

# SUMMARY

## ANALYSIS AND OPTIMIZATION OF SUBSTITUTION TREATMENT IN BELGIUM (SUBANOP)

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# Analysis and optimization of substitution treatment in Belgium (SUBANOP)

## Conclusions and recommendations

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### Background

*This document provides an extensive summary of the Subanop study. The study was financed by Federal Science Policy and the Federal Service of Public Health. The goal of this summary is to provide an overview of the most important conclusions of the scientific research, with a focus on its recommendations. The full research was published: Vander Laenen, F., De Ruyver, B., Vanderplasschen, W., Anseau, M., Smet, V., De Maeyer, J., Buckinx, M. & Van Audenhove, S. (2013), Analysis and optimization of substitution treatment in Belgium. Academia Press, Gent.*

## 1. Goals of the study and methodology

### 1.1. Background of the study

In response to the emerging opiate use, opiate substitution treatment (OST) first appeared in the EU in the late 1960s (EMCDDA, 2000). Several international studies show that OST treatment is effective in reducing crime (Schwartz et al., 2009), reducing risks (Keen, Oliver, Rowse, & Mathers, 2003), reducing morbidity and mortality (Moller, Karymbaeva, Subata, Kiaer, 2009) reducing heroin use (Amato, Davolia, Peruccia, Ferria, Faggiano, & Mattick, 2005), reducing the use of other illegal drugs (Masson et al., 2004), increasing treatment retention (Amato et al., 2005) and increasing quality of life regarding employment, housing status and education (Vanagas, Padaiga, & Bagdonas, 2010).

OST treatment has been studied in several Belgian studies as well (Reggers, Somers & Richy, 2006; Ledoux, Brohée & Lagrain, 2004; Ledoux, et al., 2005; Pelc et al., 2004; De Maeyer et al., 2011). However, policymakers and fieldworkers in Belgium point at various knowledge gaps on OST treatment in Belgium, in particular on substitution therapy in settings outside medical-social care centres (e.g. substitution therapy in (psychiatric) hospitals), the characteristics of clients receiving substitution therapy and challenges and obstacles in the provision of this type of treatment.

### 1.2. The goal of the study

The aim of the SUBANOP-research was to provide an extensive and up-to-date overview of key elements of OST treatment in Belgium. The following research objectives can be distinguished:

1. A critical analysis of available review studies and meta-analyses on OST treatment (chapter 1)

2. The development of an inventory of the current provision of OST treatment in Belgium in terms of type, number, geographical spread, and care structure, as well as mapping out the current provision of training, education and interventions for providers of OST treatment in Belgium (chapter 2)
3. In terms of clients, to execute an assessment of psychosocial dimensions of clients in OST treatment through a secondary data-analysis of existing data (chapter 3) as well as measuring treatment satisfaction of clients in various types of OST treatment (chapter 4)
4. Provide insight into the provision and application of the concept 'psychosocial support' in Belgium.
5. Develop a feasible, evidence-based guideline for the treatment and support of opiate-dependent individuals in OST treatment, with particular attention to the interpretation of psychosocial support and the WHO guidelines
6. Draw up an overview of obstacles related to substitution provision in Belgium (such as application of psychosocial support, hard-to-reach populations, referral, follow-up)
7. Develop policy and practice recommendations to overcome identified obstacles (chapter 5&6)

## 2. Methodology

### 2.1. Ethics

The study was reviewed and approved by the Ethical Committee of the University Hospital, Ghent (Belgium), the Federal public service health, food chain safety and environment and the Belgian Privacy commission.

### 2.2. Research design

To answer these research objectives, the study applied a **multi-method research design**, more specific, a combination of quantitative and qualitative methods. Methodological triangulation was applied by using both qualitative and quantitative methods (Dale, 1995). The strength of multi-method research is that it can overcome weaknesses of one method by the other method and that the scope of the research can be expanded (Creswell, Plano Clark, Gutmann, & Hanson, 2003; Johnson & Onwuegbuzie, 2004; Onwuegbuzie & Leech, 2005). Next to this, the research was executed by a multidisciplinary research team, consisting of criminologists, social workers, orthopedagists, psychologists, lawyers, medical doctors and sociologists.

Relevant English, French and Dutch scientific **literature** on OST (limited to publication dates between 2000 and April 2012) was listed through a database analysis. Considering the vast amount of literature, the inventory was limited at first to available meta-analysis, systematic reviews and overviews on the treatment of opiate dependent individuals. As to the psychosocial part of the treatment of opiate dependent individuals, the search was broadened to primary studies as very limited meta-analysis, systematic reviews and overviews seem to exist on this topic.

Data on OST providers were collected through a **telephone** (October-December 2011) and **online survey** (November 2011-May 2012) of potential Belgian providers of OST: general practitioners (GPs), hospitals, specialized centres (SCs) and pharmacists<sup>1</sup>. A stratified random sampling method was used to generate a representative sample for the telephone survey of general practitioners and pharmacists, based on the procedures of the Belgian Health Interview Survey (ISP-WIV, 2005). All the hospitals and specialised centres were contacted for the telephone survey. The general aim of the phone survey was to map out whether the GPs, hospitals, specialized centres and pharmacists provide OST (past and present). Furthermore, the respondents were asked if they wanted to participate in the online survey. Respondents with a positive reply were sent the online survey link.

In response to the request of the guiding committee an overview of the provision of OST in prisons was included in the study. For prisons, additional information was provided by the Belgian national registration of substitution therapy (Ledoux, Brohée, Lagrain, Vermeire, Houben, Spago & Vansnick, 2008), the 2008 analysis of the prison health care department Federal Public Service of Justice, (Todts, Glibert & Van Malderen, 2008) as well as a master thesis database of a prison survey (Debehets, 2011) which was based upon the study of Stover, Hennebel & Casselman (2004). The latter survey was also executed for Brussels Capital Region and Walloon prisons in June 2012.

The characteristics of OST client were studied by means of a secondary data-analysis of two databases: a Belspo-study and the extension thereof (Ledoux, 2005 and new data collection in 2006), and a national registration of prescriptions of substitution medication (Ledoux, Brohée, Lagrain, Vermeire, Houben, Spago & Vansnick, 2010; Ledoux, 2012). As a standard approach, forward conditional logistic regression was performed. The chosen approach for the BELSPO-study consists of different multivariate analysis.

In 2003, the Belgian Pharmacists Association conducted a study<sup>2</sup> (the Belspo study) using a sample of methadone substitution clients (Ledoux, 2005). More than 130 pharmacists participated and evaluated each of their OST clients. In 2006 this sample was extended to Medical Social Specialized Centres in Flanders to improve the representativeness of the sample of OST patients. The final sample has 494 Belgian clients (311 clients from Wallonia and Brussels and 183 from Flanders). Although the original study also analysed the pharmacists' evaluation of methadone clients, the chapter in the current SUBANOP-study only refers to the clients reports.

The national registration of OST treatments consisted of an epidemiological analysis of the number, gender and age of OST clients and the area of dispensation, the amount of medical practitioners/pharmacists providing OST and medication used (methadone or buprenorphine-Subutex<sup>®</sup> or Suboxone<sup>®</sup>). The database consisted of all (coded) clients who were prescribed methadone or buprenorphine between the last trimester of 2006 and the second trimester of 2009.

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<sup>1</sup> Samples: GP's and hospitals based upon the lists of the FPS of Health; pharmacists based upon the list of the National Institute for Health and Disability Insurance; specialised centres based upon the list of the VAD (Flanders), Fedito BXL (BCR), Fedito Wallone (Wallonia). More details on the consulted sources and data bases can be found in annex II of the publication Vander Laenen et al. (2013). 'Specialised centres' include all centres specifically aimed at providing drug treatment (day care centres, crisis intervention centres, therapeutic communities and associations without lucratif purpose). The specialized departments of psychiatric hospitals are included in the overview of the hospitals.

<sup>2</sup> Sponsored by BELSPO/Politique Scientifique Fédéral

**Quantitative interviews** with clients (N=77) were set up to get insight in the treatment characteristics, substance abuse history, satisfaction with treatment and quality of life of opiate-dependent individuals in OST treatment. **In depth interviews** (N=77) focused on clients' experiences with psychosocial support (e.g. availability, frequency, content) and OST treatment in general.

In order to adapt available guidelines on psychosocial support in OST treatment to the Belgian context, a two-round electronic **Delphi survey** was organized. The Delphi-method is an interactive research method, which involves a panel of experts (N=14) who reply to questions/statements in several rounds (McIlrath, Keeney, McKenna & McLaughlin, 2009; Skulmoski, Hartman & Krahn, 2007). The Delphi-method is a useful consensus method and was used to identify and obtain consensus on experts' views on psychosocial support in OST treatment.

Finally, three **focus groups** were organized (in total 21 participants) – one in each region - to formulate policy recommendations and identify good practices, in order to optimize the organization of OST in Belgium on a structural level. The topics of the focus groups were based upon the results of research in the preceding work packages and complemented with the suggestions of the members of the guiding committee. As a result, the following topics were discussed in each focus group: the identification of the different target groups within OST and the type of service they can/should be referred to; the integration of primary care into OST; the integration of (general or psychiatric) hospitals into OST; and the optimization of the organization of the inter-agency collaboration.

In general, many links were established between the international literature on OST, the different surveys and focus groups. The methods used also made it possible to get more in-depth answers and identify current issues in Belgian substitution therapy, especially in terms of the psychosocial support focus, thereby proving the additional value of the combination of the SUBANOP research methodology. In view of the importance of the 2009 WHO guideline for the **“Psychosocially Assisted Pharmacological Treatment of Opioid Dependence”** (WHO, 2009), these guidelines formed the framework of the SUBANOP-research as well used as a comparison base for the practice and policy recommendations.

### **2.2.1. Limitations of the SUBANOP research methodology**

The research design has certain limitations discussed here.

The literature review did not provide clear-cut answers on the effectiveness of the different types of psychosocial support mainly because of the heterogeneous range of psychosocial interventions utilized, a great heterogeneity in the populations studied, in the setting and length of treatment, types of treatment and in the definition of psychosocial interventions. The outcome variables measured vary as well, complicating a meta-analysis on the effectiveness of psychosocial treatment, the comparison of different types of psychosocial treatment and the possibility to include recommendations preferring one intervention over another (Amato et al., 2011a&b; Mayet et al., 2010). Further evaluation obstacles are

differing comparison basis in research as well as the lack of an adequate demarcation of the concept of 'psychosocial treatment'. Often studies comparing additional structured forms of psychosocial interventions with 'OST treatment as administered' do not mention whether this 'control group' contains a psychosocial component or not (Griffith, Rowan-Szal, Roark & Simpson, 2000). Moreover, the treatment focus (detoxification/maintenance) was not always specified, making it hard to extrapolate the findings on effectiveness to specific treatment orientation contexts. Also, most studies on this topic have been conducted in the US, which raises questions as to the generalization of these results to other countries with differing contexts, cultures and health care systems. Finally, the literature review built further on available reviews and include original studies with regard to psychosocial support, although no systematic review was executed.

As for the phone and online survey certain limitations exist as well. First of all, the information given is predetermined by the questions, not always allowing detailed answers for each topic (e.g. prelisted choices). To anticipate this problem, for each topic the respondents were also given the opportunity to add remarks. Secondly, the survey involves a self-report of the different providers, therefore limiting the validity of the response only to the specific respondents and not presenting an objective truth. The fact that the SUBANOP-research also contains focus groups with representatives of the different kinds of providers of the three Belgian regions (chapter 6), as well as the use of a Delphi-method (chapter 5), allows a reality check for the response as well as more in-depth inquiries on certain topics. Thirdly, the response for the GPs and for Brussels Capital Region (for the GP, the hospitals and the specialised centres) was too low to allow general conclusions. Due to the limited response of the Flemish (psychiatric departments of) general hospitals in the online survey, conclusions on networking, training and psychosocial support mainly apply to the *psychiatric hospitals*. The response of non-providing Flemish and Brussels Capital region pharmacists for the topic of referral and networks remained rather limited. Finally, the survey of Flemish prisons was executed in January 2011, whereas the Brussels Capital Region and Walloon prisons were inquired in June-July 2012.

As for the secondary analysis of the BELSPO- and national registration studies (Ledoux, 2005; Ledoux, Brohée, Lagrain, Vermeire, Houben, Spago & Vansnick, 2010; Ledoux, 2012) (chapter 3), the BELSPO-database is dated, as is the national registration. Furthermore, it contains 1% of non-illicit drug users who use this medication for pain treatment. A third limitation is the lack of interference analysis between the different variables.

As for the semi structured interviews with clients in OST treatment a number of limitations should be mentioned. First, the sample size was limited (N=77) and consisted of an older group of opiate-dependent individuals ( $M= 41.58$  years;  $SD = 8.56$ ) and is not fully representative for the group of opiate-dependent individuals following OST treatment in Belgium. Findings may therefore not be generalized to other groups of opiate users. Second, clients who had been in OST treatment for less than three months were not included in the study. Third, the sample consisted predominantly of individuals following OST treatment in rather large urban areas, which will give an insight in the urbanization of OST treatment, but limited information on the provision and distribution of OST treatment in rural areas is available. These restricted

regions and contextual differences might limit the generalisation of our data to other regions (in Belgium), with possible different treatment populations. Fourth, the majority of the participants got their substitute drug prescribed through a specialized treatment centre, so no specific statements can be made about clients following OST treatment in a private practice.

As for the Delphi study a number of limitations should be taken into account. The Delphi-method is a useful consensus method and was used to identify and obtain consensus on experts' views on psychosocial support in OST treatment. Nevertheless, participants might be influenced by the response of other group members or gave socially desirable responses. Another limitation of the study was that the judgments and opinions were not strictly anonymous, since the first name of the participants was used on the discussion forum. Furthermore, participants were not randomly selected, but purposively, because of their expertise in opiate OST treatment. Finally, the number of participants was limited (N=14), with an overrepresentation of Flemish experts, which will affect the input on the discussion forum. Finally, the restricted time period, the use of electronic communication and potential language barriers might had a negative impact on the number of experts participating in the Delphi-method.

The focus group technique has some limitations. The disadvantages mentioned most frequently are linked to the group dynamic. Group discussions may be dominated by one or more individuals (Macphail, 2001). Participants may feel pressured to conform with peers and/or dominant individuals in the group. The group dynamic may influence the attitudes of participating individuals (Bristol & Fern, 2003). Qualitative group techniques can also suffer from an inhibition of idea generation leading to focusing on a single idea early on in the discussion or it might be that one idea is elaborated on extensively in one group and only limitedly touched upon in another (Vander Laenen, 2009). Finally, since a focus group is a qualitative technique, it does not allow to generalise the results to a wider population (of in this case every provider of OST in Belgium). However, the report and its conclusions and recommendations will be discussed with the guidance committee as well, allowing for validating its results.

### 3. OST in international literature

Research on the *pharmacological* part of treatment of opiate dependence is dominant in the literature on OST and generally seems to maintain high quality standards. Its focus mainly lies on the role and effectiveness of pharmacological interventions and the physiological aspects of addiction (instead of psychosocial aspects).

In the literature, there is agreement about the effectiveness of pharmacological treatment, sufficient evidence exists with regard to the beneficial effects of MMT on treatment retention and heroin abstinence (Mattick et al., 2009), although these outcomes appeared to be dose-related.

Evidence has been found for adding (a minimal amount of) *psychosocial* care to pharmacological treatment, generating positive effects on treatment retention and opiate abstinence (Amato et al., 2011a&b;van den Brink, van de Glind & Schippers, 2012).

No answer can be given as to which type of *psychosocial* support proves to be the most effective. The existing research on psychosocial interventions seems to be very heterogeneous, and as a result, the conclusions for one type of intervention cannot be generalized to each type of psychosocial intervention. It

mainly addresses the effectiveness of more structural forms of psychosocial interventions like ‘contingency management’ and other behavioral therapies. Little attention goes to the psychosocial component in ‘treatment-as-usual’. In spite of the widespread occurrence of different types of psychosocial interventions for treating opiate dependence and the general consensus on the necessity of at least a minimum amount of psychosocial support, limited research seems to exist on the definition and demarcation of the concept, its application and effectiveness.

With regard to training, literature shows that training of providers in methadone maintenance (and in addiction care at large) proves to be necessary as well as susceptible to improvement (Go et al., 2001; Walters et al., 2005).

In between countries psychosocial support is being defined differently, and even on a regional level differences may exist when it comes to types of treatment and settings. Studies on psychosocial interventions do **not** always **define** the term psychosocial treatment or they use different definitions. Certain reviews refer to psychosocial support as ‘all forms of interventions and treatments excluding the administration of medication’ ([Winhusen & Kropp, 2003](#); [Mayet, Farrell, Ferri, Amato, & Davoli, 2010](#); Hesse, Vanderplasschen, Rapp, Broekaert & Fridell, 2007; [Amato, Minozzi, Davoli, Vecchi, Ferri, Mayet, 2011b](#); Cleary, Hunt, Matheson, Siegfried & Walter, 2008; [Cleary et al., 2009](#); Veilleux et al., 2010). This general definition will be used in this study as well.

#### 4. General principles for the organisation of substitution treatment in Belgium

First of all, the general approach of opiate dependence and substitution therapy should be to focus on improvements in well-being and **quality of life** of clients, rather than based on the reduction of crime and the restriction of nuisance, especially as keeping client’s confidence proves a very important success factor for OST treatment. This basic principle was stressed in particular in the focus group in Flanders. The **positive working relationship** between a client and his key worker is the keystone to achieve the final treatment goals of the client and is, among other things, characterized by an affective and equal relationship between the client and the worker and a shared decision-making about the treatment goals. Case management and a focus on clients’ strengths and assets can help to realize this bond between client and caregivers (RIOB, 2012). Goal setting with clients in OST treatment will further be of major importance, because not seldom the goals of an individual client do not correspond with the expectations and objectives of staff working in OST treatment programs. A personal treatment plan, based on an individual’s needs, capabilities and expectations, will contribute to a client-centered treatment offer. In accordance with this focus, consensus exists that OST should involve **a comprehensive and holistic approach**, with attention for different life domains (Cleary et al., 2009; De Wree, De Ruyver & Pauwels, 2009; De Maeyer, Vanderplasschen & Broekaert, 2010), which is also being proposed by the WHO: *“The optimal approach is to provide integrated holistic care to address current problems and prevent further problems. In practice, this means being able to detect medical, psychiatric and social issues in the assessment process, and having the means onsite to attend to the issues simultaneously.”* (WHO, 2009: 19)

Outreach activities (e.g. accompanying clients to different organizations, visits at home) can be an important tool to get insight in the social world of clients, their strengths and needs and to develop a



positive relationship with them. Moreover, it is recommended by WHO, UNODC and UNAIDS (2009: 8) as *“an extraordinarily effective method of accessing intravenous drug users”* in particular, an often difficult group to access. In the light of the recent evolution towards more community-based mental health care in Belgium (art. 107 of the Hospital law) which promotes, among others, the integration of opiate-dependent individuals in society, outreach activities are used to support individuals in their direct environment and reduce hospitalizations to a minimum. Outreach services are also a way to provide psychosocial support and successfully undo a number of potential barriers that hinder clients to ask for psychosocial support (e.g. feelings of shame to come to the treatment centre, contact with other drug users, mobility problems, ...).

Secondly, substitution therapy should consist of diverse **client-centered approaches** which are in accordance with clients' demands (Trujols et al., 2011, De Maeyer et al., 2011b). The needs for psychosocial support are diverse and can range from being able to have a small chat, to the provision of practical support (e.g. having a daily occupation) or specific therapeutic sessions. Also during their treatment process specific treatment needs will vary and the focus may shift between different life domains. People suffering from opiate dependence are a heterogeneous group of individuals with different treatment needs, possibilities and expectations, illustrating the need for personalized psychosocial support, tuned to the specific capacities of a person. For clients psychosocial support was not only restricted to structured, planned conversations, but also informal talks, resulting in an emotional commitment with the treatment setting, had a positive impact on their treatment process. Attention should be also paid to clients features (a principle also put forward in the Delphi and the focus group), therefore differentiation of substitution therapy in accordance with these features and the client demands should be established. An example of good practice seems to exist in Vancouver where the concept of **stepped care** differentiates in clients' needs (Parkes & Reist, 2010). More stable clients (stability on other Europ-ASI life domains) are being taken care of by GPs, whereas clients with more complex mental and social needs tend to be taken care of by hospitals (Vancouver has no system of specialized centres as is the case in Belgium). This differentiation is also important when it comes to the additional psychosocial support provided (this is being discussed further under point 3). In terms of good practice, the MSCC of Ghent refers stabilized clients to a GP, in close cooperation with a psychologist from the MSCC, who remains available for the psychosocial support of the client after referral.

On a legal level, the focus groups and the online survey of OST providers pointed out that there is a need for a **solid legal framework** for substitution therapy, optimizing the current Royal Decrees on the regulation of OST treatment of 2004 and 2006. In this respect, the participants of the focus group in Flanders suggested linking a Ministerial Circular to the Royal Decrees thereby establishing the tasks and responsibilities of the different providers.

The current Minister of Public Health and Social Affairs, Minister Onkelinx, ordered in 2011 the development of a new Royal Decree. The Federal Agency for Medicines and Health Products and the Federal Public Service Health developed a proposal for this decree in June 2012, before commentary, submitted to the SUBANOP team. They have analysed the RD design, taking into account the preliminary

outcomes of the SUBANOP-research and submitted it to the Federal Public Service Health. In December of 2012, the RD proposal was submitted to the privacy commission. The new Royal Decree is to be operational in July 2013.

## 5. The spread of OST provision

### 5.1. Who is providing?

#### 5.1.1. Type of providers

The phone and the online survey point out that in Belgium, OST is executed mainly through **specialized centres** followed by **pharmacists** (table 1). Pharmacists take up a special position, as they can be both providers as well as administrators of OST. **Hospitals** provide OST as well, be it that they report less clients per week than the specialized centres (table 2). **Psychiatric departments of general hospitals** are dominant for OST in hospitals (38.1%), although **psychiatric hospitals** are also very common (34.5%). General hospitals tend to be providing OST the least (27.4%) General practitioners are much less involved in the practice, in particular in Flanders.

Moreover, the participants in the focus groups indicated **a lack of acceptance** of OST clients and a lack of **knowledge** of OST by some (general and psychiatric) hospitals, general practitioners and pharmacists (Deering et al., 2011). More awareness and sensitization through trainings and education could improve the willingness to provide OST, they state (cf. 7.2.). In the Flemish focus group two reasons for this are given by the participants; firstly the fear of nuisance caused by OST-clients and secondly, the impossibility of verifying the methadone or buprenorphine dose indicated by a client that was not treated by the provider before.

The online survey points out some regional differences. The *number* of Flemish hospitals and specialized centres providing OST is bigger than the number of hospitals and specialized centres in Wallonia. Furthermore, when comparing *hospitals*, the phone survey proves OST in Flanders to be provided by psychiatric departments (of general hospitals) the most, whereas in Wallonia psychiatric hospitals are more dominant. In Brussels Capital Region and Wallonia general hospitals report providing OST whereas in Flanders this seems rather rare.

**Concentrations** of providing specialized centres as well as pharmacists around **big cities** (e.g. Ghent, Antwerp, Liège and Charleroi) can be established. This is in line with the findings from the National Registration (Ledoux et al., 2010) which showed that the prevalence of OST clients (for the year 2008) is the highest in Liège and Charleroi (with 46.4% of the total Walloon clients) and in Antwerp, Ghent and Aalst (representing 43.8% of the Flemish OST clients). Brussels Capital Region has quite a few concentrations of diverse OST providers as well.

As the urbanization level is higher in Flanders than in Wallonia, Flanders (n=17) has more specialized centres than Wallonia (n=12; including the German Community). Furthermore, the specialized centres in Flanders have more satellite centres (n=45) than the specialized centres in Wallonia (n=3).

Table 1: OST provision and provider's response to phone and online survey

Provider	Total population	Sample size	Phone survey			Online survey			
			Response rate	OST		Sample size	Response rate	OST	
				n	%			n	%
<b>GPs</b>	7090	100	88	5	5,7	66	42	1	2,4
FLWALL+GERM	4693	100	71	13	18,3	67	56	10	17,8
BCR	1547	50	49	7	14,3	22	13	2	15,4
<b>TOTAL</b>	<b>13330</b>	<b>250</b>	<b>208</b>	<b>25</b>	<b>12</b>	<b>152</b>	<b>111</b>	<b>13</b>	<b>11,7</b>
<b>HOSPITALS</b>									
FL		103	98	65	66,3	17	12	12	100
WALL+GERM	103	64	55	19	34,5	34	24	11	45,8
BCR	64	41	36	11	30,5	41	2	2	100
<b>TOTAL</b>	<b>41</b>	<b>208</b>	<b>189</b>	<b>95</b>	<b>50.2</b>	<b>77</b>	<b>38</b>	<b>25</b>	<b>65,8</b>
<b>SCs</b>									
FL		70	70	58	82.8	17	17	17	100
WALL+GERM	70*	19	19	12	63.1	19	11	11	100
BCR	19*	9	3	3	33.3	9	3	3	100
<b>TOTAL</b>	<b>9</b>	<b>98</b>	<b>92</b>	<b>73</b>	<b>79.3</b>	<b>45</b>	<b>31</b>	<b>31</b>	<b>100</b>
<b>PHARMACISTS</b>									
FL		100	96	76	79,2	81	61	46	75,4
WALL+GERM	1728	100	90	66	73,3	90	79	57	63,3
BCR	1443	50	47	31	65,9	35	13	9	69,2
<b>TOTAL</b>	<b>480</b>	<b>250</b>	<b>233</b>	<b>173</b>	<b>74.2</b>	<b>206</b>	<b>153</b>	<b>112</b>	<b>73,2</b>
<b>TOTAL ALL PROVIDERS</b>	<b>17290</b>	<b>809</b>	<b>739</b>	<b>366</b>	<b>49.5</b>	<b>498</b>	<b>333</b>	<b>181</b>	<b>54.3</b>

(\*) satellite centres included

### 5.1.2. Number of clients

To develop a full-spectrum view on the OST provision the reported number of clients has to be taken into account, showing that the Belgian specialized centres receive the most clients, followed by pharmacists.

When we compare the number of clients reported by the different providers in the online survey, in Belgium the specialized centres receive the most clients per week, followed by the pharmacists. We do note that there is a chance that part of the clients reported by the pharmacists are being sent there by specialized centres. GPs report the least clients per week, although in Wallonia the GPs report receiving more clients than the Walloon hospitals. As becomes clear in table 2, **specialized centres have the highest**

**number of clients per week.** Table 3 shows that for the specialized centres, the **MSSCs receive the majority of the clients.**

⇒ The number of clients per week that is treated in the hospitals is limited to less than 50 clients for all hospitals in Flanders participating in the online survey (N=12) and less than 100 clients for all responding Walloon hospitals (N=11). Again, regional differences exist, as hospitals in Wallonia report much more clients than the ones in Flanders. As more Flemish hospitals report OST provision than the Walloon hospitals, this might point to a **concentration of OST in certain Walloon hospitals.** Presumably, the lack of acceptance of OST clients and the lack of knowledge with regard to opioid dependence and with regard to substitution in some (general and psychiatric) hospitals, GP and pharmacists discussed during the focus groups can explain the limited number of clients for these providers. *The limited number of patients receiving OST in Flemish (on average less than 2 clients per week) and in Walloon hospitals (on average less than 4 clients per week) is a remarkable result. In view of the limited number of clients treated in the (psychiatric) hospitals, improvement with regard to the provision of OST in (psychiatric) hospitals in Belgium seems indicated.*

What becomes clear from table 3 is that the MSSCs in Flanders have significantly more OST clients on a weekly basis than the MSSC in Wallonia (2406 and 667 respectively). This confirms that in Flanders, opiate OST treatment is mostly supplied by specific, low-threshold services for drug users (Lamkaddem & Roelands, 2010). However, some clients choose to follow OST treatment through a general practitioner in order to limit contact with other drug users in specialized centers and to restrict feelings of stigmatization and discrimination.

When we compare the number of clients reported by the different providers in the online survey with the data of national registration (chapter 3), there is a discrepancy as the latter points out that more than half of the OST clients are registered in Wallonia (55.5%), followed by Flanders (28.6%) and BCR (16.4%), whereas in the online survey specialized centres and pharmacists in Flanders report the most clients (table 2). As was pointed out already, the response of the GP in the online survey was too low to allow for general conclusions. The question rises whether lacking information on the providing GPs might explain this discrepancy as in the French community OST treatment is mainly offered by general practitioners (Lamkaddem & Roelands, 2010). This lack of information also adds an argument for the systematic and structured registration of OST at the level of general practitioners.

**Table 2: Total and feasible number of clients per week reported source: online survey)**

provider	Weekly n° of clients	Feasible n° of clients
<b>GENERAL PRACTITIONER</b>		
VI	1	1
BCR	22	30
Wall	95,5	99,5
<b>TOTAL</b>	<b>118.5</b>	<b>130.5</b>

HOSPITALS		
VI	44	73
Bcr	.	.
Wall	91,5	118
<b>TOTAL</b>	<b>135.5</b>	<b>191</b>
SPECIALIZED CENTRES		
VI	2026	1688
BCR	290	265
Wall	757	997
<b>TOTAL</b>	<b>3073</b>	<b>2950</b>
PHARMACISTS		
VI	151	333 <sup>3</sup>
BCR	59	104
Wall	250	564,9
<b>TOTAL</b>	<b>460</b>	<b>1001,9</b>
<b>TOTAL ALL PROVIDERS</b>	<b>3787</b>	<b>4273,4</b>

**Table 3. Weekly number of clients and the estimated feasible number of clients of the specialized centres: MSSCs and non-MSSCs (source: online survey)**

Specialized centres*	Weekly n° of clients	Feasible n° of clients
MSSCs		
VI		
BCR	1701	1260
Wall	170	140
<b>Total</b>	<b>535</b>	<b>570</b>
	<b>2406</b>	<b>1970</b>
Non-MSSCs		
VI		
BCR	325	428
Wall	120	125
<b>Total</b>	<b>222</b>	<b>427</b>
	<b>667</b>	<b>980</b>

\*no satellite centres

<sup>3</sup> This number was influenced by an outlier, one pharmacy reports 1000 clients as a feasible number per week. If this response is taken into account the total number of feasible clients lies at 1333.

When confronted with the reported number of feasible clients per week, all Belgian providers, except for some **specialized centres**, report a possibility to receive more clients per week (table 2 and 3). For Flanders and BCR in particular, the MSSCs report a lower feasibility than the number of clients they are already receiving on a weekly base. In Wallonia the feasible number of clients is higher than the actual number.

As the number of clients reported by the MSSCs varied and the satellite centres were not inquired in the online survey, all Belgian MSSCs were asked to provide the numbers of clients per week for the MSSC as well as the satellite centres (table 4: e-mail request). The satellite centres are important providers of OST since they provide OST for one third of the clients in the MSSCs. We did find regional differences here between the MSSC's: in particular in the provinces of Limburg, West-Flanders and Flemish Brabant the satellite centres reach many clients. The role of the satellite centres is limited for the MSSC's in East-Flanders and certain parts of the province of Antwerp and the MSSC's of Liège and BCR have no satellite centres.

**Table 4: Weekly number of clients per MSSC satellite centre (source: e-mail request)**

Province	MSSC	N° of clients per week in MSSC	Satellite centres	N° of clients per week in satellite centres	Total N° of clients per week
<b>FLANDERS</b>					
<b>ANTWERP</b>	MSSC Antwerp	294	Antwerp (women only)	18	312
<b>EAST-FLANDERS</b>	MSSC Gent	570 <sup>4</sup>	Lokeren Sint-Niklaas	20 (OST-service: one day a week) 12 (OST-service: one day a week)	602
<b>LIMBURG</b>	MSSC Limburg		Beringen Bilzen Genk Hasselt Heusden-Zolder Maasmechelen Noord-Limburg St Truiden Tongeren	11 13 87 107 16 30 13 38 46	361
<b>WEST-FLANDERS</b>	MSSC Oostende	250	Kortrijk Roeselare	100 70	420

<sup>4</sup> The MSSC of Gent reports 450 clients receiving their medication in pharmacies, for 120 clients per week the medication is administered in the MSSC. The other MSSCs did not differentiate between pharmacies and administration at the MSSC.

FLEMISH BRABANT	MSSC Leuven	90	Diest	98	331
			Tienen	81	
			Vilvoorde	62	
TOTAL		<b>1204</b>		<b>822</b>	<b>2026</b>
<b>WALLONIA</b>					
LIEGE	MSSC Liège	180			180
HAINAUT	MSSC Charleroi	180	Farciennes	21	231
			Chapelle-lez-Herlaimont	30	
	MSSC Mons	155	Hougend	60	215
TOTAL		<b>515</b>		<b>111</b>	<b>626</b>
<b>BRUSSELS CENTRAL REGION</b>					
	MASS Brussels	170			<b>170</b>
TOTAL		<b>1889</b>		<b>933</b>	<b>2822</b>

The results of the online survey cannot be compared with the results of the e-mail request, as the latter also involved the weekly number of clients of the satellite centres (which was not questioned in the online survey) and was taken at another date than the online survey. Nevertheless, the weekly number of clients reported in this e-mail request turned out to be significantly higher for all MSSC's.

The results of the e-mail request did raise some discussion between the Flemish MSSC's, as the number of clients reported could be distorted by clients who receive their substitution therapy in pharmacies as well as clients who receive other types of support than pharmacological substitution therapy. This in turn led to a new formula in which the number of revalidation weeks<sup>5</sup> realized per MSSC per year is taken into account. By dividing this number by 52 and subtracting the clients who solely receive psychosocial support, the number of OST clients per week per MSSC can be calculated. The Walloon and Brussels MSSCs were asked to provide data based on this new formula, unfortunately no data were provided for these regions as was also the case for the Flemish Brabant MSSC. Nevertheless, this formula might fail to properly reflect the actual weekly workload, as it does not take into account clients who visit the centre several times a week.

⇒ *With regard to the difficulties encountered when assessing the MSSCs current case load (weekly number of clients) a **systematic and uniform registration is recommended** to allow monitoring the case load of the specialized centres,.*

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<sup>5</sup> All revalidation centres (including MSSCs) have to report their 'production capacity' to National Institute For Health And Disability Insurance once every trimester. It involves a registration of every contact with one client in one week ('revalidation week'). These contacts can also consist of purely psychosocial support, or involve clients with another drug dependence than opiate dependence as well as alcohol dependence, so these data do not provide a general view on the number of OST clients. They can however provide an insight in the number of clients per week in specialized centres. As medication is registered as well, it also gives an indication of the spread of clients who receive OST over the different specialized centres (phone interview, dr. Tino Ruyters, director of Free Clinic Antwerp, 27/06/2012).

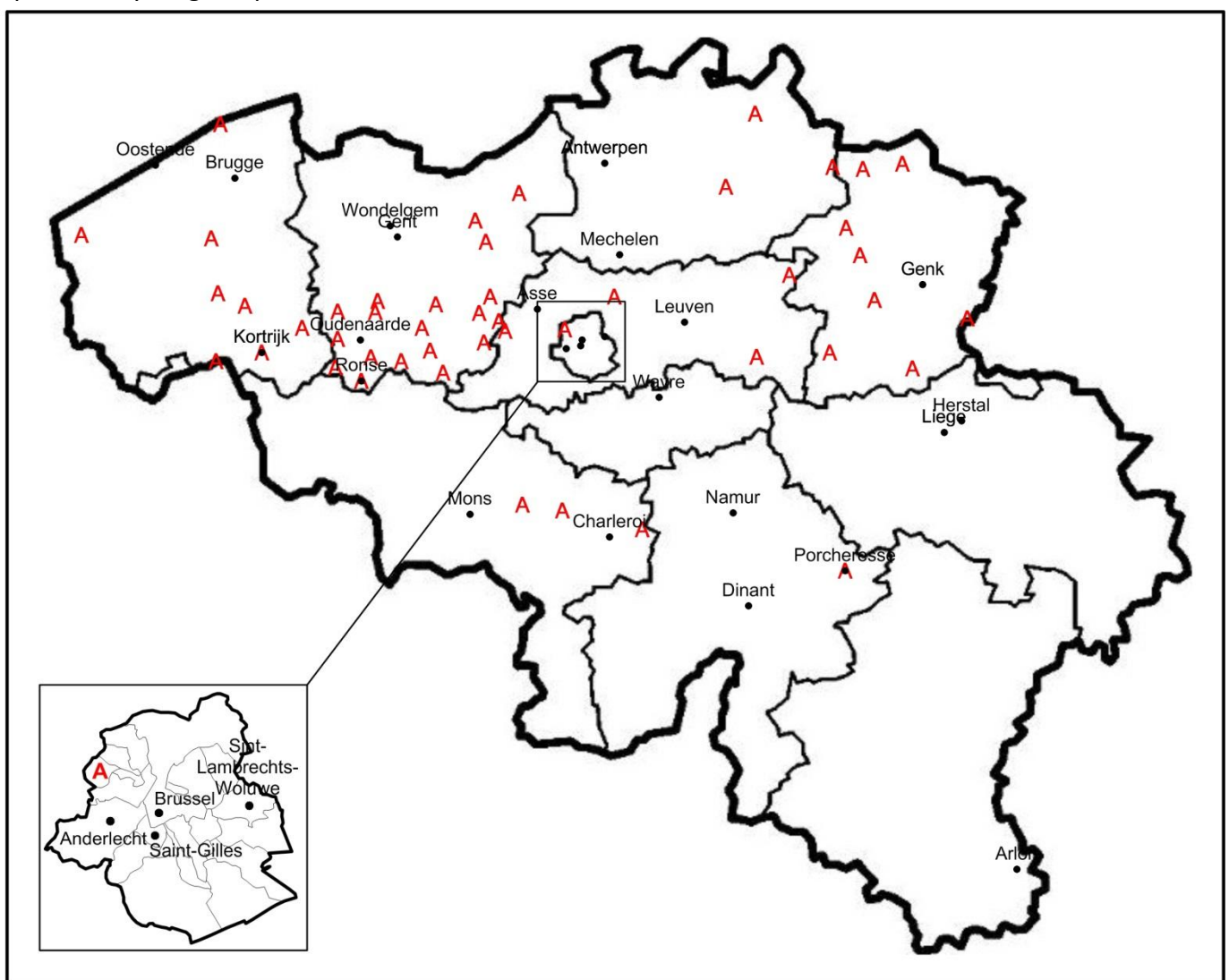
## 5.2. Geographical spread of OST providers and treatment officers

### 5.2.1. Geographical spread

When we look at the geographical spread of OST, we find a limited provision of OST in specific areas. This is the case for West-Flanders, where only a few pharmacists and specialized centres provide OST and the inquired GPs don't seem to be providing OST. In Flanders, in the provinces of West-Flanders and Flemish Brabant, few pharmacists provide OST. In Wallonia, the German community and the Walloon Brabant have the least providing pharmacists and GPs.

As is shown in map 1, there are more specialized centres in Flanders than in Wallonia and they tend to be geographically spread out more. As was discussed above, in Flanders, 45 satellite centres provide OST in regions where there would otherwise have been no OST provision. In the Walloon part of the country, the number of satellite centres is limited to 4.

Map 1: OST by Belgian specialised centres and their satellite centres



•	Specialized centre
A	Satellite centre of specialized centre



**The geographical spread of centres indicates that this spread might be organized better in certain (parts of) provinces of Flanders and Wallonia.** For Flanders this is the case for the north of Antwerp, the southwest of West-Flanders and Flemish Brabant. In Wallonia, the provinces of Luxembourg, Walloon Brabant and the German community could be organized better. Wallonia has less centres, and the centres have less satellite centres (only two MSSCs have 2 satellite centres, in the province of Hainaut). Moreover, the agencies are concentrated around the main cities only. The province of Liège has the most centres (n=3). In this respect, however, an important point to be made is the difference between Flanders and Wallonia in terms of **urbanisation scale**, with a generally high urbanization factor in Flanders, whereas Wallonia has more rural regions, therefore explaining the urban concentrations of OST provision as well as the fact that on average, more pharmacists provide OST in Wallonia than they do in Flanders.

Next to this, in order to develop recommendations on the optimal spread of OST, the provision of OST should be in accordance with (trends in) the opiate substance use and with the characteristics of opiate users in the general population. However, treatment demand data of OST clients are fragmented at best (see also 4.4. on clients characteristics). Moreover, the data that are available are collected from opiate users in treatment settings and these data cannot be generalized towards the overall group of opiate users (Colpaert, 2012). Indeed, estimations of the number of opiate-dependent individuals following treatment in the European Union show that only 40% of all problematic opiate users are involved in some form of OST treatment, mostly methadone substitution (70%) (EMCDDA, 2009). Consequently, it is unclear whether the current geographical spread is indeed in accordance with the actual demand.

- ⇒ *Notwithstanding the difference in urbanization scale, it is clear, from research (EMCDDA, 2005; Goossens, 2012) that a concentration of low threshold providers for drug treatment in specific geographic locations can impact negatively on the neighbourhood, in terms of nuisance. Therefore, it might be advisable to optimize the spread of OST providers in the Walloon part of the country.*
- ⇒ *In order to monitor and evaluate the (spread of) OST provision, the need for good quality data on treatment demand and the systematic monitoring of trends in the overall group of opiate users becomes apparent.*

In terms of willingness to provide OST, GPs and pharmacists generally seem to be making an effort, as the online survey pointed out that fear of reputation or exposure of other clients to OST clients does not seem to form significant obstacles for pharmacists and GPs. The main reason these two groups indicate in the online survey for not providing substitution therapy is a lack of demand. However, the qualitative interviews with the clients revealed that a number of clients experienced some difficulties in finding a pharmacist who was willing to provide them with their substitute drug, resulting in **difficulties with the accessibility of care**, which was also found in the online-survey, with the biggest obstacle indicated by pharmacists to restart OST is the lack of client's strictness in terms of appointments. Furthermore a **lack of expertise** is given by some Flemish GPs as a reason for not or no longer providing OST, suggesting more attention should be paid to training of general practitioners. In view of the importance of training, we will discuss this issue in detail in 7.2.

### 5.2.2. Detoxification and maintenance

Belgian GPs tend to provide more OST for maintenance reasons than for detoxification. Belgian hospitals however provide more OST for detoxification than they do for maintenance reasons. For the GPs and hospitals no regional differences in dominance of treatment orientation exist. As for the specialized centres, detoxification is more common than maintenance in Flanders, whereas Walloon centres report equal shares for detoxification and maintenance.

As for hospitals, in Flanders both detoxification and maintenance are generally provided in psychiatric hospitals, whereas in Wallonia the psychiatric departments of general hospitals provide detoxification more often than maintenance.

In the online survey, no question was included on whether or not providers *initiate* OST maintenance, therefore no general conclusion can be drawn as to whether this maintenance consists of actually starting up maintenance treatment or whether maintenance involves continuation of OST that has been initiated elsewhere.

When the spread of “detoxification versus maintenance treatment” by specialized centres is compared, for most Belgian **provinces** no great differences are found. In general, for Belgium not all specialized centres provide OST for maintenance reasons, but in most provinces another centre in the same city will still be providing OST for maintenance. For the province of Antwerp, Flemish Brabant, Brabant Walloon, Namur, Liege and Brussels Capital Region the centres providing OST for detoxification all provide it for maintenance as well. Only the province of Hainaut counts more specialized centres providing OST for maintenance than centres who provide OST for detoxification. As for West-Flanders the specialized centre with the most satellite centres (n=6) only provides detoxification. The other centre who also provides maintenance only counts two satellite centres. *Therefore, OST for maintenance purposes could be spread better in the province of West-Flanders, especially in the north and the west where no satellite centres or centres providing maintenance are available.* In the south of the province of East-Flanders only one specialised centre (with one satellite centre) is providing OST for maintenance. In general, the geographical spread in south-east Flanders could be organized better as one satellite centre reports receiving too many clients, which is caused by clients arriving from surrounding cities where OST is only provided on a detoxification basis. One specialised centre in the region with several satellite centres is providing OST for detoxification only, *which leads us to the recommendation of spreading out the provision of OST for maintenance in this part of the province of East-Flanders.* In the province of Luxemburg the specialized centre providing detoxification does not provide OST for maintenance. As in the nearby province of Namur a specialized centre also only seems to provide detoxification, *maintenance by specialized centres in the South of Wallonia (the south of the Namur province and Luxemburg) could be spread out better.*

### 5.2.3. Networking and cooperation

#### **Networking and cooperation are thought to be essential elements of OST...**

All specialized centres are part of a network which consists of several types of professionals and drug treatment services. Their network is the most diverse of all.

In terms of networks, all Flemish and 80% of the Walloon hospitals have contacts with other professionals or are part of a network. It mainly involves network of drug treatment services' and specialized centres. Flemish hospitals seem to cooperate more with drug treatment organizations on a provincial level, whereas Walloon hospitals prefer urban level drug care networks (which is not surprising in view of the urban concentration of specialized centres in the Walloon part of the country).<sup>6</sup> In this context, it should be noted that, because of the limited response of the Flemish psychiatric departments of general hospitals and the general hospitals in the online survey, the results regarding networking for Flanders mainly apply for the psychiatric hospitals.

Pharmacists very often do not have contacts with other professionals nor are they part of a network. When providing pharmacists participate in a network this mainly involves a specialized centre. In Wallonia these networks involve GPs with OST expertise more often. Networks are more common for Flemish pharmacist (45.7%) than for Walloon pharmacists (30.0%). Providing pharmacists in Wallonia are much more aware of other providing pharmacists than the Brussels Capital Region pharmacists. Flemish providing pharmacists know other providing pharmacists the least. As to pharmacists knowing GPs who provide OST, for Flanders and Wallonia the outcome is much lower than for knowing providing pharmacists, while BCR pharmacists report more.

⇒ *Based on the results of the study, it is fair to say that there is room for improvement of the current networks on OST: pharmacists should be part of a network on a systematic basis, in particular in view of the importance of pharmacists for (stabilized) OST clients.* This importance was stressed further in the interviews with OST clients in our study. From the interviews with clients, it became clear that clients who are referred to a pharmacist for the provision of their substitute drug, instead of daily collection in the specialized centres, were very positive about this evolution. Having the possibility to go to a pharmacist for the provision of their substitute, was appreciated mostly because this limited the contact with other drug users since they did not have to go to the treatment centre, the flexibility of the collecting hours and the fact that they got their medication for a couple of days and could take it home with them. The fact clients had the opportunity to go to a local, anonymous pharmacist also reduces feelings of stigmatization. Finally, they are a source of emotional support.

Of all OST providers, the specialized centres are the only ones all reporting **referral** of clients, although most hospitals tend to refer further too. For both these providers GPs with OST expertise as well as psychiatric hospitals are being referred to the most. Referral by pharmacists is less common. Pharmacists tend to refer to specialized centres the most.

As was noted already, GPs *who provide* OST are not very well represented in the online survey. With caution, we can conclude that the GPs who don't provide OST tend to refer their clients to specialized

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<sup>6</sup> The survey response contained too little GP's who provide OST so no general conclusion can be drawn.

centres or psychiatric hospitals. Regional differences exist as the Flemish and BCR non-providing GPs also refer to psychiatric departments of general hospitals whereas the Walloon GPs also refer their clients to providing GPs. Walloon GPs who don't provide OST know much more local providing GPs than do the Flemish and the BCR ones.

The providing hospitals (BCR is excluded from the discussion due to the low response) all refer to GPs with OST experience<sup>7</sup>, and all but two to psychiatric hospitals. Referral from hospitals to specialized centres seems to be more common in Wallonia. They all refer clients further on a regular base (always for the Flemish hospitals, for 80% of the Walloon hospitals as well). It is not clear from our study if these GP are part of a network or not or if they are working in a specialised centre; what is clear though is that GPs are in important part of the network of hospitals.

⇒ *In view of the referral by all hospitals to GPs, it is clear that specific attention should be paid to GPs who are not involved in a network on a regular basis.*

More Flemish hospitals *refer* clients further for psychosocial support than Walloon hospitals. The reason indicated for not referring in both regions is the sufficient service at the hospital itself. Referral by Flemish hospitals for psychosocial support mainly involves specialized centres.

All Belgian specialized centres refer clients further, mostly to GPs with OST expertise and psychiatric hospitals. As to referral for psychosocial support, Flemish specialized centres tend to refer clients to mental health centres, in Wallonia referral is more diverse, also involving external psychological experts and public social centres. Walloon specialized centres are more likely to refer to other specialized centres.

Although specialized centres provide psychosocial support themselves, they tend to refer clients further quite often to other providers of psychosocially assisted treatment. The providers they refer their clients to seem to be rather **specialized in specific life domains** of the client such as mental health, work, education and income. These specific life events can perhaps not be addressed adequately by the multidisciplinary team of the specialized centre which make referral to other providers necessary. Generally, the specialized centres mention referral to more than one type of psychosocial support provider .

In Brussels Capital Region, pharmacists' referral for psychosocial support is equally spread over psychological and social support, whereas in Flanders psychological support dominates and in Wallonia, referral by pharmacists has a dominant social focus. In all three regions the combination of referring clients to specialized centres and physicians for psychosocial support is the most common. When pharmacists don't refer their clients they indicate that this is mainly because the lack of demand thereof or because the clients already receive psychosocial support.

### **... although obstacles still hamper referral networking and cooperation**

In the Delphi study and the focus groups, a number of experts mentioned that referral of clients with addiction problems is often hampered by waiting lists, prejudices in general health care and in the alcohol

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<sup>7</sup> Except for one Flemish hospital that does not refer clients further at all.

and drug field regarding individuals with dependency problems, co-morbidity etc. Furthermore, there is a high need for activities and low-threshold projects (e.g. drop-in-centre, day activities) in the broader society to enhance opiate-dependent individuals' social identity and their feeling of belonging to mainstream society, and not purely restricted to activities organized by specialized treatment centres, but these initiatives are rather limited in the current treatment offer.

Exclusion- and time-out criteria, and accessibility problems, are not acceptable in principle, according to the WHO-guidelines, and they should be limited as much as possible. Noncompliance with program rules and house rules alone should not generally be a reason for involuntary discharge, unless: *“Involuntary discharge from treatment is justified to ensure the safety of staff and other patients.”* (WHO, 2009: 17).

The Delphi-forum participants noted it being one of the tasks of staff in addiction treatment to advocate for their clients and stand up for the realization of their social rights. Clients often encounter many barriers (e.g. discrimination) when trying to appeal to different services and fine-tuning services can remove barriers and reduce prejudices. The often difficult referrals to centres for mental health care is an example of the rather fragmented care, where clients are not seldom excluded because they are following an OST treatment. This way of thinking is at odds with striving for an integrated care and support system for people with opiate dependence. On the other hand, a network of specialised and non-specialised services could limit the barriers in the non-specialised services, if the non-specialised services would be able to refer OST clients to the specialised services in case of difficulties, the VAD Forum Addiction Medicine suggests (e-mail, 08/10/2012).

- ⇒ *In some cases (e.g. when clients have complex, multiple treatment needs involving different services), **coordination of services** might be required, to avoid fragmented care, loss of contact and improve the accessibility of services (Colpaert, 2012).*
- ⇒ *In view of the complex problem of **co-morbidity** (Roozen, Kerkhof, & van den Brink, 2000; Castells, Kosten, Capella, Vidal, Colom & Casas, 2009) and confirmed by the fact specialized centres tend to refer their clients further to mental health institutions quite regularly, OST care should be involving **integral care** and be approached on a **multidisciplinary level**.*
- ⇒ *Moreover, a good network and referral remains a condition for optimal OST provision. A network should consist of **specialised and non-specialised** services. Specific attention should be paid to the pharmacists and GPs who are not involved in a network on a regular basis.*

In terms of good practices it is worthwhile to mention the province of Limburg, where a network of GPs was established who cooperate with the specialized centres. The specialised centres refer clients for OST medication to these GPs exclusively. Next to this, they use of a central electronic registration system which is meant to follow up the clients treatment trajectory (including former referral) and the evolution of the treatment in general (both pharmacological and psychosocial, see also under 7.1). This central file is started up in an MSSC, although all involved doctors have access to it. Others members of staff have no access to the medical part of the file (the prescribed medication and medical condition). Moreover, hospitals, the police and prisons have no access to this central file.

Generally, speaking, it is worthwhile citing one of the recommendations of a study to overcome obstacles in developing community mental health care and to stimulate the integration of mental health services into primary health care, since the same recommendations can be formulated to optimize the treatment offer for OST clients beyond specialised treatment centres and psychiatric hospitals: *“This may be facilitated by ensuring that there are sufficient numbers of primary care staff, regulating training, organizing adequate and ongoing supervision of primary care staff by mental health professionals, addressing staff attitudes, and by developing and managing coordinated support networks with specialized community mental health services and other relevant sectors (such as social welfare, health, housing and employment, as well as NGO’s and the private sector.”* (Semrau, Barley, Law & Thornicroft, 2011:223). Indeed, the challenges identified for OST clients are similar to the challenges identified by the World Psychiatry Association for the WHO Europe region to develop community mental health care in Europe. The recommendations apply for OST as well. In this respect, the mental health sector and the drug treatment sector can learn from each other. In the coming years, the de-institutionalization of psychiatric hospitals (art. 107 of the Hospital law) will even lead to an *increased* need for training, supervision and the development of coordinated support networks. Why not then, in particular in view of the high co-morbidity of substance use problems with mental health problems, join forces?

### 5.3. OST in Belgian prisons

When we compare the prison data of the self-report from Todts et al. (2008) on the prevalence of (injecting) opiate users in Belgian prisons with the number of OST clients in prisons one can question the provision of OST in prisons.<sup>8</sup> This is in particular the case for maintenance therapy and in particular for some prisons. All prisons provide OST in Belgium, but not all provide maintenance. This is particularly the case in Flanders. In Flanders 5 prisons report only providing detoxification (5/15). In the province of Limburg the prison does not provide OST for maintenance. The two Brussels Central region prisons that responded to the survey both provide detoxification and maintenance. In Wallonia one of the ten prisons who answered the survey only provides OST for detoxification.

It is fair to say that this is not in line with the provisions of the Belgian law. The Belgian Prison Act of 2005 on the rights of prisoners provides a judicial basis for the right of health care that is equal to the health care in society and that is adapted to the specific needs of prisoners (art. 88). Moreover, art. 89 explicitly states that a prisoner has the right of continuity of health care, again on an equal basis as in the society. This principle is made explicit with regard to OST in a technical protocol added to the ministerial circular of 2006 (Ministerial Circular nr. 1785 of 18 July 18<sup>th</sup> 2006 on the drug problem in prisons). As regards the psycho-social drug treatment in general, it is recognized that in practice, the current treatment offer is insufficient to guarantee the actual implementation of these rights (Van Malderen, 2012).

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<sup>8</sup> As a different methodology was used to inquire the Belgian prisons on substitution treatment (online survey only), the data on OST in prison is discussed separately.

Maintenance is provided less than detoxification in Flemish prisons, although scientific evidence exists on maintenance resulting in a lower opiate use inside prisons (Stallwitz & Stöver, 2007; Stevens, Stöver & Brentari, 2010). Also, maintenance therapy provided to prisoners with pre-incarceration histories of heroin addiction proved effective for the interruption of the cycle of relapse recidivism and re-incarceration, and that Methadone Maintenance Treatment initiated in prison was superior to counselling only (Kinlock, Gordon, Schwartz, Fitzgerald & O'Grady, 2009). In Wallonia and BCR OST for maintenance and detoxification seemed to be distributed evenly.

- ⇒ *Based on the legal principle of equality (in health care) and on scientific evidence proving the positive outcomes of OST treatment in prison, we strongly recommend to expand the provision of maintenance to all Belgian prisons (Council of the European Union, 2012).*
- ⇒ *In order to guarantee the continuity of care (at the time of entering prison and to guarantee optimal post-release follow-up), a case-manager could be appointed in particular for prisoners.*

Special attention should be paid to the presence of opiates inside prison, as detoxification can lower the tolerance of OST clients and it impacts on controlling craving. As the 2008 prisoners' survey pointed out that 13.1% (n=51) had used grey market methadone or buprenorphine in prison (Todts, Glibert & Van Malderen, 2008), the existing grey market of OST medication inside prisons and the evolution thereof should be monitored as well.

#### 5.4. Characteristics of OST-clients

The national registration reported 16974 OST clients between mid 2008 and mid 2009 (Ledoux et al., 2010). Farmanet (the electronic registration system of the National Institute for Health and Disability Insurance registering the amount of extemporaneous mixtures delivered by Belgian pharmacists) reports 16.095 clients received at least one preparation of Methadone, and 2169 received at least one packing of Buprenorphine for the period of January 2010 to November 2010.

In total, women represent about one fourth of the population of OST clients (24.6%) (Ledoux et al., 2010). Moreover, in certain districts a considerable percentage of OST clients is **below the age of 25**. For Flanders, this is the case in Aalst (44.3%), Oudenaarde (32.1%), Dendermonde (31.2%) and Roeselare (30.6%). In Wallonia the youngest clients are most often found in Bastogne (31.6%), Arlon (31.2%), Tournai (25.9%) and Virton (25.8%).

**Recent illicit drug use** is still quite high amongst OST clients. About half of these clients continue to use heroin and one third continues to use cocaine. Clients who use heroin more than once a week are more likely to be in treatment in a Medical Social Specialized Centre (MSSC). **Frequent alcohol use** is much less common than illicit drug use during treatment, although 10% of the OST clients consume 9 or more glasses of alcohol a day (Ledoux, 2005).

- ⇒ *The problematic alcohol use by some OST clients should be taken into account by therapists during treatment.*

With regard to treatment satisfaction, the majority of the participants (70.6%) were slightly satisfied while only 7.8% of the participants was slightly dissatisfied about their OST treatment in general. However,

almost a third of the participants was slightly dissatisfied with the specific interventions (e.g. support with their social and work situation) and more than one fifth of the participants were (slightly) dissatisfied about the psychologist skills. In this context, a remark needs to be made that only a limited number of the participants (n=26) had experiences with psychologists during their OST treatment. Furthermore, the results of this study demonstrate a high percentage of participants who wish to get support in different life domains, especially help in the home, employment and recreational activities and who do not receive this kind of social support at the moment.

⇒ *As recommended above, we repeat the need for good quality data on treatment demand and the systematic monitoring of trends in the overall group of opiate users in order to monitor and evaluate the (spread of) context-specific OST provision. We need a thorough assessment and understanding of the local situation including client characteristics such as differences in age and gender (WHO, UNODC & UNAIDS, 2009). Under 7.1. we include detailed recommendations on how to optimize the current registration systems.*

## 6. Prescription and provision of medication

General conclusions regarding the absolute prevalence of Methadone or Buprenorphine prescription are hard to draw as too many possible combinations of medication were given by the respondents in the online survey.

In Belgium, in general, the combination of Methadone with Buprenorphine and Naloxon seems the dominant choice of medication for detoxification orientation, followed by Methadone only and thirdly the combination of Methadone with Buprenorphine.

The most common medication for maintenance seems to involve the combination of Methadone with Naloxon and Buprenorphine (37.2%), followed by Methadone (33.3%) and thirdly the combination of Buprenorphine with Naloxon (11.8%). Table 5 (detox) and 6 (maintenance) provides an overview of different types of substitution medication used for detoxification and maintenance.

The review of the literature suggests that Methadone and Buprenorphine/Naloxon are the standard and safe medication for detoxification. For maintenance treatment Methadone, Buprenorphine and Buprenorphine/Naloxon are the standard medication (van den Brink, Goppel & van Ree, 2003; van den Brink & Haasen, 2006; Soyka et al., 2011). In the WHO guidelines, Methadone is recommended over buprenorphine, because it is more cost-effective. However, buprenorphine has a slightly different pharmacological action; thus, making both medications available may attract greater numbers of people to treatment and may improve treatment matching (WHO, 2009:11).



Table 5 Substitution medication used for detoxification by OST providers per region (source: online survey).

PROVIDER	DETOXIFICATION						
	N° of OST	M	B	M + B	B + NX	M+B+NX	O
<b>GPS</b>							
FL	0	0	0	0	0	0	0
WALL+GER	7	7	3	.	2	.	0
BCR	2	1	0	1	0	0	0
<b>TOTAL</b>	<b>9</b>	<b>8</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>
% of Belgian providing GPs		<b>88.9%</b>	<b>33.3%</b>	<b>11.1%</b>	<b>22.2%</b>		
<b>HOSPITALS</b>							
FL	11	1					
WALL+GER	9	1	1	2	0	6	1
BCR	.	.	0	.	6	.	3
<b>TOTAL</b>	<b>20</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>6</b>	<b>6</b>	<b>4</b>
% of Belgian providing hospitals		<b>10%</b>	<b>5%</b>	<b>10%</b>	<b>30%</b>	<b>30%</b>	<b>20%</b>
<b>SCS</b>							
FL							
WALL+GER	17	1	0	6	0	9	0
BCR	8	1	0	2	0	5	0
<b>TOTAL</b>	<b>25</b>	<b>2</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>14</b>	<b>0</b>
% of Belgian providing SCSs		<b>7.1%</b>		<b>30.8%</b>		<b>53.8%</b>	
<b>TOTAL</b>	<b>54</b>	<b>12</b>	<b>4</b>	<b>11</b>	<b>8</b>	<b>20</b>	<b>4</b>
% of OST Belgian providers		<b>22.2%</b>	<b>7.4%</b>	<b>20.3%</b>	<b>14.8%</b>	<b>37%</b>	<b>7.4%</b>

M	Methadone	NX	Naloxone
B	Buprenorphine	O	Other

Table 6 Substitution medication used for maintenance by OST providers per region (source: online survey).

PROVIDER	MAINTENANCE						
	N° of OST	M	B	M + B	B + NX	M+B+NX	O
<b>GPS</b>							
FL							
WALL+GER	1	1	0	0	0	0	0

BCR	9 2	8 1	3 0	. 1	2 0	. 0	2 0
<b>TOTAL</b> % of Belgian providing GPs	<b>12</b>	<b>10</b> <b>83.3%</b>	<b>3</b> <b>25%</b>	<b>1</b> <b>8.3%</b>	<b>2</b> <b>16.7%</b>	<b>0</b>	<b>2</b> <b>16.7%</b>
<b>HOSPITALS</b>							
FL WALL+GER BCR	10 8 .	3 2 .	0 . .	1 1 .	0 . .	6 5 .	0 . .
<b>TOTAL</b> % of Belgian providing hospitals	<b>18</b>	<b>5</b> <b>27.8%</b>	<b>0</b> <b>0%</b>	<b>2</b> <b>11.1%</b>	<b>0</b>	<b>11</b> <b>61.1%</b>	<b>0</b>
<b>SCS</b>							
FL WALL+GER BCR	13 8 .	2 0 .	0 0 .	3 0 .	8 0 .	0 8 .	0 0 .
<b>TOTAL</b> % of Belgian providing SCs	<b>21</b>	<b>2</b> <b>9.5%</b>	<b>0</b> <b>0%</b>	<b>3</b> <b>14.3%</b>	<b>8</b> <b>38.1%</b>	<b>8</b> <b>38.1%</b>	<b>0</b>
<b>TOTAL</b> % of Belgian OST providers	<b>51</b>	<b>17</b> <b>33.3%</b>	<b>3</b> <b>5.9%</b>	<b>6</b> <b>11.8%</b>	<b>10</b> <b>19.6%</b>	<b>19</b> <b>37.2%</b>	<b>2</b> <b>3.9%</b>

From the online survey, it became clear that an important role in the administration of OST medication is being identified for **nurses** in hospitals and specialized centres. Pharmacists administer the OST medication themselves.

⇒ *Because of the regular contacts providing nurses have with OST clients, education and training of this group should be stressed (see also Go, Dykeman, Santos & Muxlow, 2011 on the importance of specialized training). This training should consist of all aspects of licit and illicit drug use and of OST in specific withdrawal and overdose symptoms, available treatment options for opiate dependence and so forth (further arguments for this are being discussed under point 4.2.).*

Specialized centres, hospitals and GPs also report clients being referred to **pharmacists** for the administration of their OST medication. The Flanders' FG stresses that the administration of medication should remain the responsibility of the medical staff, as the administration by non-medical staff, especially staff providing psychosocial support could jeopardize the relation with the client.

A distinction between Flanders and Wallonia was found in the way hospitals and specialized centres manage the provision of OST treatments. The majority of the responding Walloon institutions (5 hospitals and 5 specialized centres) do provide the OST treatment under supervision only. However, more hospitals and specialized centres tend to provide home doses than is the case in Flanders. This could indicate why the illegal trafficking of substitution medication in Wallonia was identified as a challenging issue in the Walloon focus group and not in the Flemish or Brussels focus group.

The daily distribution of substitution medication often provide opportunities for treatment services to get in contact with clients, who are rather reluctant to the provision of a structured form of psychosocial support, and it is important to build up a positive work relationship with the clients. Interviews with clients in OST treatment showed that *regardless of their profession* (e.g. nurse, doctor, psychologist, pharmacist), all staff involved in the OST treatment of a client might influence the treatment process of a client and is capable of developing a positive relationship with the client. Therefore, the provision of psychosocial support should not be restricted to psychologists and social workers.

An element adding to the general recommendation discussed above that **goal setting with clients** in OST treatment, including the dosage of the substitution medication (Ti, Tzemis & Buxton, 2012), is of major importance can be found in the criticism of some clients regarding the dosage of their substitution medication. From the interviews with clients – one fifth of the interviewees mentioned the lack of involvement in determining their current dose of their substitute drug and limited possibilities to reduce their substitute drug. This mentality sometimes gave participants the feeling they were chained to their substitute drug for the rest of their life and that there was no more hope to ever live a life without taking that drug (Witteveen & van santen, 2011).

## 7. Psychosocial support

Recent reviews prove that the psychosocial component in the treatment of opiate dependent individuals is seen as an essential part of an integrated holistic treatment (Amato, Minozzi, Davoli, Vecchi, Ferri & Mayet, 2011a; Amato et al., 2011b; Mayet et al., 2010; Soyka et al., 2011).

In general, Belgian OST providers pay attention to this aspect. Psychosocial support consists of both social and psychosocial treatment, with the social care focusing mainly on the Europ-ASI life domains (health, work/daily activities, family relations, etc.). Even providing GPs and pharmacists, who have limited time and means, seem to take into account these needs, by either providing psychosocial support themselves and/or by referring clients further. In this respect, more Flemish pharmacists provide psychosocial support (67.4%), than their colleagues in the BCR (44.4%) or Wallonia (21.0%).<sup>9</sup> Moreover, the secondary analysis of the Belspo-study (Ledoux, 2012) showed an important role of the pharmacist (difficulties in the working alliance with the pharmacist is more predictive of frequent heroin use than the therapeutic relationship with the medical practitioner). From the interviews with clients, the role of pharmacists as a source of emotional support became apparent as well.

However, both the quantitative study of clients and the qualitative interviews with clients showed that the number of participants that cited the wish to get some form of psychosocial support was higher than the number of participants that actually received some form of psychosocial support. Moreover, only 9 of the 15 Flemish prisons report providing psychosocial support. In Wallonia (5/10) and Brussels Central Region (1/2) only half of the responding prisons provide psychosocial support. A recent report by the Belgian justice department also illustrates more attention should go to psychosocial support of prisoners in general, as the current lack of social support might explain the high level psychopharmacological medication consumption in prison (37.96% of the total prison population in 2010; FOD, 2012).

⇒ *The **provision** of psychosocial support for some OST clients **could be enhanced**. This is particularly the case in Belgian **prisons**.*

### a. Psychosocial assessment

The online survey points out that psychosocial assessment is generally executed on a regular base in the specialized centres and in the different types of hospitals, where multidisciplinary teams are present. The assessment generally seems to pay attention to the different Europ-Asi life domains and to an assessment of psychological functioning .

However, the interviews with clients show that, in their experiences, limited attention is given to client-reported outcomes, starting from clients' own expectations and experiences (e.g. quality of life) and the focus is mainly on socially desirable outcomes (e.g. no illegal drug use, no criminal offences, employment)

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<sup>9</sup> : Pharmacists do not provide structural forms of psychosocial interventions; they have an important role as listener and caregiver (Vogt & Finley, 2009).

(De Maeyer, Vanderplasschen & Broekaert, 2009). In the Delphi-study, the need for a holistic starting point, with attention for different life domains, broader than drug-related aspects, was also quoted.

*Based on these findings, we recommend that in the assessment as well as in the psychosocial support sufficient attention should be paid to the different life domains, that this assessment should be broader than drug-related aspects, and more attention could be given to client-reported outcomes and overall well-being.*

## **b. Complex problems call for a holistic approach**

### ***i. Psychosocial support is essential, with a focus on social support***

The review of the literature has highlighted that there is no consensus as to what a basic psychosocial treatment should consist of (Griffith, Rowan-Szal, Roark & Simpson, 2000). Therefore, a lot of different types of intervention can be provided by professionals. This wide range of interventions could be explained by one of the recommendations participants of the focus groups have made. They, indeed, argue that it is important to give the psychosocial care a specific individualized interpretation, **dependent on the psychosocial needs** of the client. The Flemish and Walloon focus group also stressed the importance of client's stability to be taken into account for the determination of how and which support should be provided.

⇒ *The psychosocial support in substitution therapy should be client-centred and should differentiate between different groups of clients.*

Psychosocial *treatment* consists of both social and psychological treatment. The social care focuses mainly on the Europ-ASI life domains with an emphasis on the provision of solutions for housing and employment, the referral of clients to more specialized professionals and the provision of help with juridical and administrative problems. The psychological care involves mostly trying to have an open and comprehensive attitude towards their clients or the referral of clients to psychiatrists or psychologists. In addition, it remains important to mark that the client's satisfaction survey pointed out that clients seem to consider the provision of **social treatment** to be more important than psychological support. These results illustrated the high percentage of participants who wish to get support in different life domains, especially help at home, employment and recreational activities and who do not receive this kind of social support at the moment. The results on Quality of Life also illustrated the diverse support needs on different life domains (e.g. leisure activities, social relations, financial situation). In the qualitative interviews, clients also expressed the desire to talk about the current situation and the future, rather than keep on digging in the past and telling that same old story again, why they started using drugs in the first place.

⇒ *The psychosocial support of OST clients should consist of support on different life domains. Clients expect especially more social support, in particular help in the home, employment and recreational activities, than is the case today.*

### ***ii. Support on a voluntary basis***

The results of the different focus groups and the interviews with clients pointed out that psychosocial support, valuable as it is, should however always be provided on a voluntary base, especially since clients'

motivation determines OST treatment's success. In Flanders, psychosocial treatment in hospitals and specialized centres is much more mandatory than it is in Wallonia. Wallonia follows the principle of autonomy of the client, described by the participants of the focus groups. The main difference in psychosocial treatment between Flemish and Walloon hospitals is the aspect of *written agreement*, which is much more common in the Walloon hospitals. Contrary to hospitals, for specialized centres, written agreements are much more common in Flanders than in Wallonia.

The clients in the interviews also expressed the desire for psychosocial support when they need it and not with strict appointments with a strict time-limit. Their stories revealed that their life is sometimes very unpredictable, urging for flexibility in the provision of psychosocial support and not strictly planned in advance. However, a number of clients do not need (e.g. when they have a strong informal network to depend on) or want additional psychosocial support. Research has illustrated that the provision of OST treatment alone without psychosocial services also generates positive effects on the reduction of illegal activities and the use of illicit drugs (Schwartz, Kelly, O'Grady, Gandhi & Jaffe, 2011).

⇒ *Psychosocial support should be available to all opiate-dependents clients, according to the WHO-guidelines, although indeed it "should not be compulsory". (WHO, 2009, p. 9-10). The clients expect more flexibility in its provision though (moreover, flexibility is found to be a key component of high quality OST by Deering, Horn & Frampton, 2012).*

### *iii. The importance of cooperation and referral for psychosocial support*

More Flemish hospitals *refer* clients further for psychosocial treatment than Walloon hospitals, the reason indicated for not referring in both regions being sufficient service at the hospital itself. Referral by Flemish hospitals mainly involves referral to specialized centres.

In Brussels, pharmacists' referral for psychosocial support is equally spread over psychological and social support, whereas in Flanders, referral for psychological support dominates and in Wallonia the referral has a dominant social focus. In all three regions the combination of referring clients to specialized centres and physicians for psychosocial support is the most common. When pharmacists don't refer their clients it is mainly because the lack of demand thereof or the clients (are thought to be) already receiving psychosocial treatment.

Although specialized centres provide psychosocial treatment themselves, they tend to refer clients further quite often to other providers of psychosocially assisted treatment. The providers they refer their clients to seem specialized in specific aspects of care such as mental health, work, education and income. These specific life domains can perhaps not be addressed adequately by the multidisciplinary team of the specialized centre which makes referral to other providers necessary. Generally, the specialized centres mention more than one provider of psychosocial treatment. Flemish specialized centres tend to refer clients to mental health centres, in Wallonia referral is more diverse, also involving external psychological experts and public centres for social welfare (OCMW/CPAS).

According to the participants of the three focus groups, **networking across the different levels of care** is a necessary condition for active support: general practitioners, pharmacists and other primary care workers should refer clients with complex problems to other, more specialized, centres such as specialized

drug centres or primary care centres with a low threshold and with expertise in reaching marginalized populations (General Welfare Centre/ Centre d'Action Sociale Globale /MSSC). In this respect, the participants in the three focus groups stress that networking with different (health) care services is an essential part of the treatment process.

The WHO-guidelines emphasize the importance of networking with the diverse specialized and non-specialized, health and other services as well: *“Access to and networking with medical, psychiatric, social and harm-reduction services is desirable, and should be developed when possible.”* (WHO, 2009: 17)

The participants of the three focus groups all agree that it is important that the different primary care actors and centres and the specialized centres involved in OST get to know each other, at a structural-organizational level as well as with regard to the actual content and (treatment) methods applied. Knowing each other has several important advantages, on a client level as well as on a structural level. The actors involved can develop a relationship of trust and it can lead to a clear-cut cooperation. Moreover, the interaction between professionals is essential to avoid misunderstandings and double prescriptions. Finally, it can help to optimize the spread of clients.

- ⇒ *To optimize cooperation and networking, participation in conferences and in informal and formal meetings are suitable ways of getting to know each other. Secondly, the consultation between primary and specialized - ambulant and residential - care, is considered to be the ‘golden triangle’. Participants of the three focus groups all agree that this type of consultation is a simple and effective way to induce the cooperation on a client-level as well as on an organizational level. To realize this, consultation meetings should take place on a regular basis, e.g. every three months.*
- ⇒ *Referral could be also optimized by developing a map of the different institutions, their specific provision and responsibilities. Also, training of pharmacists and GPs in the matter of OST and opiate dependence could result in a more optimal problem identification or detection, therefore leading to a more optimized referral.*

Another important argument for high standard referral is the value **OST clients** attribute to the relationship with their caregiver (cfr. Infra). Optimal referral to the right channels in the appropriate service could avoid clients treatment drop-out out of frustration. Optimized referral is important as the clients satisfaction survey proved it seems to be an obstacle for OST clients to be referred to many different services, since it involves them having to start telling their story all over each time. Also in the qualitative interviews clients frequently mentioned the desire of a **case manager** (e.g. a central person or key social worker) they could rely on. Often participants have experienced a lot of turn-over of staff in their OST treatment, hampering their willingness to develop a trustful relationship with a professional in their treatment program or in other treatment services.

- ⇒ *When clients are facing multiple and complex problems a **case manager** can function as a central key worker, to avoid fragmentation of care and to develop a personal, positive work relationship with the client. In terms of providing optimal continuity of care, a case manager can be appointed to clients with changing living situations(e.g. incarceration, hospitalization, homeless clients, etc.) (Parkes & Reist, 2010). This case-manager can follow the whole path of the OST client.*

## 8. Prerequisites for improving (the quality of) OST

### a. Registration of OST demand and provision

To allow monitoring and to optimize OST treatment there is an urgent need for a systematic registration of the OST demand and provision. To meet this end, reliable data are required at two levels, on a structural level and on the level of clients.

#### *i. Registration on a structural level*

Registration on a structural level is aimed at generating epidemiological data to monitor and optimize demand, provision and administration of OST which will benefit both clients and providers. Two main existing databases could be used for this: Farmanet (National Institute for Health and Disability Insurance) and the Treatment Demand Indicators.

It is clear from the registration by **Farmanet** that the purpose of this data collection is orientated at the financial management of substitution medication. However, with a minimum of extra work, the Farmanet database could provide valuable information for the monitoring of OST, as it already registers the OST medication delivered by pharmacists (with separate files for Methadone and Buprenorphine), the postal code of the pharmacist, the category of MP prescribing the medication (medical specialization) as well as the age of the client. Clients are registered anonymously with a unique code and every delivered prescription is registered separately, resulting in a very large file.

⇒ *Combining the files on the different types of substitution medication in a central database, distinguishing between the use of these medications for pain management and for substitution reasons and between the use for detoxification and for maintenance purposes it could allow a better insight into OST provision and administration. Collecting the identification of the prescriber could be used to detect possible fraud on a client and prescriber level. In case of the identification of the prescriber the geographical spread of the providers could be inventoried. If this database would also contain the clients' place of residency, a comparison is possible in between the geographical spread of demand/needs and the provision. Changing the unique code into a numeric code<sup>10</sup> could however allow the generation of epidemiological data on dosage, age of clients, the prevalence of Methadone and Buprenorphine and administering pharmacists. Furthermore, this database could allow the analysis of the workload of pharmacists with regards to OST.*

The National Institute for Health and Disability Insurance gathers information on the number of **'revalidation weeks'** per client for the specialized centres as well, which could provide an insight in (the evolution of) the number of OST clients treated in specialized centres. The contacts in these revalidation weeks can also consist of purely psychosocial support, or involve clients with another drug dependence (non-opioid or alcohol). As medication is registered as well, it gives an indication of the spread of clients

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<sup>10</sup> At the moment, this unique code consists of both letters and numbers making it not accessible for spss-analysis; therefore a numeric coding is being suggested.



who receive OST over the different specialized centres (phone interview, director MSSC Antwerp, 27/06/2012).

Currently, anonymous registration on a client level exists and is being developed further by means of the Treatment Demand Indicators developed by the EMCDDA and coordinated for Belgium by the BMCDDA.

The **Treatment Demand Indicator** (TDI), which has to be filled in by National Institute for Health and Disability Insurance-registered treatment centres, provides anonymous data on clients entering addiction care (age, gender, address of residence, frequency of use, receiving OST treatment, etc.). This database is a key to monitoring client's characteristics, involving information on the EuropASI life domains, as well as treatment demand and will in the future be able to provide information on evolutions in substitution client profiles.

⇒ *As to OST, this list should be completed with specific treatment orientation (detoxification /maintenance). Since the database only contains clients who start up treatment, no information is present as to whether clients continue OST treatment, which leaves a knowledge gap concerning clients who continue OST treatment.*

Currently TDI is not being registered by treatment departments in prisons, independent GPs and group practices of GPs, independent psychiatrist and pharmacists, and TDI is only registered by a sample of general and psychiatric hospitals.

=> *We therefore recommend to include each of these providers in the registration of the DTI in the future to allow for a full view on the OST providers.*<sup>11</sup>

## *ii. Registration on the level of the client*

The main purpose of a registration on a client level is to guarantee continuation of OST treatment in case of a change of setting (hospitalisation, arrest and incarceration) as well as the follow-up of clients in contact with different care providers. Another goal is the avoidance of interference between different types of medication (e.g. benzodiazepines and opiates, etc.). Furthermore, this registration could resolve the resistance of other providers than the specialized centres (e.g. hospitals, prisons) regarding the provision of OST treatment as it could provide data on whether a client is already receiving OST treatment, treatment orientation, dosage and medication used. The fourth main goal of a registration on a client level

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<sup>11</sup> In 2012, TDI involves the data of a pilot phase in 25 general and psychiatric hospitals for the period August 2011 until August 2012 and for 42 general and psychiatric hospitals for the period August 2012 – December 2013, and to all Flemish and Walloon providers with a National Institute for Health and Disability Insurance (RIZIV)-registration, all Flemish Centres of Mental Health care (CGG), all Walloon providers with a drug care registration of the Walloon government, the Brussels Capital Region drug care centres who have no RIZIV-registration (who are part of the ADDIBRU-network) and the centres for drug care of the Walloon Community who have no RIZIV-registration or Walloon government registration (who are part of the Eurotox-network). The TDI registration will, after the evaluation of the pilot phase and the advice of the services involved in the project, be put into operation in each hospitals in 2014.

involves the detection of potential abuse by clients (medical shopping) and by providers (prescription behaviour). For the latter the database of Farmanet could be used as an additional information source.

The advantages of central registration on a client level are in accordance with the WHO guidelines (2009:10), stating it: *“Prevents patients from receiving Methadone or buprenorphine from more than one source; can be used to limit access to other controlled medicines requiring central approval, such as other opiates; can provide more accurate data on treatment numbers than situations where central registration is not used.”*

However, there is some hesitance, to implement a central registration system including **identifiable client codes**, which also became clear in the different focus groups. There was no agreement between the participants in the focus groups in Flanders, Wallonia and Brussels regarding an (electronic) central registration system of clients.

In the focus groups in **Flanders** all the professionals working in specialized centres are in favour of an electronic central registration system of clients, stressing the advantages discussed above. In **Brussels**, there was no consensus about an electronic central registration system of clients because of its potential negative effects. In the focus group in **Wallonia**, all the participants recognized that an electronic central registration system of clients could be very useful although most participants (including specialized centres) mistrust it also because of its potential negative effects. In fact, the Walloon participants prefer no electronic data registration to avoid excesses; they would prefer a liaison to gather these data and pass them along. They also propose that it would be (more) interesting to create a repertory to identify institutions, organizations and professionals active in the field of OST. This could lead to more clarity for all professionals and more visibility for all clients.

Overall, the main fear of the participants in the focus group opposing an electronic central registration system of clients is that this system could be liable to issues of **privacy** and **professional secrecy**. The element of privacy also makes the WHO hesitant towards a central registration system: *“However, central registration can facilitate breaches of privacy, and this may deter some patients from entering treatment.<sup>12</sup> It can also delay the commencement of treatment. Safe and effective treatment of opioid dependence can be achieved without central registration. Because such registration could cause harm if privacy is breached, it should only be used if government agencies have effective systems for maintaining privacy”* (WHO, 2009: 10).

A central registration of clients data in a health file (e-health platform) is being contested by the National Health Board (Nationale Gezondheidsraad) as well as the League of Physicians (Orde van Geneesheren). In 2005, The National Health Board advised against a centralized health-file accessible for all medical care practitioners as it could interfere with the law on professional secrecy. Therefore they put forward the demand for limiting access, reserved to specific categories or specialisations of medical practitioners. (Advies NROvG, 26 November 2005)

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<sup>12</sup> Indeed, 71% of an opioid user sample rated ‘being a registered drug addict’ as at least a moderate barrier to accessing OST in a New Zealand study (Deering et al, 2011).

In terms of the e-health platform, the League of Physicians in 2008 advised against a centralisation of data where one institution holds and both manages the encryption keys, which can be used to identify clients (League of Physicians, 7 June 2008).

All in all it is clear that a central registration has important advantages, however, in view of the privacy concerns mirrored in literature and in practice, this issue warrants further discussion. The evaluation of the 'Vitalink' project, a Flemish pilot project that was initiated by the end of 2012 in Aalst, Limburg, Turnhout and Zenneland, aimed at exchanging data on treatment (e.g. medication) between health care providers, might lead to concrete recommendations.<sup>13</sup> Without a doubt, a positive element of the project is that the patient is to give his/hers informed consent for the information exchange and that information of all medication is exchanged and not just the information on the substitution medication.

Client leveled central electronic registration does exist already in Limburg (combined with a system of accredited GPs). In this registration system, which is still being developed further, all details on clients are monitored (referral, treatment plan), making it easier for the different care providers to follow the path and evolution of the client. The system is accessible for medical and psychosocial care practitioners although the content of the medical support is not available to psychosocial care practitioners. In addition, in order to avoid dangerous interference, they have a code for the accredited GPs and the MSSC prohibiting the prescription of benzodiazepines to OST clients, and clients are being tested for alcohol use as well. This system can be accessed by all MSSCs medical practitioners and the accredited GPs.

The limitation of this system is its limitation to the provincial level as well as the fact this database is not accessible by physicians in hospitals and in prisons. As was addressed in the online survey, the continuation of OST treatment can be problematic during hospitalisation as well as incarceration, where the involved professionals are confronted with clients requesting OST while they cannot verify whether these client actually are receiving OST treatment, nor the orientation of the treatment (detoxification /maintenance), type of substitution medication used as well as other medication, dosages, etc. A possible way to deal with the non-accessibility by providers (outside a OST network) could be an emergency 24 on 24 hours accessible contact number where clients OST treatment details (type of medication used and dosage) can be checked with a OST network collaborator/liaison. Preferably this liaison would be a network's medical practitioner.

If applied, central registration on a client level should contain **information on the prescribing practitioner** (including contact details), **treatment orientation, dosage, other medication being used** (in terms of interference with the substitution medication, as is for instance is the case for benzodiazepines), development as well as lowering of **tolerance** (Strang, Copenhagen, June 2012).

## b. Training and education

The results of the providers' survey, the focus groups and the participants of the Delphi forum as well as international scientific literature (Walters, Matson, Baer & Ziedonis, 2005) prove that, to guarantee

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<sup>13</sup> It is a network of GP's, pharmacists, nurses, care providers and software companies (more information can be found at: [www.vitalink.be](http://www.vitalink.be)).

optimal OST provision, training and education should be the highest priority. However, the results of the survey and of the focus groups show that there are still improvements to make.

All Belgian **specialized centres and hospitals** report training and education. We do note that the results for Flanders mainly apply to the psychiatric hospitals. For all Belgian specialized centres, intervision turns out to be a more common practice than supervision (as well as it being more mandatory) whereas for hospitals supervision is less common than intervision. All Belgian specialized centres report training. Regional differences exist, with it being mandatory in all Flemish specialized centres and only in half the Walloon centres. In Flanders training's content is very diverse (training generally consists of psychosocial education (life domains and specialized types of psychological interventions) as well as specific pharmacological education (13/17) and client assessment (11/17) and general education on drug use, addiction and treatment); in Wallonia education on life domains is most common.

Training seems to be a regular practice in Belgian hospitals too. In Wallonia it seems to be less mandatory than in Flanders.

However, training is not very common amongst Belgian **pharmacists** (only one in five pharmacists report training in the online survey), and (if organized) it tends to be on a voluntary base. Intersession and supervision are not common practices for Belgian pharmacists either.<sup>14</sup> Moreover, Flemish and BCR pharmacist seldom receive psychosocial training, which seems to be provided more in Wallonia. *In view of the fact that in particular Flemish and BCR pharmacists provide psychosocial support (67.4% and 44.4% respectively), it seems warranted that this type of training is offered for pharmacists.*

Training for **prison staff** involved in OST seem rather limited in Flemish (7/15), Walloon (3/10) and Brussels Central region (0/2). Only half of the Flemish prisons provide training for staff involved in OST (7/15) and, if provided; this training generally remains rather limited. Basic training for new staff is the only example given. No further or more detailed information was given on the content of this training (Debehets, 2011). Only 3 Walloon prisons report providing training for their staff; 7 Walloon prisons report not providing training for their staff. No further details about these trainings were provided. The 2 Brussels Capital Region prisons responding to the survey do not provide training for their staff either. Although only provided in half of the prisons, training seems more common in Flemish prisons than in BCR or Walloon prisons.

As to **the content** of the training and education, all providers reported trainings on pharmacological matters. They also mentioned trainings on psychosocial aspects of the care although less frequent than the pharmacological matters. Specialized centres did mention more training about the clients' life, as opposed to other providers.

The participants of the focus groups have reported the **medical as well as psychosocial aspects** of OST treatment to be both important parts of the education and training.

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<sup>14</sup> The survey response contained too little GP's who provide OST, so no general conclusion can be drawn with regard to GP's.

Integrated holistic care emphasizes the merging of all the elements related to care. In that respect, the participants of the focus group stressed the importance of the acquisition of new skills and training are essential for every care giver. In particular pharmacists and general practitioners report a lack of time and skills to support their clients on a personal, efficient and effective manner. Especially **clients with complex problems** are in need of active and long term support, in accordance with their treatment needs.

The focus groups and the participants of the Delphi-method pointed out training should also involve referral and networks. As primary care givers do not have the means to provide the full offer, they should be aware of the **existing provision, possible networks** and whom to refer to. Among others, a growing collaboration between specialized centres and primary health care would have a positive impact on the social reintegration of opiate-dependent individuals and enhance their feelings of inclusion in the broader society. Knowing each other's services is one thing, but cooperating closely and making agreements between services will be necessary to set up integrated treatment services.

⇒ As was noted earlier, the relationship the client has with his or her caregiver is very valuable. Participants of the Delphi-method noted that staff can be trained in these skills by teaching them **client-centered communication** strategies, such as specific conversation skills, active and empathic conversation techniques, which will be experienced by clients as interested and empathic (Stewart et al., 2000). *Training should be organized for **all providers and all medical and non-medical staff involved** in OST practice, including prison staff, especially as insufficient knowledge can result in insufficient care (Go, Dykeman, Santos & Muxlow, 2011) or in rejection of OST clients. Training should consist **of all different aspects of opiate dependence** (pharmacological as well as psychosocial support, referral and the available network of (psychosocial) support for opiate-dependent individuals, present provision, etc.) (Stöver, 2011). Thus, in training of staff in OST treatment not only attention should be given for specific treatment methods and techniques, but also attention on how to establish a solid therapeutic relation with clients. Especially **pharmacists, nurses, general practitioners, other primary care workers, and staff in general and psychiatric hospitals** are in need of education and training on OST treatment.*

According to the participants of the three focus groups, one of the most important obstacles for the quality of OST-provision is the lack of support for and training of *all* care practitioners. They have reported that pharmacists, general practitioners, other primary care workers, and hospitals are in need of education and training.

Quite some arguments can be given in favour of training and education. First of all, 33.3% of the non-providing Flemish GPs in the online survey noted that a lack of expertise to be an obstacle to provide OST or to restart providing it while training for GPs and pharmacists does not seem to be organized on a frequent basis. Secondly, the organization of training and education, or maybe even better the adoption of training on opiate dependence in general in the university's curriculum, may result in **less resistance** against OST and OST clients as well as be the **gateway to more sufficient care for these groups**. A system of trainee posts in specialized centres or specific psychiatric hospitals written into the university's curriculum was also suggested by the Walloon focus group.

- ⇒ *To optimize knowledge on OST, including training on all aspects of problem drug use and opiate dependence in the **basic curriculum** of medical practitioners, psychologists, nurses, social workers and pharmacists, is being suggested, maybe even involving **apprenticeships** for future providers (e.g. in specialized centres).*

There are however certain **conditions** for this education and training.

- ⇒ *First of all, training should be **organized on a regular base** and also **be repeated**, as the effects of training seem to fade away. These conditions were stated in the focus groups in Flanders and Wallonia and it is stressed in international literature (Walters, Matson, Baer & Ziedonis, 2005).*

Secondly, for the groups of GPs and pharmacist the focus groups pointed to limited time and means, suggesting a financial compensation. Another way of dealing with this issue could be (the development of) a less time-consuming e-learning tool. The importance of the development of a website with information on OST, including an e-learning module, was also stressed by the VAD Forum Addiction Medicine (e-mail, 08/10/2012). This module could be used in the basic curriculum of the relevant Bachelors and Masters as well.

- ⇒ *In terms of training, a **financial compensation** or the development of an **e-learning tool** could respond to the GPs and pharmacists needs (e.g. lack of means and time). Moreover, the evaluation of online training for the provision of opioid substitution treatment by community pharmacists showed that online training is an appropriate and economical method of improving pharmacists' clinical skills with respect to this client group, and has the potential to reach a wider audience of pharmacists (Walters, Raymont, Galea & Wheeler, 2012).*

Thirdly, the participants of the Flemish focus group insisted on training and education being provided by independent organisations, implying it should not be organised by pharmaceutical companies. The participants in the Walloon focus groups suggested the league of GPs or the league of pharmacists.

- ⇒ *The organisation of training and education should be provided by **independent** organisations. Networks of specialised and non-specialised services could serve as networks for training and education as well.*

## 9. Recommendations for further research

The SUBANOP-study started with the aim to gain more insight in and optimize current practices of opiate substitution treatment in Belgium. Unfortunately, it soon appeared that available databases included several limitations, as they are often fragmented and not comprehensive. Although substitution treatment has been applied on a large scale for more than 15 years now, research on this topic has been limited. Based on the SUBANOP-study, several recommendations can be formulated for further research. As described above, there is a clear need for a centralized and comprehensive database which allows to map the providers of substitution treatment and to monitor evolutions in treatment demand and practices over time. Such a registration should include specialized treatment centres, as well as (psychiatric wards in) general hospitals, general practitioners and pharmacists. Besides quantitative and longitudinal analyses of

available services, it is recommended to explore these aspects further during in-depth qualitative research. This may include research among treatment providers who are rather reluctant to provide substitution treatment or (to refer to) psychosocial support. This may allow to identify existing concerns and thresholds among service providers and to look for solutions to take these obstructions away (Deering et al., 2012). Moreover, it will be important to explore the perspectives of (potential) clients in this type of research.

Besides centralized information on OST providers and the substitution treatment that is provided, it is necessary to collect more information on the characteristics and support needs of individuals participating in OST. Based on the registration of Farmanet, only limited information is available regarding these issues for the moment, but a number of registered variables need to be further refined and complemented with socio-demographic data (educational level, cultural background, ...) and information regarding persons' living situation (e.g. daily activities, housing). Consequently, profiles of service users can be derived which allow to attune treatment – and psychosocial support in particular – to the needs of the target population. A recently published Belgian study regarding the quality of life of opiate dependent persons (n=159) 5 to 10 years after starting opiate substitution treatment (De Maeyer et al., in press) demonstrated that persons in long-term OST can be considered a very heterogeneous population with varying support needs, including three typical profiles: socially included individuals who have a job or structured day activity and who have some clear goals in life (n=95); socially excluded, but stabilized persons who often depend on welfare benefits, who have limited social relations and a rather poor quality of life (n=41); the third group consists of opiate dependent persons who live in rather marginalized situations, characterized by active and excessive drug use, low quality of life and feelings of insecurity (n=23).

The combination of treatment-related data (e.g. dosage, type of medication and treatment regimen) with client data may provide important information regarding the question which clients benefit most from, for example, treatment with Buprenorphine and which are their support needs. It is further important that such a registration is not limited to the situation at the start of treatment, but that the registration is updated regularly, in order that clients' changing needs and demands can be monitored, given the often long length of substitution treatment.

Besides a quantitative and longitudinal analyses of support needs and profiles of persons in substitution treatment, it is necessary to assess these and other aspects in greater detail based on qualitative research. This may reveal information on emerging treatment issues like the specific needs of older opiate dependent individuals who are considered 'elderly' at a much younger age than their non-opioid misusing peers. Also, few information is available on the needs of young, homeless poly substance users who are opiate dependent and often fall through the cracks of the social welfare and health care system. Other questions relate to the specific provision and organisation of OST, like dealing with aggressive behaviour, gender issues or the desirability of separate counters or agencies for stabilized persons who are no longer using excessively or do not longer live in marginalized situations. It is recommended to map the perspectives of service users, providers, treatment coordinators as well as policy makers in this discussion. Finally, additional research is advised regarding the nature and type of psychosocial support that opiate

dependent persons need. The SUBANOP-study revealed that psychosocial support often takes diverse forms. Research regarding the effectiveness of specific forms of psychosocial support for persons treated in specialized outpatient centres, as well as for persons who receive their methadone through pharmacies is recommended. Moreover, given the strong association between treatment retention and outcomes, additional research is needed regarding treatment adherence and compliance of opiate dependent individuals and how these aspects can be enhanced. The client-provider relationship and how this supporting relation can be strengthened, deserves specific attention. Research needs to start from a view on opiate dependence as a complex and lasting problem, including attention for changing support needs and a focus on recovery. In the UK, but also in the US and Australia, the recovery movement is currently growing (Best, 2012), among others as a reaction toward the extremely low abstinence rates after methadone treatment (Berridge, 2012). Recovery starts from a client-centred approach aimed at giving individuals' more control over their lives and having a good quality of life, despite the disabilities and limitations that are associated with drug dependence (Slade, Amering & Oades, 2008).

## 10. General conclusion

In general, it is fair to say that the outcomes of the SUBANOP-research match with the WHO guidelines for the Psychosocially Assisted Pharmacological Treatment of Opiate Dependence (WHO, 2009).

The general approach of OST in terms of a **health care** is supported by the WHO guidelines and is being specified by the FG Flanders as not being dominated by a safety and security discourse: *“Given the multiple medical problems associated with opiate dependence and the nature of pharmacological treatment, provision of pharmacological treatment for opiate dependence should be a health-care priority”* (WHO, 2009: 8).

The advantages of **integrated holistic care** are emphasized in the WHO-guidelines as well: *“The optimal approach is to provide integrated holistic care to address current problems and prevent further problems. In practice, this means being able to detect medical, psychiatric and social issues in the assessment process, and having the means onsite to attend to the issues simultaneously.”* (WHO, 2009: 19)

Integrated care also involves networks and referral: The WHO-guidelines emphasize the importance of networking with the diverse specialized and non-specialized, health and other services as well: *“Access to and networking with medical, psychiatric, social and harm-reduction services is desirable, and should be developed when possible.”* (WHO, 2009: 17)

The aspect of **central registration** is also supported by the WHO guidelines, but was specified further in terms of necessary content of this registration (e.g. contacts of the prescribing practitioner, dosage, other medication, treatment orientation, degree of tolerance developed), as well as a necessary differentiation between client-levelled registration and registration at a structural level which might resolve certain issues regarding privacy. Central registration has the following advantages according to the WHO guidelines: *“Prevents patients from receiving methadone or buprenorphine from more than one source; can be used to limit access to other controlled medicines requiring central approval, such as other opiates; can provide more accurate data on treatment numbers than situations where central registration is not used.”* The



element of **privacy** also makes the WHO hesitant towards a central registration system: *“However, central registration can facilitate breaches of privacy, and this may deter some patients from entering treatment. It can also delay the commencement of treatment.”* (WHO, 2009: 10).

The aspect of central registration (determined at a structural level by the SUBANOP focus groups) in terms of providing a better insight into the OST practice and spread by providing epidemiological data is also stressed by the WHO: *“The policy should outline the approach to preventing and treating the problems of opiate dependence. It should be based on epidemiological data, the evidence for effectiveness of interventions, the resources of the country and the values of the society.”* (WHO, 2009: 8-9)

As to **training**, several outcomes of the SUBANOP-research are in accordance with the WHO guidelines. First of all, as nurses and pharmacists play a significant role in the administration of medication, therefore also having frequent contacts with the clients, the importance of special training should be stressed: *“Staff dispensing Methadone and buprenorphine are generally pharmacists, although (...) nursing staff may also be able to dispense medication, depending on national laws. Staff dispensing Methadone and buprenorphine should have specific training in opiate-dependence treatment”.* (WHO, 2009: 15-16). The WHO-guidelines also highlight the necessity for education and training: *“The support and training of health-care personnel requires a continuous effort (...). These requirements may include postgraduate training and certification, continuing education and licensing and the setting aside of funding for monitoring and evaluation.”* (WHO, 2009: 15).

As to **prisons** the aspect of follow-up after release is stressed by the WHO-guidelines. The SUBANOP-research suggests the attribution of a case manager for people who change settings often, to guarantee treatment continuation (Parkes & Reist, 2010): *“Policy makers and prison administrators should ensure appropriate links between prison health services and agonist maintenance treatment outside prison. Even small gaps in the continuity of treatment are distressing for the patient and risk the person relapsing to illicit opiate use. Therefore, opiate agonist maintenance treatment should be continuous on leaving prison. This means coordinating the day of discharge from prison with the day of commencement of opiate agonist treatment outside prison.”* (WHO, 2009: 12)