Nasal 3=Smoking 4=Non IV injection 5=IV injection 6=Other

Note: See manual for representative examples for each drug class

**E23.** Which substance is the major problem?

Please code as above (1-19) or, see below.

00=No problem

15=Alcohol & Drug (dual addiction)

16=Polydrug

**E24.** Type of services and times you received treatment:

1 Alcohol 2 Drugs (00=still abstinent)

1 Outpatient detoxification

2 Detoxification

3 Outpatient substitution

4 Outpatient drug-free

5 Drug-free residential

6 Day care

7 Psychiatric hospital

8 Other hospital/ward

9 Other treatment

**E17.** How many months lasted the longest period that you have been abstinent/clean as the result of these treatments?

a Alcohol

b Drugs

**E29.** How many days in the past 30 have you experienced:

a Alcohol problems

b Drug problems

**E25.** How long was your last period of voluntary abstinence from this major substance not as consequence of residential treatment? When not clear, ask patient.(00=never abstinent)

**E26.** How many months ago did this abstinence end ? (referring to E25)

**E27.** How much would you say you spent during the past days on:

a Alcohol (amount) \_\_\_\_\_

b Drugs (amount ) \_\_\_\_\_

**E28.** How many days of the past 30 have you received outpatient treatment?

(include AA, NA, etc.)

CONFIDENCE RATING

Is the above information significantly distorted by

**E30.** Patient's misrepresentation?

0=No 1=Yes

**E31.** Patient's inability to understand?

0=No 1=Yes

**E32.** COMMENTS

**H FAMILY/SOCIAL RELATIONSHIPS**

**H1. Martial status:**

- 1=Married
- 2=Remarried
- 3=Widowed
- 4=Separated
- 5=Divorced
- 6=Never married:

**H2.** How long have you been in this martial status? (if never married, since 18) Y Y M M

**H3.** Are you satisfied with this situation?

**H4.** Usual living arrangements? (past 3 0 days before entering treatment)

- 1=With sexual partner and children
- 2=With sexual partner alone
- 3=With children alone
- 4=With parents
- 5=With family
- 6=With friends
- 7=Alone
- 8=Controlled environment
- 9=No stable arrangements

**H5.** How long have you lived in these arrangements? long

Y Y M M  
(if with parents or family since age 18)

**H6.** Are you satisfied with these living arrangements? 0=No 1=Indifferent 2=Yes

Do you live with anyone who:

**H6a.** Has a current alcohol problem? 0=No 1=Yes

**H6b.** Uses psychoactive drugs? 0=No 1=Yes

Have you had significant periods in which you have experienced serious problems getting along with

- 0=No 1=Yes
- 1 Past 2 In
- 30 days your life

**H10.** Mother

**H11.** Father

**H12.** Siblings

**H13.** Sex. partner/spouse

**H14.** Children

**H15.** Other close relative

**H16.** Close friends

**H17.** Neighbors

**H18.** Co-workers

**H7.** With whom do you spend most of your free time?

- 1=Family, without current alcohol or drug problems
- 2=Family, with current alcohol or drug problems
- 3=Friends, without current alcohol or drug problems
- 4=Friends, with current alcohol or drug problems

5=Alone

**H8.** Are you satisfied with spending your free time this way? 0=No 1=Indifferent 2=Yes

**H9.** How many close friends do you have?

DIRECTION FOR H9a + H10-H 18:  
 0=Clearly no for all in the category  
 1=Clearly yes for any within the category  
 1=Clearly yes for any within the category  
 N=There never was a relative from that category

**H9a.** Would you say you have had close,

lasting, personal relationships, with any of the following people in your life?

- 1 Mother
- 2 Father
- 3 Sibling
- 4 Sexual partner/spouse
- 5 Children
- 6 Friends

**CONFIDENCE RATING**

Is the above information significantly distorted by:

**H25.** Patient's misrepresentation?

0=No 1=Yes

**H26.** Patient's inability to understand?

0=No 1=Yes

**H27.** COMMENTS:

**i PSYCHIATRIC STATUS**

**i1.** How many times have you been treated for any psychological or emotional problems:

**a** As inpatient?

**b** As outpatient?

**i2.** Do you receive a pension for a psychiatric disability? 0=No 1=Yes

Have you had a significant period, in which you have:

(Questions i3-i6+i8 concerns period that was direct result of drug or alcohol use)

**1) Past 2) In  
30 days your life**

- i3.** Experienced serious depression?
- i4.** Experienced serious anxiety or tension?
- i5.** Experienced trouble understanding, concentrating, or remembering?
- i6.** Experienced hallucinations?
- i7.** Experienced trouble controlling violent behaviour?
- i8.** Been prescribed medication for any psychological/emotional problem?
- i9.** Experienced serious thoughts of suicide?
- i10.** Attempted suicide?
  - i10a.** How many times have you attempted suicide?
  - i10b.** Experienced anorexia, bulimia or other eating disorders?
- i11.** How many days of the past 30 have you experienced these psychological/emotional problems?

**i16.** Obviously anxious/nervous?

**i17.** Having trouble with reality thought disorders, paranoid thinking?

**i18.** Having trouble comprehending, concentrating, remembering?

**i19.** Having suicidal thoughts?

**CONFIDENCE RATING**

Is the above information significantly not a distorted by:

**i21.** Patient's misrepresentation?

0=No 1=Yes

**i22.** Patient's inability to understand?

0=No 1=Yes

**i23.** COMMENTS:

THE FOLLOWING ITEMS ARE TO BE COMPLETED BY THE INTERVIEWER

At the time of the interview, is patient: 0=No 1=Yes

**i14.** Obviously depressed/withdrawn?

**i15.** Obviously hostile?

*QCT Europe : Crime questions*

*P1c*

1. "Have you ever done...?"







**LEGAL STATUS**

6. Was this admission prompted by the criminal justice system?  
(judge, probation/ parole officer, etc.)

0= no                    1= yes                    1

7. Are you on probation or parole?

0= no                    1= yes                    1

8. For which crime have you received the QCT sentence (same categories A-V) 1

9. Motive for last crime that brought you to court:

1= need for drugs

2= need for money

3= acceptance by peers

4= sensation seeking

5= in order to get treatment

6= other

if other, please specify .....

**CONFIDENCE RATING**

Is the above information significantly distorted by:

A Patient's misrepresentation

B Patient's inability to understand

Country code<sup>1</sup> City code<sup>1</sup> Unit code<sup>1</sup> Client code<sup>1</sup> Group<sup>1</sup> Interviewer code<sup>1</sup>

The following questionnaire is designed to identify crimes you have experienced during the last 12 months. Please read the questions below carefully, and then decide on your answer. Your answers are completely private and confidential. They are only used for statistics in an anonymised format.

To each of the following eight questions, please use the following codes :

0=No

1=Yes

97=too many times to remember

- 
- |   |     |
|---|-----|
| 1. During the last 12 months, has anyone burgled or broken into your house/flat or tried to do so   | Π   |
| If yes, how many times has this happened  | ΠΠΠ |
| 2. During the last 12 months, has anyone tried to steal a car, motorcycle or other vehicle that you were responsible for  | Π   |
| If yes, how many times has this happened  | ΠΠΠ |
| 3. During the last 12 months, have you had anything stolen from your pocket or bag  | Π   |
| If yes, how many times has this happened  | ΠΠΠ |
| 4. During that time, have you had anything stolen from you at all   | Π   |
| If yes, how many times has this happened  | ΠΠΠ |
| 5. During the last 12 months, has anyone physically attacked or assaulted you or molested you in any way  |     |
| Π   |     |
| If yes, how many times has this happened  | ΠΠΠ |
| 6. During the last 12 months, has anything else happened to you – apart from what you have mentioned already – which you think might have involved a crime of any sort  | Π   |
| If yes, how many times has this happened  | ΠΠΠ |
| 7. Some of these things may have happened at the same time. For example, you may have been assaulted and had something stolen at the same time. How many separate incidents that have happened over the past 12 months are we talking about ? | Π   |
|   | ΠΠΠ |
| 8. Excluding any crimes you have just told me about, have you been insulted, pestered, or intimidated in any way by anybody who is not a member of your household   | Π   |
| If yes, how many times has this happened  | ΠΠΠ |

adapted from the British Crime Survey by Fitzgerald et al 2002

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Country code<sup>1</sup> City code<sup>1</sup> Unit code<sup>1</sup> Client code<sup>11</sup> Group<sup>1</sup> Interviewer code<sup>1</sup>

*This instrument identifies by whom and to what extent you feel pressured to enter the treatment programme resp. to stay in the treatment programme you are involved in at present. Please read the questions below carefully, and then decide whether you agree or disagree with the statements. Your answers are completely private and confidential.*

For each of the following fourteen questions, choose one of these responses and circle the appropriate number :

**1** Not at all      **2** Slightly      **3** Moderately      **4** Considerably **5** Extremely

***How much do you feel pressured to be in this treatment programme by***

- |    |  |                  |
|----|--|------------------|
| 1. | <u>medical</u> authorities (doctor, health center...)          | <b>1 2 3 4 5</b> |
| 2. | your family or friends   | <b>1 2 3 4 5</b> |
| 3. | your employer  | <b>1 2 3 4 5</b> |
| 4. | <u>legal</u> authorities (police, court, probation officer...) | <b>1 2 3 4 5</b> |
| 5. | yourself   | <b>1 2 3 4 5</b> |
| 6. | others   | <b>1 2 3 4 5</b> |

if others, please specify : .....

adapted from TCU, Institute of Behavioural Research ([www.criminal.org](http://www.criminal.org))

questions filled in	1	by client
	2	by interviewer

Country code<sup>1</sup> City code<sup>1</sup> Unit code<sup>1</sup> Client code<sup>1</sup> Group<sup>1</sup> Interviewer code<sup>1</sup>

**QCT: Self-efficacy Questionnaire****P4**

The following questionnaire is designed to identify how you personally feel about tackling with tasks and problems. Please read the questions below carefully, and then decide whether you agree or disagree with the statements. Your answers are completely private and confidential.

For each of the following fourteen questions, choose one of these responses and circle the appropriate number :

	1 Strongly disagree	2 Disagree	3 Unsure	4 Agree	5 Strongly agree
1. I am a „take charge“ person					<b>1 2 3 4 5</b>
2. I try to let things work out on their own (-)					<b>1 2 3 4 5</b>
3. After attaining a goal, I look for another, more challenging one					<b>1 2 3 4 5</b>
4. I like challenges and beating the odds					<b>1 2 3 4 5</b>
5. I visualize my dreams and try to achieve them					<b>1 2 3 4 5</b>
6. Despite numerous setbacks, I usually succeed in getting what I want					<b>1 2 3 4 5</b>
7. I try to pinpoint what I need to succeed					<b>1 2 3 4 5</b>
8. I always try to find a way to work around obstacles, nothing really stops me					<b>1 2 3 4 5</b>
9. I often see myself falling so I dont get my hopes too high (-)					<b>1 2 3 4 5</b>
10. When I apply for a position, I imagine myself filling it					<b>1 2 3 4 5</b>
11. I turn obstacles into positive experiences					<b>1 2 3 4 5</b>
12. If someone tells me I can't do something, you can be sure I will do it					<b>1 2 3 4 5</b>
13. When I experience a problem, I take the initiative to resolve it					<b>1 2 3 4 5</b>
14. When I have a problem, I usually see myself in a now-win situation (-)					<b>1 2 3 4 5</b>

**Note :** (-) indicates the item has to be reversed

Based on Greenglass, Schwarzer & Taubert „Self-efficacy scale“ 1999

questions filled in      1      by client  
    2      by interviewer

Country code<sup>1</sup> City code<sup>1</sup> Unit code<sup>1</sup> Client code<sup>1</sup> Group<sup>1</sup> Interviewer code<sup>1</sup>

**QCT: Readiness to Change Questionnaire****P5**

The following questionnaire is designed to identify how you personally feel about your drug taking right now. Please listen to each of the questions below carefully, and then decide whether you agree or disagree with the statements. Some of the questions will refer to the time before entering treatment. Your answers are completely private and confidential.

For each of the following twelve questions, choose one of these responses and circle the appropriate number :

	<b>1 Strongly Disagree</b>	<b>2 Disagree</b>	<b>3 Unsure</b>	<b>4 Agree</b>	<b>5 Strongly Agree</b>
1. I don't think I take/took too much drugs(P)					<b>1 2 3 4 5</b>
2. I am/was trying to take less than I used to (A)					<b>1 2 3 4 5</b>
3. I enjoy/enjoyed my drugs, but sometimes I take too much (C)					<b>1 2 3 4 5</b>
4. Sometimes I think/thought I should cut down on my drug taking (C)					<b>1 2 3 4 5</b>
5. It is/ was a waste of time thinking about my drug taking (P)					<b>1 2 3 4 5</b>
6. I have just recently changed my drug habits (A)					<b>1 2 3 4 5</b>
7. Anyone can talk about wanting to do something about drug taking, but I am actually doing/ I did something about it (A)					<b>1 2 3 4 5</b>
8. I am/ was at the stage where I should think about taking less drugs (C)					<b>1 2 3 4 5</b>
9. My drug taking is/was a problem sometimes (C)					<b>1 2 3 4 5</b>
10. There is/ was no need for me to think about changing my drug taking (P)					<b>1 2 3 4 5</b>
11. I am actually changing my drug taking habits right now (A)					<b>1 2 3 4 5</b>
12. Taking less drugs would be pointless for me (P)					<b>1 2 3 4 5</b>

Based on Readiness to change questionnaire (Copyright © Commonwealth of Australia 2000)

questions filled in	1	by client
	2	by interviewer

Country code<sup>1</sup> City code<sup>1</sup> Unit code<sup>1</sup> Client code<sup>1</sup> Group<sup>1</sup> Interviewer code<sup>1</sup>

Next to each statement below, please put a mark (X) in ink to show whether you “strongly agree”; “agree”; “disagree”; “strongly disagree” or are “unsure” of your opinion.

Your views are confidential and will only be seen by our research staff. When you have filled out the form please seal it in the envelope provided.

Thank you very much for your help.

### b. Section 1: Your treatment

	STRONG- LY AGREE	AGREE	UNSURE	DIS- AGREE	STRONG- LY DISAGREE
<i>During my contact with this treatment</i>					
a. The staff have not always understood the kind of help I want.	0	1	2	3	4
b. I have been well informed about decisions made about my treatment.	0	1	2	3	4
c. The staff and I have had different ideas about what my treatment objectives should be.	0	1	2	3	4
d. There has always been a member of staff available when I have wanted to talk.	0	1	2	3	4
e. The staff have helped to motivate me to sort out my problems.	0	1	2	3	4
f. I have not liked all of the treatment sessions I have attended.	0	1	2	3	4
g. I have not had enough time to sort out my problems	0	1	2	3	4
h. I think the staff have been good at their jobs.	0	1	2	3	4
i. I have received the help that I was looking for.	0	1	2	3	4
j. I have not liked some of the treatment rules or regulations.	0	1	2	3	4

Note : (-) the items b, d, e, h, and i have to be reversed

**Section 2: This service**

Please write down in the box below any comments you would like to give us about the treatment you have received here. We would be very interested if you could tell us about how you think we could improve the service.

Thank you very much for your help!

---

Country code<sup>1</sup> City code<sup>1</sup> Unit code<sup>1</sup> Client code<sup>1</sup> Group<sup>1</sup> Interviewer code<sup>1</sup>

This form serves to check on self-report data from probands, by use of medical records and police records. The use of such records is only allowed if the respective conditions are met (see Quantitative Evaluation Protocol 1.7)

- 1a. Self-report data on drug use P1a/b have been checked on the basis of **medical examinations** and records (incl. urinalysis)  1= yes  
 0= no
- 1b. If no :           no consent was given     
                          no records available
- 1c. If yes           consistency with self-report was found   
                          major or multiple inconsistencies found
- 2a. Self-report data on crime involvement have been checked on the basis of **police records**  1= yes  
 0= no
- 2b. If no           no consent was given     
                          no records available
- 2c. If yes           consistency with self-report was found   
                          major inconsistencies found

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Country code<sup>1</sup> City code<sup>1</sup> Unit code<sup>1</sup> Client code<sup>1</sup> Group<sup>1</sup> Interviewer code<sup>1</sup>

**TREATMENT UNIT/ PROGRAMME FORM  
TUF-R**

Version: June 1997; revised by QCT team 2003

This instrument was produced by a working group composed of representatives from 7 FP's (Austria, Belgium, Greece, The Netherlands, Spain, Italy and the U.K.) under the coordination of the Greek F.P. Various relevant instruments already existing in Europe and in the U.S.A. constituted the basis for the development of the present instrument. TUF was adapted for the QCT study and named TUF-R.

Contents : the following modules are retained

- Instructions
- SECTION A Identification Information
- SECTION B Treatment Unit / Programme Characteristics
- SECTION C Treatment Planning / Approach / Goals / Services
- SECTION D Assessment of Clients
- SECTION E Completion of Treatment
- SECTION F Staffing
- SECTION H Evaluation (H1)
- SECTION K Changes in the Treatment Unit/Programme (K1-2)

c. Treatment Unit/ Programme

(name)  
.....  
(address)  
.....  
(phone)  
.....  
(fax)  
.....  
(email):  
.....

Reference year :   
(to be defined and printed by the institution responsible for data collection).

This questionnaire refers to the various aspects of treatment delivery to clients in the treatment unit/programme you are in charge of. Please review the INSTRUCTIONS below before filling out the form. If you have any questions while completing the questionnaire you can contact:

Mr/Ms ..... at the (name of the institute responsible for data collection, address, phone, Fax and email).  
.....  
.....  
.....

**INSTRUCTIONS**

**Definitions**

- In this questionnaire the term **treatment** is broadly defined as any activity/intervention targeted directly at people who have problems with their drug use (exclude clients for whom alcohol is the primary drug) and which aims to ameliorate their psychological, medical or social state. In this context, “treatment” includes services provided not only by qualified personnel but also by persons who are accepted to have appropriate therapeutic skills but who lack formal qualifications.

More specifically “treatment” includes interventions:

- aimed at detoxification and abstinence,
- aimed at drug-related harm reduction,
- nonmedical and medical interventions,
- short-term crisis or informal advice, counselling support,
- structured longer-term programmes.

However, it excludes:

- contacts at general services involving requests for social assistance only;
- contacts where drug use is not the reason for seeking help;
- imprisonment per se (though it includes admissions to drug treatment programmes in prison or to treatment as an alternative to prison);
- interventions solely concerned with the physical complications of drug misuse: e.g. overdoses or infections treated at a hospital;
- contacts by telephone or letter only;
- requests for practical information only;
- contact with family only.

- In this questionnaire **treatment unit/ programme** is defined as a functional or administrative/ organizational entity providing treatment for drug abusing clients.
- If your unit is separate from the main part of the overall programme, either administratively or in terms of treatment or services provided (or both), please complete the questionnaire in relation to your unit only.
- In this questionnaire a **structured unit/ programme** is defined as a unit/programme where clients are admitted/enrolled to follow treatment, of varying duration depending on the programme, aiming basically at reduction, abstinence or maintenance. **Low threshold programme** includes drop-in, street agencies, syringe exchange, outreach services.
- In this questionnaire **clients** are those individuals who are admitted or enrolled in treatment, as defined in the above mentioned treatment intervention, with the purpose of taking care of their drug problem.
- In this questionnaire information is required only for clients for whom the primary substance of abuse is a drug other than alcohol. Alcohol-abusing clients are included only if their primary substance of abuse is an illicit drug.
- **Reference year** : Calendar year for which information is provided (see front page).

#### d. Guidelines for completion

- If you find it necessary to have parts of this questionnaire filled out by other members of the staff, you can do so. However, please be sure to review the information for its accuracy and thoroughness.

- Provide answers, unless otherwise instructed, for the **reference year** as defined on the front page.
- Please answer all applicable questions by entering the requested information on the underlined blank spaces or by CIRCLING the code numbers corresponding to the response appropriate for your unit/programme. Numbers in parentheses next to underlined blank spaces are NOT to be circled. Just write the requested answer in the blank space, as follows:

(1) Write \_\_\_\_\_ your \_\_\_\_\_ answer  
 here.....

- Instructions are provided in each question regarding whether you should “circle one” or “circle all that apply”.
- If you do not know an answer or cannot easily find the answer, mark “**don’t know**” next to the question.
- Please **write clearly** any comments you might have in the margins of the printed page or use a **blank page** indicating the number of the question to which your comments refer.

**SECTION A**  
*IDENTIFICATION INFORMATION*

- A1 Name and address of the Treatment Unit/Programme:  
(name)  
.....  
(address)  
.....  
(phone) (fax) (email):  
.....
- A2 Name and address of the Parent Organization<sup>1</sup> to which the Treatment Unit/Programme belongs (IF APPLICABLE):  
(name)  
.....  
(address)  
.....  
(phone) (fax) (email):  
.....
- A3 Name of respondent:  
.....
- A4 Position of respondent:  
.....
- A7 Date of questionnaire completion:  day  month 20 year
- A8. In which sector is this treatment unit/programme based<sup>1</sup>?  
1 public  
2 fully private  
3 non-governmental
- A9. When did this treatment unit/programme begin treating clients with substance abuse problems?  
 (YEAR)

---

<sup>1</sup> Refers to the sector in which the centre is based, not the source from which it obtains funding. Thus a non-governmental (nonstatutory) centre which receives funding from public authorities is in the NGO sector, not the public sector. Similarly, a private clinic which accepts patients covered by health insurance or by welfare or local authorities, but which otherwise operates as a fee-paying private concern, is in the private sector.

SECTION B

TREATMENT UNIT/PROGRAMME CHARACTERISTICS

B1 Which of the following **types of treatment programme** describes best this treatment unit/ programme? (CIRCLE ONE)

**1. Specialised Residential**

- 1.1 hospital inpatient unit
- 1.2 therapeutic community
- 1.3 other specialised residential (SPECIFY): .....

**2. Specialised Nonresidential**

- 2.1 hospital outpatient treatment centre
- 2.2 structured day care centre/day hospital
- 2.3 local health centre/social service centre
- 2.4 low threshold/drop-in/street agency
- 2.5 other specialised nonresidential (SPECIFY): .....

**3. Based in General Services**

- 3.1 inpatient psychiatric hospital
- 3.2 outpatient mental health care centre
- 3.3 primary health care services
- 3.4 residential social care facility
- 3.5 nonresidential social care facility
- 3.6 other nonspecialised residential (SPECIFY): .....
- 3.7 other nonspecialised nonresidential (SPECIFY): .....

B2 What type of treatment modality is offered in this treatment unit/programme? (CIRCLE ALL THAT APPLY)

- 1. long term drug substitution / maintenance
- 2. medicament free therapy / longer term psychosocial treatment
- 3. advice / counselling / support
- 4. Other (SPECIFY): .....

B3 Is treatment within this treatment unit/programme divided into **phases** or **stages** of treatment? (e.g. treatment segmented into categories, such as intake, detox, treatment, relapse prevention, aftercare)

- 1. yes
- 2. no > **go to B6**

B3a. What phases or stages is treatment divided into at this treatment unit/programme? (CIRCLE ALL THAT APPLY)

- 1. Intake
- 2. Detoxification
- 3. Treatment
- 4. Relapse Prevention
- 5. Aftercare (rehabilitation - reinsertion)
- 6. Other (SPECIFY): .....

B4 Is this treatment unit/programme considered to be one phase of treatment in a **sequence** of closely affiliated treatment units<sup>2</sup>?

- 1. yes

---

<sup>2</sup> For example, a detox unit and a T.C. might be two closely affiliated treatment units/programmes.

2. no

B6 What is the typical planned duration for successful treatment for the majority of clients in this treatment unit/programme<sup>3</sup>?  
 (NUMBER OF DAYS)

B7 What is your treatment unit's/programme's client capacity<sup>4</sup>?  
 (NUMBER)

B7a How many clients were admitted/enrolled at this treatment unit/programme, including readmissions, during the reference year?  
 (NUMBER OF CLIENTS)

B7b How many of the clients were admitted/enrolled more than once during the reference year? (IF NO READMISSIONS, ENTER 000)  
 (NUMBER OF CLIENTS)  
 (there of number of women)

B7c How many new clients<sup>5</sup> were admitted/enrolled in this unit/programme during the reference year?  
 (NUMBER OF CLIENTS)  
 (there of number of women)

B8 Does this treatment unit/programme offer specific services exclusively tailored for certain special population subgroups? (CIRCLE ALL THAT APPLY)

1. yes
  - a. women
  - b. dually diagnosed (psychiatric/mental/emotional problems)
  - c. probationers or parolees
  - d. homeless
  - e. other (SPECIFY): .....
2. no

B9 What estimated percentage of clients currently in treatment and during the reference year fall into the subgroup probationers or parolees?

percent of current clients  
 percent of number of women  
 percent of clients during reference year  
 percent of number of women during reference year

B13 Does this treatment unit/programme currently maintain a waiting list?  
1. yes  
2. no > go to section C

B13a How many clients are currently on the waiting list<sup>6</sup>?  
 (NUMBER OF CLIENTS)

<sup>3</sup> Please specify by treatment modality offered in this treatment unit, if applicable.

<sup>4</sup> Number of beds/places for an inpatient service or average number of clients served monthly in a programme.

<sup>5</sup> Clients who have not asked for help in this treatment unit before.

<sup>6</sup> Please provide separate answers for each phase or treatment modality offered in this treatment unit, if appropriate.

B13b What is the average waiting period at present?  
 days

B14 How many referrals/ clients did this treatment unit/programme receive over the reference year from each of the following sources?  
 (FOR EACH CATEGORY, CIRCLE THE APPROPRIATE ANSWER IN TABLE B14: REFERRAL OF CLIENTS).

**TABLE B14: REFERRAL OF CLIENTS**

	REFERRALS	estimated fraction of clients in %
(1)	Self-referrals	
(2)	Other drug treatment units in organization	
(3)	Other drug treatment units outside the organization	
(4)	Client's family	
(5)	Physicians (private practitioners)	
(6)	Primary health services	
(7)	Hospitals	
(8)	Mental health centres	
(9)	Courts/Probation/Parole	
(10)	Other (SPECIFY):	
		100%

SECTION C

**TREATMENT PLANNING  
APPROACH – GOALS - SERVICES**

- C1 Does this unit/programme provide written information to clients about the treatment/ services offered (e.g. a brochure or other written material)?
1. yes
  2. no
- C2 Is a written, individual treatment plan usually developed for the clients in this unit/ programme?
1. yes
  2. no -> go to **C5**
- C3 Who usually develops these treatment plans? (CIRCLE ALL THAT APPLY)
1. Client's primary counsellor or professional in charge
  2. Intake worker
  3. Case conference or staff as a whole
  4. Other staff (e.g., physician or psychologist) (SPECIFY): .....
- C4 Do clients have a role in developing their treatment plan?
1. yes
  2. no > go to C5
- C4a To what degree are clients involved in developing their treatment plan<sup>7</sup>?(CIRCLE ONE)
1. None
  2. Minimal
  3. Moderate
  4. Great
- C5 What kind of individual treatment/services plan is most common in your unit/programme? (CIRCLE ONE)
1. Informal plan
  2. Formal written plan - not signed by the client
  3. Formal written plan - signed by the client

---

<sup>7</sup> Please specify by treatment modality offered in this treatment unit, if appropriate.

- C6 What degree of emphasis does this treatment unit/programme place on each type of counselling and therapy?  
(CIRCLE APPROPRIATE ANSWER FOR EACH TYPE OF COUNSELLING/THERAPY IN TABLE C-6: THERAPEUTIC EMPHASIS)

**TABLE C6: THERAPEUTIC EMPHASIS**

TYPE OF COUNSELLING OR THERAPY	<i>none</i>	<i>some</i>	<i>moderate</i>	<i>great</i>
(1) Medical/Psychiatric	0	1	2	3
(2) Individual psychotherapy	0	1	2	3
(3) Supportive individual counselling <sup>8</sup>	0	1	2	3
(4) Group therapy	0	1	2	3
(5) Family therapy	0	1	2	3
(6) 12 Steps	0	1	2	3
(7) Relapse prevention and learning to cope with relapse triggers	0	1	2	3
(8) Other (SPECIFY):	0	1	2	3
(9) Other (SPECIFY):	0	1	2	3
(10) Other (SPECIFY):	0	1	2	3

- C7 How many **group counselling** or group therapy sessions<sup>9</sup> does a client receive on average per month?  
 (HOURS PER MONTH)

- C8 How many **individual counselling** or individual therapy sessions<sup>10</sup> does a client receive on average per month?  
 (HOURS PER MONTH)

C8b Does your service offer the following harm reduction interventions (CIRCLE ALL THAT APPLY)

	yes	no
(1) preventing overdose	1	0
(2) information about nightshelter/ places to sleep, counselling and support in case of premature dropping out of treatment	1	0
(3) safer use information, syringe/needle exchange	1	0
(4) information about HIV/AIDS and hepatitis	1	0
(5) safer sex prevention, information about STD (Sexually Transmitted Diseases), condom availability	1	0

- C9 Do any clients in this treatment unit/programme currently receive methadone or other substitution drugs as part of their treatment plan?

<sup>8</sup> Such as counselling designed to build trust and self-confidence

<sup>9</sup> Please provide separate answers for each phase or treatment modality offered in this treatment unit, if appropriate.

<sup>10</sup> Please specify by phase or treatment modality offered in this treatment unit, if appropriate.

1. yes (specify drug) .....
2. no -> go to section C16

C9a What percentage of clients are currently receiving methadone or other substitution drugs?  
 (PERCENT)

C10 To what extent does this treatment unit/ programme encourage or support long-term maintenance (over 1 year) for patients receiving methadone?

1. Not at all
2. To some extent
3. To a moderate extent
4. To a great extent

C11 What percentage of clients in this treatment unit/ programme do you estimate to be on long-term (over 1 year) methadone maintenance?  
 (PERCENT)

C12 To what extent does this treatment unit/programme encourage or support return to abstinence (detoxification) from methadone or other substitute drug?

1. Not at all
2. To some extent
3. To a moderate extent
4. To a great extent

C13 Is LAAM used in this treatment unit/programme? (CIRCLE ONE)

0. Never
1. Rarely
2. Sometimes
3. Frequently
4. Always

C14 Is Naltrexone or any other narcotic antagonist used in this treatment unit/programme? (CIRCLE ONE)

0. Never
1. Rarely
2. Sometimes
3. Frequently
4. Always

C15 What drugs (other than methadone) does your treatment unit/ programme staff prescribe for clients in treatment? (CIRCLE ALL THAT APPLY)

0. None > go to section C16
1. Propoxyphene-N, propoxyphene, oxycodone, or other pain medications
2. Buprenorphine
3. Amitriptyline, Desipramine, or any other antidepressants
4. Disulfiram
5. Chlordiazepoxide, diazepam, alprazolam, flurazepam, or other benzodiazepines
6. Chlorpromazine, trifluoperazine, thioridazine, or other antipsychotics
7. Chloral hydrate or other sedatives or hypnotics
8. Pentobarbital, secobarbital or other barbiturates
9. Lithium carbonate, carbamazepine, valproic acid, or other antimanics
10. Other (SPECIFY):

*Note:* Commercial names of drugs appropriate in each country are to be provided in parentheses next to each generic chemical term in question C15.

C16 What is the emphasis and priority given in this treatment unit/programme to the **goals** listed in Table C16?  
 (CIRCLE THE APPROPRIATE ANSWER FOR EACH GOAL IN **TABLE C16a**. ASSIGN A RANK ORDER TO TOP 5 GOALS BY RANKING FROM THE MOST IMPORTANT AS 1 DOWN TO THE FIFTH MOST IMPORTANT AS 5 IN TABLE **C16b**).

**TABLE C6: THERAPEUTIC EMPHASIS**

GOALS	C16a. EMPHASIS				C16b. RANK ORDER
	none	small	mode- rate	great	Top 5 goals
1) Physical health and physical well being	0	1	2	3	
2) Practical life skills (e.g. personal functioning, coping skills)	0	1	2	3	
3) School education	0	1	2	3	
4) Job preparation	0	1	2	3	
5) Social skills	0	1	2	3	
6) Family relationships	0	1	2	3	
7) Self awareness, self-esteem, self confidence	0	1	2	3	
8) Change of environment (friends, living situation, location)	0	1	2	3	
9) Abstinence from cannabis	0	1	2	3	
10) Abstinence from alcohol	0	1	2	3	
11) Abstinence from all other drugs	0	1	2	3	
12) Avoiding blood or sexually transmitted infections such as HIV or hepatitis	0	1	2	3	
13) Other (SPECIFY):	0	1	2	3	
14) Other (SPECIFY):	0	1	2	3	
15) Other (SPECIFY):	0	1	2	3	

- C17 What type of services are provided to clients, or do clients have access to? Are these services provided on site<sup>11</sup> or off site<sup>12</sup>?  
(CIRCLE THE APPROPRIATE ANSWER FOR EACH SERVICE LISTED IN TABLE C17)

**TABLE C17: SERVICES OFFERED/ ACCESS TO SERVICES**

	YES	YES	NO
SERVICE	<i>ON SITE</i>	<i>OFF SITE</i>	
(1) Primary Medical Care	1	2	3
(2) Psychiatric Care	1	2	3
(3) Housing Assistance	1	2	3
(4) School/Academic Training	1	2	3
(5) Vocational Training	1	2	3
(6) Financial Assistance	1	2	3
(7) Job Finding Assistance	1	2	3
(8) Aftercare	1	2	3
(9) Other (SPECIFY):	1	2	3
(10) Other (SPECIFY):	1	2	3

**Question C18 for low threshold units/ programmes only**

**C18 For low threshold units/ programmes: estimations**

C18a What type of activities/ services are organized and delivered by this treatment unit/ programme) (CIRCLE THE APPROPRIATE ANSWER FOR EACH TYPE OF ACTIVITY/ SERVICE LISTES IN TABLE C18a)

C18b What is the **overall number of clients** that have received services in this treatment unit during the reference year? (IF UNKNOWN ENTER 000)

(NUMBER OF CLIENTS)

(there of number of women)

C18c How many **individual clients** have received the activities/ services listed in Table C18c during the reference year in this treatment unit/ programme? (ENTER NUMBER OF INDIVIDUAL CLIENTS IN TABLE C18c; IF NO CLIENTS ENTER 000)

C18d What was the **overall number of contacts** of clients that have received services in this treatment unit during the reference year? (IF UNKNOWN ENTER 000)

(NUMBER OF CONTACTS)

<sup>11</sup> Service provided within the treatment unit/programme

<sup>12</sup> Service provided elsewhere

**TABLE C18: ACTIVITIES/ SERVICES DELIVERED AND CLIENTS RECEIVING**

SERVICE	C18a SERVIC IS OFFERED		C18bc NUMBER OF CLIENTS (estimated)
	yes	no	
<b>1) ADVICE</b>			
- users	1	2	
- non users	1	2	
- other professionals/ service providers	1	2	
<b>2) CRISIS INTERVENTION/ ASSESSMENT/ REFERRAL/ COUNSELLING/ SOCIAL ASSISTANCE</b>			
- housing	1	2	
- legal advice/ assistance	1	2	
- financial assistance	1	2	
- education	1	2	
- training	1	2	
- job finding	1	2	
- prostitutes/ sex workers	1	2	
- nightshelter	1	2	
- drop in sessions	1	2	
<b>3) RELAPSE PREVENTION</b>	1	2	
<b>4) PRISON WORK</b>	1	2	
<b>5) GROUP WORK</b>			
- self help	1	2	
- counsellor led	1	2	
<b>6) SYRINGE EXCHANGE</b>			
- on site	1	2	
- mobile	1	2	
- other	1	2	
<b>7) OUTREACH WORK</b>			
<b>8) DRUG TESTING</b>			
<b>9) MEDICAL INTERVENTIONS – PRIMARY HEALTH CARE</b>			
<b>10 ALTERNATIVE – COMPLEMENTARY - THERAPIES</b>			

SECTION D  
ASSESSMENT OF CLIENTS

- D1 Is there an **intake or initial assessment**<sup>13</sup> service or procedure provided for clients?  
 1. yes  
 2. no > go to D3
- D1a Is the intake or initial assessment procedure provided within this treatment unit/ programme or elsewhere?  
 1. intake/initial assessment provided **within** this unit/programme  
 2. intake/initial assessment provided **in another** unit/programme
- D2 Is a standard assessment instrument routinely administered for intake or initial assessment purposes (CIRCLE ALL THAT APPLY)?  
 1. assessment is based on open interview  
 2. assessment is based on structured interview  
 3. assessment is based on checklist  
 4. other (SPECIFY):.....
- D3. Does this treatment unit/programme **routinely conduct assessment of clients**, in any of the following areas? Please indicate whether no, some, most or all clients are assessed. (CIRCLE AN ANSWER FOR EACH AREA IN TABLE D3)

**TABLE D3: Assessment of Clients**

AREA OF ASSESSMENT	<i>no clients</i>	<i>some clients</i>	<i>most clients</i>	<i>all clients</i>
(1) Drug use history	0	1	2	3
(2) Alcohol abuse history	0	1	2	3
(3) Educational/Vocational	0	1	2	3
(4) Criminal activity	0	1	2	3
(5) Family functioning	0	1	2	3
(6) Social support	0	1	2	3
(7) Living situation	0	1	2	3
(8) Psychological	0	1	2	3
(9) Psychiatric by psychiatrist	0	1	2	3
(10) Physical by physician	0	1	2	3
(11) Urinalysis or other biological tests	0	1	2	3
(12) HIV test 0 1 2 3	0	1	2	3
(13) Hepatitis B and C tests	0	1	2	3
(14) TB test	0	1	2	3
(15) Other (SPECIFY):	0	1	2	3
(16) Other (SPECIFY):	0	1	2	3

<sup>13</sup> Appraisal of client's characteristics and needs leading to his acceptance to treatment unit or to referral.

D4a Which instruments or tests are **routinely** administered? Please indicate whether no, some, most or all clients are assessed by standard instruments or tests. (CIRCLE AN ANSWER FOR EACH INSTRUMENT/TEST IN TABLE D4)

**TABLE D4: Assessment by use of standard instruments/ tests**

	<i>no clients</i>	<i>In spezial cases only</i>	<i>routinely</i>
<b>INSTRUMENT OR TEST</b>			
(1) Pampidou Treatment Demand Protocol	0	1	2
(2) Addiction Severity Index (ASI) or EuropASI	0	1	2
(3) Other alcohol or drug abuse screening instrument (SPECIFY): .....	0	1	2
(4) Psychiatric assessment instrument (SPECIFY): .....	0	1	2
(5) Personality assessment instrument (SPECIFY): .....	0	1	2
(6) Functional assessment inventory (SPECIFY): .....	0	1	2
(7) Family assessment inventory (SPECIFY): .....	0	1	2
(8) Child/Adolescent assessment (SPECIFY): .....	0	1	2
(9) Test for Organicity <sup>14</sup> (SPECIFY): .....	0	1	2
(10) Other (SPECIFY): .....	0	1	2
(11) Other (SPECIFY): .....	0	1	2

<sup>14</sup> For example, delirium, dementia, amnesic disorder, or other cognitive disorder.

SECTION E  
COMPLETION OF TREATMENT

E1. What are this treatment unit's/programme's criteria for successful completion or graduation (or successful maintenance if this is a methadone maintenance unit)?  
(CIRCLE ALL THAT APPLY)

- 1. graduation from full programme
- 2. discharge by mutual agreement
- 3. attainment of individual goals
- 4. other  
SPECIFY.....

E2. During the reference year, approximately what percentage of cases graduated from this treatment unit/programme, was discharged prematurely, dropped out, or other.

- 1. Treatment completed  
 (fraction of all clients in %)  
 (fraction of all female clients in %)
- 2. Premature discharge  
 (fraction of all clients in %)  
 (fraction of all female clients in %)
- 3. Client dropped out  
 (fraction of all clients in %)  
 (fraction of all female clients in %)
- 4. Administrative discharge  
 (fraction of all clients in %)  
 (fraction of all female clients in %)
- 5. decision by court  
 (fraction of all clients in %)  
 (fraction of all female clients in %)

E3. During the reference year what percentage of clients was prematurely discharged from this treatment unit (before treatment was completed) for each of the reasons listed in Table E-3?  
 (ENTER ANSWERS IN APPROPRIATE ROWS AND COLUMNS OF TABLE E3: REASONS FOR PREMATURE DISCHARGE OF A CLIENT. PLEASE PROVIDE DATA BASED EXCLUSIVELY ON PATIENT RECORDS).

**TABLE E3: Reasons for premature discharge**

REASONS	PERCENT
(1) Use of illicit drugs on the premises	
(2) Use of illicit drugs out of the premises	
(3) Involvement in illegal activities other than using illicit drugs	
(4) Missing counselling or therapy sessions	
(5) Violent behaviour on site	
(6) Violation of unit's/programme's rules or regulations (SPECIFY THE REGULATION) .....	
(7) Other reasons (SPECIFY): .....	
TOTAL	100%

## SECTION F STAFFING

This section refers to the paid staff and volunteers working in this unit/programme, or working in its parent organisation and providing services to this treatment unit/programme. Information is requested both in terms of the number of different individuals on the staff and in terms of conversion to full time equivalent (FTE), as defined below.

FULL TIME EQUIVALENT (**FTE**) means the number of hours that a full-time staff member would be expected to work in one week. Two half-time staff members or four quarter-time staff members are equal to one FTE. Use decimals to indicate partial FTE's, for example, one full-time and one half-time staff member would be considered 1.5 FTE's.

F1. How many hours per week are considered full-time employment in this treatment unit/programme?

(HOURS)

ENTER ANSWERS TO QUESTIONS F1a-F1d IN THE APPROPRIATE ROWS AND COLUMNS OF TABLE F-1: THERAPEUTIC STAFF. ENTER A NUMBER **OR** ZERO IN EACH SPACE IN THE TABLE.

F1a. How many staff were engaged<sup>15</sup> during the reference year in this treatment unit/programme, in total and by each staffing category?

F1b. How many Full-Time Equivalent (FTE) staff were engaged<sup>16</sup> during the reference year in this treatment unit/programme, in total and by each staffing category?

F1c. How many volunteers<sup>17</sup> were working during the reference year in this treatment unit/programme, in total and by each staffing category?

F1d. How many Full-Time Equivalent (FTE) volunteers were working<sup>18</sup> during the reference year in this treatment unit/programme, in total and by each staffing category?

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<sup>15</sup> Count all working individuals who receive payment regardless of whether they are paid directly by this treatment unit/programme, its parent organisation or by other institutions (e.g. labour subsidies) or from public/semi-public sources (e.g. conscientious objectors to the military service, labour fully or partly financed by job-training programmes, etc.). **Do not** count unpaid trainees; they should be included in volunteers. If the size of the staff changed during the reference year, give the size that applied to most of the year.

<sup>16</sup> In case overtime is worked by certain staff members, count these extra hours when calculating the FTE number.

<sup>17</sup> Include unpaid trainees.

<sup>18</sup> In case overtime is worked by certain staff members, count these extra hours when providing the FTE number.

**TABLE F1: Therapeutic staff**

STAFF CATEGORIES	<b>F1a.</b> <i>NUMBER OF STAFF</i>	<b>F1b.</b> <i>FTE STAFF</i>	<b>F1c.</b> <i>NUMBER OF VOLUNTEERS</i>	<b>F1d.</b> <i>FTE VOLUNTEERS</i>
<b>Total Number</b>				
(1) Psychiatrists				
(2) Other Physicians				
(3) Psychologists				
(4) Social Workers				
(5) Counsellors (no formal qualification)				
(6) Other therapists/ Rehabilitation Specialists/ Trainers/ Educators				
(7) Nurses				
(8) Other Professional				

F2. Are recovering substance abusers employed as staff to provide services in this treatment unit/programme?

1. yes
2. no -> go to **F3**

F2a. Approximately what percentage of the staff in the reference year were recovering drug or alcohol abusers? (Answer with reference to the number of staff, not FTE)

(PERCENT)

F2b. In what ways are recovering staff involved? (CIRCLE ALL THAT APPLY)

1. Individual peer counselling
2. Leading group sessions
3. Providing outreach services
4. Giving lectures
5. Other (SPECIFY):.....

F3. Are training sessions provided for the staff working in this treatment unit/programme?

1. yes
2. no > go to **F4**

F3a. In what type of training<sup>19</sup>, and how frequently, has the staff working in this treatment unit/ programme participated during the reference year?  
 (CIRCLE APPROPRIATE ANSWER FOR EACH TYPE OF TRAINING IN TABLE F3a)

**TABLE F1: Staff Training**

TYPE OF TRAINING	NEVER	AD HOC	ROUTINELY
1. In service Training	0	1	2
2. Formal courses in other institutions	0	1	2
3. Supervision	0	1	2
4. Other (SPECIFY): .....	0	1	2

F4. How many paid staff members left your treatment unit/programme during the reference year?

(NUMBER)

F4a. How many staff members have you hired during the reference year?

(NUMBER)

**SECTION H  
EVALUATION**

H1. Does this treatment unit/programme currently undertake or participate in any internal or external evaluation of treatment process or patient outcome?

- 1. no -> go to section **K**
- 2. yes
  - a. process evaluation
  - b. outcome evaluation
  - c. both
  - d. other (SPECIFY) .....

**SECTION K  
CHANGES IN THE TREATMENT UNIT/PROGRAMME**

K1. Would you say that this treatment unit/programme underwent significant operational changes during the reference year? For example, did significant changes occur with respect to treatment approach, financial support, staff or client composition, etc.?

- 1. yes
- 2. no -> go to **K2**

K1a. In which categories did significant changes occur? (CIRCLE ALL THAT APPLY)

- 1. Treatment approach
- 2. Financial support

<sup>19</sup> This excludes operational meetings of staff.

- 3. Staff composition
- 4. Client composition
- 5. Number of clients served
- 6. Staff to client ratio
- 7. Other (SPECIFY):.....

K2. Do you expect any notable changes in this treatment unit/programme during the 12 months immediately following the reference year? In which domains?

**TABLE K2: Expected changes**

Domains	YES	NO
1. Treatment approach	1	2
2. Financial support	1	2
3. Staff composition	1	2
4. Client composition	1	2
5. Number of clients served	1	2
6. Staff to client ratio	1	2
7. other (SPECIFY) .....	1	2

THANK YOU VERY MUCH FOR COMPLETING THE TREATMENT UNIT /PROGRAMME FORM.

**If there is anything else you would like to add or if you have any comments that you think might be useful for this questionnaire please write in the blank space or use extra sheets.**

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