



**Alcohol & Drug Abuse Research Group**

**Medical Research Council**

**Technical Report on Audit of  
Substance Abuse Treatment  
Facilities in Gauteng (2003-2004)**

Bronwyn Myers

Alcohol and Drug Abuse Research Group

Medical Research Council (MRC)

April 2004

**Acknowledgements**

The author wishes to thank Fred Koopman for managing the fieldwork of this study, the treatment facilities that participated in this project, and Prof. Charles Parry for editing this report.

## TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY.....</b>	<b>7</b>
<b>PART 1: BACKGROUND.....</b>	<b>9</b>
<b>GENERAL BACKGROUND.....</b>	<b>9</b>
<b>Need for effective and accessible substance abuse treatment in Gauteng.....</b>	<b>9</b>
<b>The socio-political context of substance abuse treatment services in South Africa.....</b>	<b>10</b>
<b>The state of substance abuse treatment services in Gauteng.....</b>	<b>11</b>
<b>Conceptualising access to substance abuse treatment services.....</b>	<b>13</b>
<b>Monitoring of substance abuse treatment services in Gauteng.....</b>	<b>14</b>
<b>TERMINOLOGY.....</b>	<b>15</b>
<b>AIMS.....</b>	<b>16</b>
<b>OBJECTIVES.....</b>	<b>17</b>
<b>METHODS.....</b>	<b>18</b>
<b>Study Design.....</b>	<b>18</b>
<b>Sample.....</b>	<b>19</b>
<b>Questionnaire.....</b>	<b>19</b>
<b>Data collection procedures.....</b>	<b>20</b>
<b>Data analysis.....</b>	<b>21</b>
<b>Response rates.....</b>	<b>22</b>
<b>Quality assurance and item non-response.....</b>	<b>22</b>
<b>Further data considerations and limitations.....</b>	<b>22</b>
<b>PART 2: RESULTS FROM THE MRC AUDIT OF SUBSTANCE ABUSE TREATMENT FACILITIES IN GAUTENG.....</b>	<b>24</b>
<b>CHARACTERISTICS OF SUBSTANCE ABUSE TREATMENT FACILITIES IN GAUTENG.....</b>	<b>24</b>
<b>Treatment facility profile by intensity of care.....</b>	<b>25</b>
<b>Treatment facility profile by facility ownership.....</b>	<b>25</b>
<b>Treatment facility profile by state affiliation .....</b>	<b>25</b>

<b>Treatment facility profile by intensity of care and facility ownership</b> .....	25
<b>PROFILE OF CLIENTS SERVED BY SUBSTANCE ABUSE</b>	
<b>TREATMENT FACILITIES IN GAUTENG.....</b>	27
<b>Demographic profile of clients at treatment facilities in Gauteng .....</b>	27
<b>Variations in the profile of clients served at treatment facilities in</b> <b>Gauteng by facility characteristics.....</b>	29
<b>TREATMENT CAPACITY AND SERVICE UTILIZATION.....</b>	32
<b>Average number of clients treated per month by facilities in Gauteng</b> .....	32
<b>Treatment capacity of substance abuse treatment facilities in Gauteng</b> .....	33
<b>Extent to which services of treatment facilities in Gauteng are utilized</b> .....	34
<b>Waiting period for treatment services at substance abuse treatment</b> <b>facilities in Gauteng .....</b>	35
<b>Treatment retention and attrition .....</b>	35
<i>Variations in treatment retention and attrition by facility</i> <i>characteristics .....</i>	36
<i>Variables associated with treatment attrition and retention .....</i>	37
<b>CHARACTERISTICS OF STAFF AT SUBSTANCE ABUSE TREATMENT</b> <b>FACILITIES IN GAUTENG.....</b>	38
<b>Characteristics of staff at substance abuse treatment facilities in</b> <b>Gauteng .....</b>	38
<b>Variations in staff characteristics by organisational</b> <b>factors.....</b>	39
<b>Staff participation in development activities.....</b>	42
<b>Resources to support staff development for treatment facilities in</b> <b>Gauteng.....</b>	44
<b>PROFILE OF SERVICES PROVIDED BY SUBSTANCE ABUSE</b> <b>TREATMENT FACILITIES IN GAUTENG.....</b>	46

<b>Profile of treatment services offered by substance abuse facilities in Gauteng .....</b>	<b>47</b>
<b>Variations in treatment services by facility characteristics.....</b>	<b>49</b>
<i>Variations by demographic profile of clients.....</i>	<i>49</i>
<i>Variations by treatment intensity and facility ownership .....</i>	<i>50</i>
<i>Variations by type of state affiliation .....</i>	<i>55</i>
<i>Variations by speciality staffing resources .....</i>	<i>57</i>
<b>ACCESSIBILITY OF SUBSTANCE ABUSE TREATMENT FACILITIES.....</b>	<b>59</b>
<b>Practices that target barriers to treatment entry.....</b>	<b>59</b>
<b>Practices that target barriers to engagement and retention in treatment.....</b>	<b>61</b>
<b>Variations in practices that target barriers to treatment entry.....</b>	<b>62</b>
<b>Variations in activities to improve treatment engagement and retention by facility characteristics.....</b>	<b>68</b>
<b>MONITORING AND EVALUATION ACTIVITIES FOR SUBSTANCE ABUSE TREATMENT FACILITIES IN GAUTENG.....</b>	<b>73</b>
<b>Monitoring and evaluation activities at substance abuse treatment facilities in Gauteng.....</b>	<b>73</b>
<i>Variations in monitoring and evaluation activities by treatment intensity and facility ownership .....</i>	<i>75</i>
<i>Variations in monitoring and evaluation activities by affiliation .....</i>	<i>75</i>
<b>PART 3: DISCUSSION OF KEY FINDINGS FROM THE MRC AUDIT OF SUBSTANCE ABUSE TREATMENT FACILITIES IN GAUTENG.....</b>	<b>77</b>
<b>AVAILABILITY OF SUBSTANCE ABUSE TREATMENT SERVICES.....</b>	<b>77</b>
<b>DIVERSITY OF SERVICES PROVIDED .....</b>	<b>78</b>
<b>Variations in the diversity of services provided by organisational factors.....</b>	<b>79</b>

<i>Variations in the provision of medical services by organisational factors</i> .....	79
<i>Variations in the provision of mental health services by organisational factors</i> .....	83
<b>TARGETING BARRIERS TO TREATMENT ACCESS, ENGAGEMENT AND RETENTION FOR CLIENTS FROM UNDERSERVED GROUPS.....</b>	<b>86</b>
<b>Targeting barriers to treatment entry and retention for Black clients.....</b>	<b>87</b>
<i>Variations in activities to target barriers to treatment entry for Black clients.....</i>	<i>89</i>
<b>Targeting barriers to treatment entry and retention for female clients.....</b>	<b>92</b>
<b>THE ROLE OF MONITORING AND PROGRAMME EVALUATION IN SUBSTANCE ABUSE TREATMENT FACILITIES IN GAUTENG.....</b>	<b>93</b>
<b>RECOMMENDATIONS.....</b>	<b>94</b>
<b>To improve the availability and utilization of substance abuse treatment facilities .....</b>	<b>94</b>
<b>To improve the diversity and range of services provided through increasing access to ancillary treatment services.....</b>	<b>95</b>
<b>To increase the capacity of treatment services so that appropriate and accessible services can be provided .....</b>	<b>96</b>
<b>To professionalise the substance abuse treatment field in order to improve the quality and appropriateness of services.....</b>	<b>97</b>
<b>To improve treatment service planning and delivery through research and monitoring and evaluation activities .....</b>	<b>97</b>
<b>REFERENCES.....</b>	<b>99</b>

## LIST OF TABLES

- Table 1.** *Demographic profile of clients served in last 12 months at substance abuse treatment facilities in Gauteng (N=31).*
- Table 2.** *Variations in demographic profile of clients at substance abuse treatment facilities in Gauteng by treatment intensity and ownership (N = 30).*
- Table 3.** *Variations in demographic profile of clients at substance abuse treatment facilities in Gauteng by state affiliation (N = 30).*
- Table 4.** *Mean number of staff per staffing category for facilities in Gauteng (N=31).*
- Table 5.** *Descriptive statistics for each staffing category by treatment intensity and facility ownership, for substance abuse treatment facilities in Gauteng (N = 31).*
- Table 6.** *Descriptive statistics for each staffing category by affiliation (N = 31).*
- Table 7.** *Variations in treatment services provided by treatment intensity and ownership*
- Table 8.** *Variations in categories of treatment services provided by registration, for substance abuse treatment facilities in Gauteng (N = 31)*
- Table 9.** *Variations in treatment services provided by registration (N = 31)*
- Table 10.** *Variations in treatment services provided by speciality staffing resources for substance abuse treatment facilities in Gauteng (N = 31)*
- Table 11.** *Activities that target barriers to treatment entry by treatment intensity and facility ownership, for substance abuse treatment facilities in Gauteng (N = 31)*
- Table 12.** *Activities that target barriers to treatment entry by facility affiliation for substance abuse treatment facilities in Gauteng (N = 31)*
- Table 13.** *Variations in activities targeting culture, gender, and age barriers to treatment engagement and retention by treatment intensity and ownership (N = 31)*
- Table 14.** *Variations in activities that target barriers to treatment engagement and retention by facility affiliation (N = 31)*

## EXECUTIVE SUMMARY

A cross-sectional audit of substance abuse treatment facilities was conducted in Gauteng, South Africa from August 2003 to January 2004. A revised version of the Treatment Services Audit (TSA) Questionnaire was used to collect information from a number of domains including the characteristics of the treatment facility such as ownership, affiliations, intensity of care, and organisational resources; the diversity of services provided; the profile of clients served; variables related to barriers to treatment entry, engagement and retention; and service delivery variables.

Substance abuse treatment services in Gauteng are provided predominantly by private, non-profit facilities. Private non-profit facilities also serve the highest number of clients from under-served groups. Consequently, it is recommended that state funding to these facilities be increased. Furthermore, despite a high demand for substance abuse treatment services, treatment facilities are under-utilised. It is thus recommended that interventions which target the factors underpinning this under-utilization such as client loads, staff competencies, and facility resources are implemented.

The range of treatment services provided by substance abuse treatment facilities in Gauteng is limited, with few facilities providing comprehensive services that integrate ancillary medical and mental health services into core addiction services. This audit found that organisational factors such as ownership, intensity of care and state affiliation appear to be associated with the demographic profile of clients served and the extent to which ancillary medical and mental health services are available. Ancillary medical and mental health services are significantly more accessible in inpatient facilities, facilities affiliated with the Department of Health and with regard to ancillary medical services, in facilities with a non-profit ownership status. Differences in the extent to which facilities ascribe to the goal of profit maximisation, differences in client profiles across facilities, and differences in organisational (particularly staffing-related) resources may account for these differences. Case management techniques may help facilitate the delivery of integrated and comprehensive services so that clients at private non-profit outpatient facilities have access to ancillary medical and mental health services.

In terms of activities that target barriers to treatment entry, engagement and retention, relatively few facilities perform outreach activities aimed at improving awareness of treatment options. In addition, while many facilities report providing financial assistance for the direct costs of treatment, few facilities address other logistical barriers to treatment such as the indirect costs associated with transport and childcare services. As with knowledge barriers and logistical barriers, private non-profit outpatient facilities affiliated with the Department of Social Development are more likely to address cultural and linguistic barriers to treatment for underserved groups than facilities with another ownership status, intensity of care, or state affiliation. The organisational goal of profit maximisation, historical factors in the provision of substance abuse treatment services in South Africa and the overlap between race and socio-economic status in South Africa may help account for these findings. A number of recommendations are made to improve the accessibility of treatment services for historically under-served groups, such as the need to build capacity among practitioners so that culturally sensitive interventions can be delivered.

Findings point to the need for substance abuse treatment facilities in Gauteng to introduce routine, systematic client monitoring systems as well as the need for substance abuse treatment programmes to be comprehensively evaluated. In addition, as part of the monitoring of the quality of substance abuse treatment services in South Africa, a national treatment audit should be conducted on a regular basis. Findings from this national audit should be used to inform decision-making about the allocation of funding and other resources to existing facilities, based on the extent to which they provide services to historically under-served groups.

## **PART 1: BACKGROUND**

### **GENERAL BACKGROUND**

#### **Need for effective and accessible substance abuse treatment in Gauteng**

During the apartheid era, the country's physical and economic isolation, strict monitoring of external borders, and stringent internal controls restricted access to and availability of most kinds of illicit drugs, with locally cultivated cannabis, Mandrax (methaqualone combined with an anti-histamine) tablets, and prescription drugs being the only drugs widely available to South Africans. However, changes in global drug markets, such as improved drug supply- and demand-reduction strategies in Europe and the USA, have forced traffickers to seek alternative routes and markets. South Africa, due to its geographical location, is a convenient trans-shipment point for illicit drugs from drug-producing countries to drug markets. Socio-political changes that followed the collapse of apartheid, such as the reduction in internal and external border controls, the increase in land and air travel, increased trade, and the poorly resourced law enforcement agencies; together with the country's advanced banking, transport, and communication systems have also made the country an attractive new market for drug cartels. With these changes South Africans now have access to a broad range of illicit drugs, including cocaine and heroin (Parry et al., 2002a). Supply and demand indicators suggest that the domestic drug market is expanding, with drug prices decreasing, availability increasing, and treatment demand for substance-related problems on the rise (Parry et al., 2002a/b). This expansion of the domestic drug market has placed substance abuse treatment facilities under increased pressure to provide effective and accessible treatment services.

This study focuses on substance abuse treatment services in Gauteng. Gauteng is the smallest of the nine provinces in South Africa, but has the second largest population. This largely urban province has a population of approximately 8.8 million people, of which 73.8% are Black<sup>1</sup>, 19.9% are White, 3.8% are Coloured and 2.5% are Indian/Asian

---

<sup>1</sup> The terms "White, Black, Asian/Indian, and Coloured" refer to demographic markers and do not signify inherent characteristics. These markers were chosen for their historical significance. These demographic characteristics are important as accurate user profiles assist in identifying vulnerable sections of the population and in planning effective prevention and intervention programmes.

(Statistics South Africa, 2003). A decision was made to focus on treatment services in Gauteng due to the high levels of substance abuse and substance-related problems experienced in this province (Parry et al., 2002a; Parry et al., 2002b). The need for substance abuse treatment services is also confirmed by the high proportion of arrestees in Gauteng that reported the need for treatment for problems related to the use of alcohol, cannabis and Mandrax (Parry et al., 2002b).

### **The socio-political context of substance abuse treatment services in South Africa**

International research provides evidence of the benefits of substance abuse treatment. These benefits include reductions in alcohol and drug use, reductions in criminal behaviour, improvements in mental and physical health, improvements in employment and welfare status (Best et al., 2002; Gossop et al., 2001; McKay & Weiss, 2001) as well as general health care and crime-related cost savings (Alterman et al., 2001; Gossop et al., 2001).

Despite the need for substance abuse treatment services and evidence of treatment benefits, the availability and accessibility of substance abuse treatment services remains limited. Historically, funding to state-subsidised treatment services has generally been inadequate. Under the apartheid system of governance, the available treatment facilities were poorly distributed, with services being concentrated in urban areas that were historically reserved for Whites. Major disparities also existed (as a result of the apartheid system of governance) between the racially defined population groups in terms of the resources spent on substance abuse treatment and the quality of services provided (Parry & Bennetts, 1998). Substance abuse treatment services were therefore not readily available to all sectors of the population. For example, a situational analysis of substance abuse services in South Africa, conducted in 1995, reported that services in overcrowded townships, informal settlements and in the rural areas of the country were inadequate especially compared to those in urban areas (Parry, 1997).

Several socio-political factors have hampered access to substance abuse treatment in South Africa. One factor has been the shared responsibility for the treatment and management of substance use disorders between the Department of Health (DOH) and

the Department of Social Development (DSD)<sup>2</sup>, with the DOH responsible for medical treatment and custodial care, and the DSD responsible for prevention and community rehabilitation activities. This, however, resulted in a lack of a co-ordinated strategy for addressing substance use disorders and reduced accountability. For example, the DOH was only marginally involved in substance abuse treatment. This, in part, was due to the low priority given to mental health in general and substance abuse in particular, relative to other health problems (Department of Health, 2001). Other factors that contributed to the DOH's marginal involvement included the perception that substance use disorders represented legal or social rather than health problems, the lack of interest in the area by health professionals, and a lack of expertise (Parry, 1997).

The fragmentation of services within both the DOH and the DSD also hampered treatment service delivery. Specifically, the country had (as a result of the apartheid system of governance) numerous health and welfare departments (each serving a different population group). These departments did not work together to develop a coordinated integrated approach to substance use. Consequently, sectors duplicated initiatives and as both sectors lacked resources, they were generally ill equipped to intervene effectively (Parry, 1997).

### **The current state of substance abuse treatment services in Gauteng**

Despite high levels of substance abuse in Gauteng, substance abuse has been given a relatively low priority by both the Gauteng Department of Health and the Gauteng Department of Social Services and Population Development. For example, in the Gauteng Department of Social Services and Population Development's annual report (2001/2) substance dependence was ranked low in the list of priorities. In addition, the Department has focused its resources on prevention, early intervention and statutory activities rather than the provision of treatment services. At present, there are only two state-run treatment facilities for substance abuse in Gauteng. Although there are other treatment facilities subsidised by the state, over time funding to these facilities has decreased in real terms. The number of beds available in state-funded general and psychiatric hospitals for patients with substance use disorders has also decreased. These

---

<sup>2</sup> Previously Department of Welfare

changes have contributed to long waiting periods for treatment at state-funded facilities. This may have a negative impact on retention and treatment outcomes, with studies reporting that clients on waiting lists tend to lose their motivation for treatment by the time a treatment slot becomes available (Mejita et al., 1997).

Reductions in state funding have been an attempt to improve the accessibility of treatment services to historically underserved groups, through shifting from service provision at a specialist, tertiary level of care to community-based services that integrate substance abuse treatment into existing primary health care networks. While some steps have been taken to improve the availability of substance abuse treatment services at a primary health care level (such as the development and implementation of protocols for the management of alcohol and other drug intoxication and withdrawal at the regional hospital level), implementation has been slow with the availability of substance-related treatment being limited at the primary health/community level of care (Myers & Parry, 2003). As in the past, most state substance-related treatment services occur at the tertiary level of care. Given the limited number of state facilities and the high levels of substance-related harm in Gauteng, responsibility for the treatment of substance use disorders rests heavily on the private sector.

While a number of private facilities are available in the province, access to private treatment services is generally limited to individuals with private health insurance or those who can afford to pay out-of-pocket. In South Africa, the private sector has been criticised on a number of access-related issues, including serving mostly White communities; having limited skills for dealing with the cultural, social and language context of historically disadvantaged communities; being located in urban areas and thus being inaccessible to the majority of the population; and for only being accessible to those who can afford to pay for services (Edelstein, Weber, & Pillay, 1997). Given the rising levels of substance abuse in the country, and in the Gauteng Province in particular (Parry et al., 2002), accessibility to substance abuse treatment services (in either the private or public sector) is an area that needs to be addressed as a matter of urgency.

### **Conceptualising access to substance abuse treatment services**

Access to treatment represents the ease at which health and social services are initiated and sustained (McCaughrin & Howard, 1996). For the purpose of this study, access to substance abuse treatment refers to the extent to which the substance abuse treatment system facilitates (or inhibits) client entry into and retention in treatment. This study focused on the accessibility of substance abuse treatment services in South Africa as access is an important factor for establishing the effectiveness of health and social service delivery. For example, research has shown that the ease with which clients obtain services impacts on client motivation and treatment outcomes. The effectiveness of substance abuse treatment service delivery is also impacted on by barriers to access which may affect the cost of services, the quality of services provided and client satisfaction with services received (McCaughrin & Howard, 1996). Consequently this report will outline the extent to which substance abuse treatment facilities in Gauteng are accessible to clients and the degree to which they address barriers to access. Access is a multidimensional concept that is comprised of factors such as the availability of services, the affordability, service diversity and retention factors (McCaughrin & Howard, 1996). In considering the accessibility of substance abuse treatment services, it is therefore important to consider both the availability and affordability of such services and the extent to which treatment service characteristics impact on client retention.

Treatment retention is accounted for in Simpson et al's (2001) generic, evidence-based model of effective substance abuse treatment. This model views retention as an indicator of engagement in the treatment process. The likelihood of client engagement is predicted by multiple variables, including patient, therapeutic and social environmental factors that are fundamental to effective treatment. The model assumes that the pre-treatment characteristics of the client, the characteristics of the counsellors, and the quantity of opportunities to exert an effect on the client (i.e. the range and scope of services as well as intensity of care) influence the degree to which clients engage in the programme (Joe et al., 1999). Treatment retention is therefore influenced by variables at the level of the client, variables at the level of the treatment programme (such as the nature of the service

delivery) and variables at the level of the social context (such as the accessibility and affordability of treatment services).

### **Monitoring of substance abuse treatment services in Gauteng**

In South Africa, provincial and local governments control the allocation of resources for substance abuse services. For local governments to plan and deliver substance abuse treatment services that ensure appropriate and adequate provision of services to the community (through addressing current and projected treatment needs, targeting high-risk groups, and improving accessibility for all sectors of the population), access to quality information about local treatment needs, existing treatment services, patterns of service utilisation, and service performance are required. This necessitates the development of an effective system for monitoring substance abuse treatment services (Grant & Petrie, 2001). However, planning and decision-making around substance abuse treatment services in Gauteng, as in the rest of the country, has been hampered by a lack of accurate information on existing treatment services, service delivery and patterns of utilisation.

Although it is internationally recognized that the collection of substance abuse treatment service information is an important part of treatment service planning, monitoring and evaluation (Grant & Petrie, 2001), South Africa has not yet developed a monitoring system that routinely collects information on substance abuse treatment services. On the positive side, the South African Community Epidemiology Network on Drug Use (SACENDU) project does collect descriptive information about the profile of clients served at treatment centres in five of the eleven provinces in the country on a six-monthly basis. The Gauteng Department of Social Services and Population Development and the National Department of Health have been consistent funders of the SACENDU project. Whilst the SACENDU project provides essential information that should be collected as part of a national monitoring system, it does not collect information on the type or quality of treatment services provided. At present, only limited information is collected on the facilities that provide substance abuse treatment services. This information, typically contained in listings of treatment facilities in resource directories, generally consists of a brief description of the types of clients served and services provided. Although state departments require more detailed information for the purposes of facility registration,

this information consists of descriptions of the structural and organisational features of facilities and service delivery plans. State departments do not require the routine monitoring of service delivery for the purpose of continued registration. An exception to this was a local-level audit of specialist substance abuse treatment facilities in Cape Town, conducted in 2002 (Myers & Parry, 2003). This audit reported on treatment facility characteristics, the profile of clients served, the type and range of treatment services provided, the accessibility of treatment services to clients from historically underserved groups, and treatment service monitoring and evaluation processes (Myers & Parry, 2003). In addition, this local-level audit recommended that a national audit of substance abuse treatment facilities occur on a regular basis to facilitate the collection of quality information on substance abuse treatment services (Myers & Parry, 2003). By expanding the audit to include all substance abuse treatment facilities in Gauteng province, the current audit represents a partial response to this recommendation.

## **TERMINOLOGY**

The following terms are used throughout this report:

- **Facility ownership** refers to the type of entity owning or responsible for the operation of the facility. In South Africa, private for-profit, private non-profit, and state (government) facilities comprise the main types of ownership.
- **Treatment setting** refers to the environmental setting in which a facility is located. In South Africa these include mental health settings such as psychiatric hospitals, general health settings, stand alone substance abuse treatment facilities, correctional (criminal justice) settings, religious settings, and welfare settings.
- **Intensity of treatment** is defined as the amount of and level at which treatment services are provided. In South Africa, substance abuse treatment occurs at one of several intensity levels: primary care at an inpatient/residential level, outpatient, day patient (intensive outpatient), and secondary inpatient care:
  - *Inpatient/Residential Treatment*: where clients reside temporarily or on a longer term basis in a facility that is not their home or usual place of residence. The treatment

programme provides diagnosis, treatment and rehabilitation for clients with substance use disorders whose physical and emotional status does not allow them to function in their usual environments.

- *Outpatient Treatment* refers to non-residential programmes that provide diagnosis, treatment and rehabilitation for clients with substance use disorders whose physical and emotional status allows them to function with support in their usual environments.
  - *Daypatient or Intensive Outpatient Treatment* refers to a non-residential program which provides highly structured treatment services to clients and their families on a daily basis, for 6 or more hours per week.
  - *Secondary inpatient treatment* refers to a residential treatment facility for alcohol and drug abuse clients who have received prior treatment in a primary care program. A treatment regimen of individual and group therapy as well as other activities aimed at the physical, psychological and social recovery of the addicted individual is continued.
- **Facility registration** refers to the type of state registration that a facility has obtained. In South Africa, substance abuse treatment facilities can be registered with either the Department of Health or the Department of Social Development, can have dual registration with both state departments, or can be unregistered. Each department has different requirements for registration, a discussion of which is beyond the scope of this report.
  - **Retention** refers to the extent to which clients remain in treatment and complete the treatment programme
  - **Attrition** refers to the extent to which clients leave or drop out of treatment before the agreed upon date for treatment completion

## **AIMS**

This study had the following broad aims:

- To gain an understanding of the characteristics of substance abuse treatment facilities in Gauteng

- To gain an understanding of the profile of clients served by substance abuse treatment facilities in Gauteng
- To increase knowledge about the nature of service delivery for substance abuse treatment facilities in Gauteng
- To gain an understanding of the staffing and organisational characteristics of substance abuse treatment facilities in Gauteng
- To gain an understanding of the treatment services provided by substance abuse treatment facilities in Gauteng
- To increase knowledge about the accessibility of substance abuse treatment in Gauteng for clients from historically underserved population groups
- To describe the relationship between the profile of clients served and facility characteristics
- To describe the relationship between the profile of clients served, facility characteristics, and the accessibility of treatment services
- To serve as a needs assessment for future evaluation studies of substance abuse treatment services in the region
- To serve as a pilot, feasibility study for the development and implementation of an annual, national audit of substance abuse treatment services
- To use this information to inform current substance abuse treatment service planning and delivery at the local, provincial and national level
- To use this information to inform substance abuse treatment policy at a provincial and national level

## **OBJECTIVES**

In order to achieve these broad aims, the following objectives were specified:

- To describe the characteristics of substance abuse treatment facilities in Gauteng (e.g. intensity of care offered, type of facility ownership, treatment setting, and type of registration)
- To describe and compare the demographic profile of clients served at substance abuse treatment facilities in Gauteng by facility characteristics

- To describe service delivery for substance abuse treatment facilities in Gauteng on a number of variables, namely number of clients served per month; treatment capacity; utilization of treatment capacity; delay in service delivery; treatment completion/retention rates; and treatment attrition rates
- To compare service delivery for substance abuse treatment facilities in Gauteng by facility characteristics
- To describe and compare the staffing characteristics of substance abuse treatment programmes by facility characteristics
- To describe the type and range of treatment services offered by substance abuse treatment facilities in Gauteng
- To describe the relationship between the treatment services provided, facility characteristics, and demographic profile of clients served at substance abuse treatment facilities in Gauteng
- To describe and compare activities conducted by substance abuse treatment facilities in Gauteng that target barriers to accessing treatment for clients from underserved groups by facility characteristics
- To describe and compare activities conducted by substance abuse treatment facilities in Gauteng to improve treatment retention for clients from underserved groups by facility characteristics
- To describe and compare monitoring and evaluation activities conducted by substance abuse treatment facilities in Gauteng by facility characteristics
- To make recommendations that inform substance abuse treatment service policy, planning and delivery in Gauteng
- To disseminate the information collected, through a variety of mechanisms to local, provincial and national stakeholders

## **METHODS**

### **Study Design**

A cross-sectional survey of substance abuse treatment facilities was conducted in Gauteng Province, South Africa during August 2003 to January 2004.

## **Sample**

The sample consisted of the total population of specialised substance abuse treatment facilities in Gauteng. This study defined specialised treatment facilities as those facilities that deliver one or more specialised substance abuse treatment services to people with substance use disorders (Torres, Mattick, Chen & Baillie, 1995). A variety of treatment facilities are covered by this definition, including detoxification and rehabilitation programmes and psychological treatments. Using this definition, self-help groups and facilities that provide only information, education, crisis intervention or prevention services are not classified as specialist substance abuse treatment facilities. In addition, solo practitioners and facilities that provide general health and social services, including substance abuse-related services (e.g. psychologists, social workers, and general hospitals) are not included in the sample. The TSA is designed to collect data from each physical location where treatment services are provided. Accordingly, a “facility” is defined as the point of delivery of substance abuse treatment services (i.e. the physical location). Several treatment services consisted of a central office from which satellite clinics operated. For the purpose of this study satellite clinics were not analysed as separate facilities.

The sample frame was constructed from the list of known treatment facilities made available by the Central Drug Authority (CDA) of South Africa’s resource directory on alcohol and drug related services (CDA, 2003). These facilities were contacted telephonically and asked to identify other specialist substance abuse treatment facilities in Gauteng that were not in the CDA’s resource directory. At the time of the audit, there were 36 facilities that satisfied the criteria used by this study for the definition of “specialist substance abuse treatment facility”.

## **Questionnaire**

The Treatment Services Audit (TSA) Questionnaire (revised version) was used to collect self-report information from specialist substance abuse treatment facilities in Gauteng. The TSA was designed for the purposes of auditing substance abuse treatment facilities in South Africa. The construction of the original TSA was based loosely on the Unified Facility Data Set Questionnaire (UFDS) (Carise et al., 2000) that has been used to collect

one-day census information on the population of substance abuse treatment facilities in the USA. The questions contained in the original version of the TSA were discussed in focus groups of substance abuse treatment experts to ensure applicability to the South African context. A pilot version of the original TSA was then used at two treatment facilities in Cape Town and necessary changes were made to problematic items. The original TSA was used to audit substance abuse treatment facilities in Cape Town in 2002 (Myers & Parry, 2003).

In order to minimise non-response and to include areas of emerging interest (such as questions about service delivery); several adjustments have been made to the original version of the TSA. The TSA (revised version) contains the following changes: a section on treatment completion, retention and other service delivery variables was included, the number of items relating to improving access to treatment were expanded, and open-ended questions about treatment goals, facility philosophy, and treatment model were excluded.

The TSA (revised version) is an eight page questionnaire with 45 questions, many of which require multiple responses. It includes structured questions with forced choice responses, as well as open-ended questions. Information is collected from a number of domains including treatment facility characteristics, service delivery characteristics, types of treatment services offered, services to improve access to and retention in treatment, characteristics of clients served, staffing characteristics, organisational environment, and monitoring and evaluation activities. The TSA is directed at key informants from treatment programmes, such as clinical/treatment programme managers or treatment directors. The TSA collects self-report information in English and takes approximately 30 minutes to complete.

### **Data collection procedures**

Treatment programme managers and/or facility directors of all the treatment facilities in the sampling frame were contacted telephonically, informed about the study, and asked to participate. Data collection packets, including the TSA, a guideline for completion of the TSA, and a covering letter explaining the purpose of the audit were sent via mail, fax, or

email to the identified informants at participating facilities in August 2003. During the data collection phase, the principal investigator was available to answer facilities' questions about the audit. Four weeks after the initial mailing, reminder letters were sent to all facilities and reminder telephone calls were made. Approximately eight weeks after the initial mailing, further reminder telephone calls were made to non-responding facilities. These facilities were also sent a second mailing. About four weeks after the second mailing, non-respondents received a third reminder telephone call. Those respondents that had not responded within four weeks after the third reminder call, were telephoned again and sent a third mailing.

The field period for the audit ran from August 2003 to December 2003. Follow-up calls to non-responding facilities and for correction of missing and erroneous data continued through January 2004. Non-respondents were followed up telephonically on at least four occasions.

#### **Data analysis**

Statistics for this study were computed using the Statistical Package for the Social Sciences (Norusis/SPSS Inc., 1988). Descriptive statistics were calculated for all treatment service-, service delivery-, client-, staff-, and access-oriented variables. Facilities were stratified by treatment intensity and ownership and separately by registration. For each of these strata, cross-tabulations were performed on all treatment service, service delivery, access-oriented, client and staffing variables. Chi-square tests of association were performed to determine whether there were any significant differences between the different types of facilities on these variables. Within the facility category of treatment intensity and facility ownership and the registration category, paired sample *t*-tests were conducted to identify the direction of significant differences between the mean number of facilities on service delivery-, client-, and staff-oriented variables. Within the category of treatment intensity and facility ownership and the facility category of registration, Wilcoxon Signed Rank tests were performed to identify the direction of significant differences between the mean number of facilities on treatment service-, and access-oriented variables.

### **Response rates**

Questionnaires were mailed to a total of 38 facilities believed to offer substance abuse treatment services. Of these facilities, 5 % (2) were found to be ineligible for the survey as they did not meet the criteria for inclusion. Of the remaining 36 facilities, 86.1% completed the TSA questionnaire (N = 31). An additional facility could not be included in the data analysis due to late completion and return of the TSA questionnaire. This was a small private non-profit inpatient facility in a religious setting. Non-responding facilities tended to serve smaller numbers of clients, were privately owned, had fewer staff and other resources, and were located in rural areas.

### **Quality assurance and item non-response**

All mail questionnaires were reviewed for inconsistencies and missing data. Telephone calls were made to facilities to obtain missing data and to clarify questionable responses. Careful editing and extensive follow-up greatly reduced item non-response. Where missing data occurred, facilities with missing values for a given variable were excluded from tabulations using that variable.

### **Further data considerations and limitations**

Certain procedural considerations and data limitations must be taken into account when interpreting data from this audit. Considerations and limitations of specific data items are discussed where data are presented. However, the following general considerations should be noted:

- This audit attempted to obtain responses from all known treatment facilities in Gauteng. It is, however, a voluntary survey and no adjustment was made for facilities that did not respond.
- This audit provides information on the substance abuse treatment system and its clients for the specified reference period only (i.e. the 12 months preceding the audit). Client counts reported here are estimated counts only and do not represent annual totals.
- The TSA collects data about treatment facilities and not about individual clients. Data on clients represent an aggregate of clients in treatment for each participating facility.

- Multiple responses were allowed for certain variables (e.g. type of registration).
- The TSA collects self-report data from key informants at participating facilities. Social desirability processes and political concerns about ways in which findings will be used may have influenced facility responses on specific items. The TSA (revised version) incorporates a number of validity checks. For example, several differently worded questions are used to examine client retention rates.

## **PART 2: RESULTS FROM THE MRC AUDIT OF SUBSTANCE ABUSE TREATMENT FACILITIES IN GAUTENG**

### **CHARACTERISTICS OF SUBSTANCE ABUSE TREATMENT FACILITIES IN GAUTENG**

Treatment services research has shown that the organisational features of treatment facilities impact on the types of services available and the quality of services provided to clients (Lee et al., 2001). The following section describes a number of facility characteristics that have been shown to impact on access to treatment. These characteristics include: intensity of treatment provided by the treatment service, ownership status, and facility affiliation.

#### **Treatment facility profile by intensity of care**

***Core findings:***

- 54.8% of facilities provide primarily inpatient treatment services
- 45.2% of facilities offer mainly outpatient treatment services

Substance abuse treatment facilities in South Africa provide services at various levels of intensity. These include inpatient/residential treatment, secondary inpatient treatment, day patient programmes and outpatient programmes. In Gauteng, 48.4% of the 31 facilities offer primary inpatient services, 6.5% offer secondary inpatient treatment services, 54.8% offer outpatient substance abuse treatment services, and 12.9% offer a day patient programme for substance use disorders. Some treatment facilities provide services at stepped-down levels of care, in other words they offer outpatient services to clients who have completed an inpatient programme at the facility.

As the primary business of facilities that offer stepped-down care is inpatient treatment, for the purposes of this report, stepped-down care facilities will be categorised as inpatient facilities. In Gauteng, 17 of the 31 facilities (54.8%) provide primarily inpatient treatment services whilst 14 (45.2%) provide primarily outpatient services.

### Treatment facility profile by facility ownership

***Core findings:***

- 93.5% of facilities are privately owned
- 72.4% of privately owned facilities have non-profit and 27.6% have for-profit status
- 6.5% of facilities are state owned
- The state provides some (limited) funding to private non-profit facilities

Facility ownership (understood in terms of profit status and public/private orientation) has been shown to impact on access to substance abuse treatment services (Lee et al., 2001). Most of the facilities (93.5%) that participated in this study are privately owned, with state facilities accounting for only 6.5% of the sample. Of the privately owned facilities, 21 (72.4%) have non-profit and 8 (27.6%) have for-profit ownership status.

The state does provide funding to privately owned substance abuse treatment facilities. State funding for substance abuse treatment services covers 0% to 100% ( $\bar{x}$  = 32.07, SD = 35.04) of facilities' costs. Of the facilities that receive state funding, 13.3% (4) receive more than 75%, 20.0% (6) receive between 50% and 75%, 13.3% (4) receive between 25% and 50%, and 53.3% (16) receive less than 25% of their total funding from the state.

### Treatment facility profile by state affiliation

***Core findings:***

- Most facilities are registered with the Department of Social Development

Overall 16.1% (5) of the treatment facilities are registered with the Department of Health (DOH), 77.4% (24) are registered with the Department of Social Development (DSD), and 16.1% (5) are not registered with either state department. Three of the registered facilities (9.7%) have dual registration with both the DOH and the DSD.

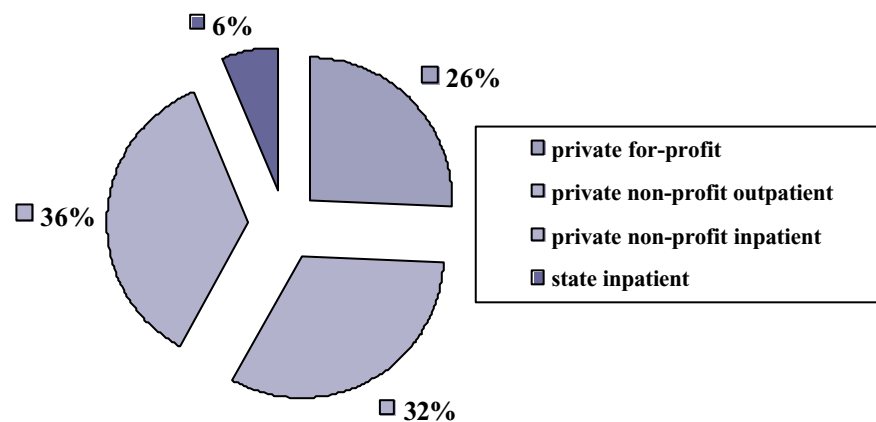
### Treatment facility profile by intensity of care and facility ownership

***Core findings:***

- Of the private non-profit facilities, 52.4% provide inpatient and 47.6% provide outpatient services
- Facilities registered with the DOH tend have private for-profit ownership status
- Facilities registered with the DOH are more likely to provide inpatient than outpatient levels of care

As there is a large overlap between the intensity of care provided and ownership status (with most state and private for-profit facilities offering primarily inpatient care), a new variable was created that combined intensity of care and ownership status. Of the 31 facilities, 32.3% (10) are private, non-profit facilities that offer outpatient treatment services, 35.5% (11) are private, non-profit treatment facilities that offer inpatient treatment, 19.4% (6) are private for-profit facilities that offer inpatient treatment, 6.5% (2) are private for-profit facilities that offer outpatient treatment, and 6.5% (2) are state inpatient treatment facilities. As further analyses revealed that no significant differences existed between the private for-profit inpatient and private for-profit outpatient facilities, these categories were collapsed into a single category, namely private for-profit in/outpatient facilities. These 8 facilities account for 25.8% of the sample (Figure 1).

**Figure 1.** *Proportion of substance abuse treatment facilities in Gauteng by treatment intensity and facility ownership (N = 31)*



A higher proportion of private for-profit facilities (37.5%) are registered with the DOH than private non-profit (9.5%) or state facilities (0.0%). This difference was not significant. All of these private non-profit facilities provide inpatient services. A significantly greater proportion of facilities with inpatient services (29.4%) are registered with the DOH than facilities with outpatient levels of care (0.0%) (Chi-Square = 4.91, p= 0.027).

Private non-profit and state facilities are mostly registered with the DSD, with a significantly higher proportion of private non-profit (90.5%) and state (100.0%) facilities being affiliated with the DSD than private for-profit facilities (37.5%) (Chi-Square = 9.92,  $p= 0.007$ ). More specifically, 90.0% of the private non-profit inpatient, 90.9% of the private non-profit outpatient, and 100.0% of the state inpatient facilities are registered with the DSD. No significant differences were found between the proportion of inpatient and the proportion of outpatient services affiliated with the DSD.

## **PROFILE OF CLIENTS SERVED BY SUBSTANCE ABUSE TREATMENT FACILITIES IN GAUTENG**

The following section describes the demographic profile of the clients served, in the 12 months prior to the audit, by substance abuse treatment facilities in Gauteng. More specifically, variations in client profile by treatment intensity, facility ownership, and facility affiliation are examined.

### **Demographic profile of clients at treatment facilities in Gauteng**

#### *Core findings:*

- Treatment facilities provide services to significantly more males than females
- Clients treated at substance abuse treatment facilities are most likely to be between 20 and 29 years of age
- Black clients are underrepresented and White clients are overrepresented at substance abuse treatment facilities in Gauteng

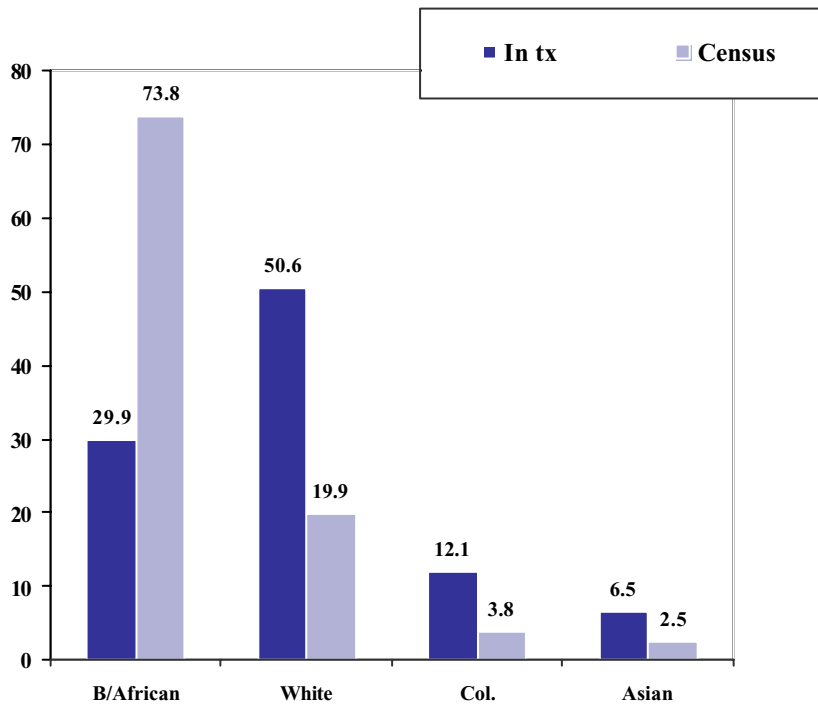
The estimated proportion of male clients ranges from 30.0% to 100.0% of the total client population ( $\bar{x} = 72.77$ ,  $SD = 17.90$ ). In contrast, the estimated proportion of female clients ranges from 0.0% to 50.0% ( $\bar{x} = 23.90$ ,  $SD = 13.65$ ). A paired sample  $t$ -test revealed that the mean proportion of male clients is significantly higher than the mean proportion of female clients ( $t = 9.165$ ,  $p= 0.000$ ) (Table 1).

**Table 1. Demographic profile of clients served in last 12 months at substance abuse treatment facilities in Gauteng (N=31).**

	All facilities			
	Min	Max	$\bar{x}$	SD
<b>% of clients by gender</b>				
<i>Males</i>	30.0	100.0	72.77	17.90
<i>Females</i>	0.0	50.0	23.90	13.65
<b>% of clients by age</b>				
<i>&lt;20</i>	0.0	85.0	24.95	23.06
<i>20-29 years of age</i>	0.0	80.0	30.41	18.82
<i>Age 30-39 years of age</i>	0.0	50.0	18.71	11.74
<i>Age 40-49 years of age</i>	0.0	60.0	15.78	13.07
<i>= 50 years of age</i>	0.0	20.0	4.74	5.44
<b>% of clients by race</b>				
<i>White clients</i>	0.0	98.0	50.57	33.38
<i>Black clients</i>	0.0	100.0	29.95	27.67
<i>Coloured clients</i>	0.0	80.0	12.88	20.29
<i>Asian clients</i>	0.0	60.0	8.93	14.08

In terms of age, paired sample *t*-tests revealed that the mean proportion of clients between 20 and 29 years of age is significantly greater than the mean proportion of clients between 30 and 39 years of age ( $t = 2.935$ ,  $p = 0.007$ ), between 40 and 49 years of age ( $t = 3.109$ ,  $p = 0.004$ ), and 50 years of age or older ( $t = 6.740$ ,  $p = 0.000$ ) (Table 1). In terms of race, compared to the demographic profile of the population in Gauteng Black clients appear underrepresented and White clients appear to be overrepresented in treatment facilities (Figure 2)

**Figure 2 Comparison of race profile of clients at treatment facilities with census data (2001) for Gauteng Province**



Paired sample *t*-tests revealed that the mean proportion of White clients is significantly greater than the mean proportion of Coloured ( $t = 4.503$ ,  $p = 0.000$ ) and Asian clients ( $t = 5.469$ ,  $p = 0.000$ ), and approached significance with the mean proportion of Black clients ( $t = 2.000$ ,  $p = 0.055$ ) (Table 1).

**Variations in the profile of clients served by substance abuse treatment facilities in Gauteng by facility characteristics**

- Core findings:**
- Compared to other facilities, private for-profit facilities are most likely to have high proportions of female clients
  - Compared to other facilities, private non-profit outpatient facilities are more likely to have a client population comprised of large proportions of Black clients and clients less than 20 years old
  - DOH-affiliated facilities are most likely to serve high proportions of female clients
  - DSD-affiliated facilities are most likely to serve high proportions of Black clients

*Variations by treatment intensity and facility ownership*

In terms of gender, low proportions of female clients are most likely to occur in state inpatient treatment facilities with 100.0% of these facilities reporting that females comprise less than 20% of the total treatment population. In contrast, private for-profit treatment facilities are more likely than other types of facilities to have a client population comprised of a high proportion of females, with 28.6% of these facilities reporting that women comprise more than 40% of their total client population (Table 2).

**Table 2.** *Variations in demographic profile of clients at substance abuse treatment facilities in Gauteng by treatment intensity and ownership (N = 30)*

	<i>Private for-profit inpatient (N=7)</i>		<i>Private non-profit inpatient (N=10)</i>		<i>Private non-profit outpatient (N=11)</i>		<i>State inpatient (N=2)</i>	
	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>
<b><i>Proportion of female clients</i></b>								
<b><i>0-10%</i></b>	1	14.3	2	20.0	2	18.2	1	50.0
<b><i>11-20%</i></b>	1	14.3	1	10.0	6	54.5	1	50.0
<b><i>21-30%</i></b>	1	14.3	2	20.0	3	27.3	0	0.0
<b><i>31-40%</i></b>	2	28.6	4	40.0	0	0.0	0	0.0
<b><i>=41%</i></b>	2	28.6	1	10.0	0	0.0	0	0.0
<b><i>Proportion of clients less than 20 years of age</i></b>								
<b><i>0-20%</i></b>	4	57.1	6	60.0	4	40.0	2	100.0
<b><i>21-40%</i></b>	2	28.6	4	40.0	3	30.0	0	0.0
<b><i>41-60%</i></b>	0	0.0	0	0.0	1	10.0	0	0.0
<b><i>=61%</i></b>	1	14.3	0	0.0	2	20.0	0	0.0
<b><i>Proportion of Black clients</i></b>								
<b><i>0-10%</i></b>	5	71.4	5	50.0	2	18.2	0	0.0
<b><i>11-30%</i></b>	2	28.6	2	20.0	1	9.1	1	50.0
<b><i>31-50%</i></b>	0	0.0	3	30.0	3	27.3	1	50.0
<b><i>=51%</i></b>	0	0.0	0	0.0	5	45.5	0	0.0
<b><i>Proportion of White clients</i></b>								
<b><i>0-10%</i></b>	0	0.0	1	10.0	6	54.5	0	0.0
<b><i>11-30%</i></b>	0	0.0	1	10.0	3	27.3	0	0.0
<b><i>31-50%</i></b>	0	0.0	2	20.0	1	9.1	1	50.0
<b><i>=51%</i></b>	7	100.0	6	60.0	1	9.1	1	50.0

Compared to other types of treatment facilities, private non-profit outpatient treatment facilities are more likely to report a client population comprised of a high proportion of clients less than 20 years of age and a high proportion of Black clients (Table 2). More specifically, 20.0% of these facilities report that clients less than 20 years of age comprise more than 60% of the total client population and 45.5% of these facilities report that Black clients comprise more than 50% of all clients (Chi-Square = 17.04, p= 0.048)

(Table 2). Compared to other types of facilities, private for-profit treatment facilities are more likely to report treating high numbers of White clients (Chi-square = 21.16, p= 0.012) (Table 2).

*Variations in the profile of clients served by facility affiliation with the state*

Table 3 depicts variations in the demographic profile of clients served by the type of facility affiliation. Facilities affiliated with the DOH are more likely to serve high proportions of females than facilities with other types of affiliation. In terms of age, facilities affiliated to the DOH are most likely to report serving low proportions of clients less than 20 years of age and unregistered facilities are most likely to report serving high proportions of clients less than 20 years of age (Table 3). Compared to other types of facilities, more facilities affiliated with the DSD report treating high numbers of Black clients, with 45.9% of these facilities reporting that Black clients comprise more than 30% of all clients (Table 3). In contrast, a greater proportion of facilities registered with the DOH report treating a high proportion of White clients (Table 3).

**Table 3. Variations in demographic profile of clients at substance abuse treatment facilities in Gauteng by state affiliation (N = 30)**

	Department of Health (N =4 )		Department of Social Development (N =24 )		DOH & DSD (N = 3)		Not registered (N = 5)	
	n	%	n	%	n	%	n	%
<b>Proportion of female clients</b>								
0-10%	1	25.0	4	16.7	1	33.3	2	40.0
11-20%	0	0.0	8	33.3	0	0	1	20.0
21-30%	1	25.0	5	20.8	0	0	1	20.0
31-40%	1	25.0	6	25.0	1	33.3	0	0.0
=41%	1	25.0	1	4.2	0	0.0	1	20.0
<b>Proportion of clients less than 20 years of age</b>								
0-10%	3	75.0	13	56.5	2	66.7	2	40.0
11-30%	1	25.0	8	34.8	1	33.3	1	20.0
31-50%	0	0.0	1	4.3	0	0.0	0	0.0
=51%	0	0.0	1	4.3	0	0.0	2	40.0
<b>Proportion of Black clients</b>								
0-10%	2	50.0	8	33.3	2	66.7	4	80.0
11-30%	2	50.0	5	20.8	1	33.3	1	20.0
31-50%	0	0.0	7	29.2	0	0.0	0	0.0
=51%	0	0.0	4	16.7	0	0.0	0	0.0
<b>Proportion of White clients</b>								
0-10%	0	0.0	6	25.0	0	0.0	1	20.0
11-30%	0	0.0	3	12.5	0	0.0	1	20.0
31-50%	0	0.0	4	16.7	0	0.0	0	0.0
=51%	4	100.0	11	45.8	3	100.0	3	60.0

## TREATMENT CAPACITY AND SERVICE UTILIZATION

This section describes the number of clients treated in a typical month by facilities in Gauteng, the capacity of facilities to treat clients, and the extent to which capacity is utilized. Variations in the number of clients treated per month, treatment capacity and service utilization are explored with reference to organizational factors such as treatment intensity, facility ownership, and facility affiliation.

### *Core findings:*

- Private for-profit facilities treat the smallest and state inpatient facilities treat the largest mean number of clients per month
- DOH-affiliated facilities serve the largest and unregistered facilities serve the smallest mean number of clients per month
- Private for-profit facilities have the lowest and state inpatient facilities have the highest capacity to treat clients
- DOH-affiliated facilities have the highest and unregistered facilities have the lowest treatment capacity
- All facilities are significantly underutilised, especially state inpatient treatment facilities
- Compared to other facilities, non-profit outpatient facilities are less likely to use waiting lists
- Retention rates are highest at private non-profit inpatient and lowest at non-profit outpatient facilities
- Retention rates are highest at DOH-affiliated facilities and lowest at DSD-affiliated facilities

### **Average number of clients treated per month by facilities in Gauteng**

Overall, the typical number of clients receiving substance abuse treatment services per month ranges from 4 to 152 ( $\bar{x}$  = 37.71, SD = 34.56). Of the 31 facilities, 46.4% (13) treat up to 20 clients, 10.7% (3) treat between 21 and 30 clients, 10.7% (3) treat between 31 and 50 clients, 28.6% (8) treat between 51 and 100 clients, and 3.6% (1) treat more than 100 clients in a typical month.

### *Variations in the typical number of clients served per month by facility characteristics*

The typical number of clients at private for-profit facilities ranges from 4 to 96 ( $\bar{x}$  = 28.44, SD = 30.99). For private non-profit inpatient and outpatient facilities, the typical number of clients ranges from 7 to 152 ( $\bar{x}$  = 37.20, SD = 43.74) and from 12 to 80 ( $\bar{x}$  = 37.50, SD = 27.46), respectively. For state inpatient facilities, the typical number of clients served per month ranges from 55 to 81 ( $\bar{x}$  = 68.00, SD = 18.39). Most of the facilities that report treating more than 50 clients in a typical month are private non-profit outpatient facilities (33.4%), with private for-profit facilities, state inpatient facilities,

private non-profit inpatient facilities each accounting for 22.2% of the remaining facilities.

For facilities registered with the DOH, the typical number of clients treated per month ranges from 20 to 152 ( $\bar{x}$  = 58.00, SD = 55.62). For facilities registered with the DSD, the typical number of clients served per month ranges from 7 to 152 ( $\bar{x}$  = 39.86, SD = 34.98). The typical number of clients receiving treatment services per month ranges from 4 to 96 ( $\bar{x}$  = 26.80, SD = 38.82) for unregistered facilities. More specifically, 40.0% (2) of facilities registered with the DOH, 33.3% (7) of facilities registered with the DSD, 33.3% (1) of facilities with dual registration, and 20.0% (1) of the unregistered facilities serve more than 50 clients in a typical month.

### **Treatment capacity of substance abuse treatment facilities in Gauteng**

Treatment capacity refers to the number of treatment slots available to treat clients. Overall, treatment capacity ranges from 8 to 156 slots ( $\bar{x}$  = 49.85, SD = 41.23). Of the 31 facilities, 29.6% (8) have the capacity to treat 20 clients, 22.2% (6) have the capacity to treat between 21 and 30 clients, 11.1% (3) have the capacity to treat between 31 and 50 clients, 25.9% (7) have the capacity to treat between 51 and 100 clients, and 11.1% (3) have the capacity to treat more than 100 clients at any given point in time.

#### *Variations in treatment capacity by facility characteristics*

The treatment capacity of private for-profit treatment facilities ranges from 8 to 80 slots ( $\bar{x}$  = 33.75, SD = 27.81). For private non-profit inpatient facilities, treatment capacity ranges from 14 to 156 slots ( $\bar{x}$  = 45.20, SD = 43.02). Treatment capacity at private non-profit outpatient facilities ranges from 20 to 110 slots ( $\bar{x}$  = 53.57, SD = 33.51). At state inpatient facilities, treatment capacity ranges from 94 to 155 slots ( $\bar{x}$  = 124.50, SD = 43.13). Of the facilities that report the capacity to treat more than 50 clients in a typical month, 30.0% are private non-profit outpatient facilities, 30.0% are private non-profit inpatient facilities, 20.0% are private for-profit facilities, and 20.0% are state inpatient facilities.

For facilities registered with the DOH, treatment capacity ranges from 21 to 156 slots ( $\bar{x}$  = 64.80, SD = 54.93). The capacity to treat clients ranges from 14 to 156 slots ( $\bar{x}$  = 54.75, SD = 44.27) for facilities registered with the DSD. The treatment capacity of unregistered treatment facilities ranges from 8 to 80 slots ( $\bar{x}$  = 29.20, SD = 28.83). More specifically, 40.0% (2) of facilities registered with the DOH, 40.0% (8) of facilities registered with the DSD, and 20.0% (1) of unregistered facilities have the capacity to serve more than 50 clients in a typical month.

### **Extent to which services of treatment facilities in Gauteng are utilized**

Treatment service utilization was considered by examining the estimated proportion of treatment slots occupied at any given point in time and separately by calculating the difference between the means of the two variables “treatment capacity” and “average number of clients treated in a typical month.” For the 31 facilities, the average proportion of treatment slots occupied ranges from 44.0% to 100.0% ( $\bar{x}$  = 70.88, SD = 15.64). A paired-sample *t*-test revealed that the mean typical number of clients treated per month is significantly lower than the mean treatment capacity ( $t$  = -3.783,  $p$  = 0.001).

#### *Variations in service utilization by facility characteristics*

For private for-profit facilities, the estimated proportion of treatment slots occupied in a typical month ranges from 60.0% to 100.0% ( $\bar{x}$  = 74.63, SD = 13.56). The mean typical number of clients treated per month seems not to be significantly different from the mean treatment capacity ( $t$  = -0.923,  $p$  = 0.387). For private non-profit inpatient and outpatient facilities, the estimated proportion of treatment slots occupied during a typical month ranges from 44.0% to 98.0% ( $\bar{x}$  = 68.80, SD = 17.56) and from 60.0% to 100.0% ( $\bar{x}$  = 75.50, SD = 14.72), respectively. For each of these types of facilities, the mean typical number of clients treated per month is significantly lower than the mean treatment capacity ( $t$  = -7.372,  $p$  = 0.000;  $t$  = -3.379,  $p$  = 0.020, respectively). For state inpatient facilities, the estimated proportion of treatment slots occupied ranges from 50.0% to 55.0% ( $\bar{x}$  = 52.50, SD = 3.54). A paired sample *t*-test was not performed due to the small number of state inpatient facilities

For facilities registered with the DOH, the estimated proportion of treatment slots occupied during a typical month ranges from 67.0% to 98.0% ( $\bar{x} = 77.40$  SD = 13.72), with the mean typical number of clients treated per month being significantly lower than the mean treatment capacity ( $t = -3.302$ ,  $p = 0.030$ ). The estimated proportion of treatment slots occupied at facilities registered with the DSD ranges from 44.0% to 100.0% ( $\bar{x} = 72.68$ , SD = 16.61). For these facilities, the mean typical number of clients treated per month is significantly lower than the mean treatment capacity ( $t = -3.665$ ,  $p = 0.002$ ). For unregistered facilities, the estimated proportion of treatment slots occupied ranges from 50.0% to 80.0% ( $\bar{x} = 62.00$ , SD = 10.95) and the mean typical number of clients treated per month does not differ significantly from the mean treatment capacity.

#### **Waiting period for treatment services at substance abuse facilities in Gauteng**

A large proportion of facilities (54.8% (17)) use a waiting list when full to capacity. Specifically, 100.0% (2) of the state facilities, 80.0% (8) of the private non-profit inpatient facilities and 75.0% (6) of the private for-profit facilities place clients on a waiting list when full to capacity. Compared to other types of facilities, a significantly smaller proportion of private non-profit outpatient facilities use waiting lists (9.1%) (Chi-square = 14.81,  $p = 0.002$ ). In terms of facility affiliation, 80.0% (4) of facilities registered with the DOH, 60.0% (3) of unregistered facilities, and 54.2% (13) of facilities registered with the DSD maintain a waiting list when full to capacity.

For the 19 facilities that maintain a waiting list, the number of clients on the waiting list at the time of the audit ranged from 0 to 27 ( $\bar{x} = 3.37$ , SD = 6.85) and the number of clients on the waiting list in the month prior to the audit ranged from 0 to 20 ( $\bar{x} = 3.68$ , SD = 5.47). Half of the facilities with more than 15 clients on the waiting list at the time of the audit were private non-profit inpatient facilities and the other half were state inpatient facilities.

#### **Treatment retention and attrition**

Overall, the estimated retention rate ranges from 0.0% to 99.0% ( $\bar{x} = 68.06$ , SD = 30.51) and the estimated attrition rate ranges from 1.0% to 75.0% of all clients ( $\bar{x} = 23.77$ , SD = 21.10). Specifically, 19.4% (6) of facilities report that less than 25% of clients, 9.7% (3)

report that 25% to 50% of clients, 16.1% (5) report that 50% to 75% of clients, and 54.8% (17) report that more than 75% of clients are retained in treatment. In addition, 67.7% (21) of facilities report that less than 25% of clients, 19.4% (6) report that 25% to 50% of clients, and 12.9% (4) report that 50% to 75% of clients do not complete treatment.

#### *Variations in treatment retention and attrition by facility characteristics*

The estimated retention rate ranges from 50.0% to 99.0% of clients ( $\bar{x}$  = 83.38, SD = 15.78) and the estimated attrition rate ranges from 1.0% to 50.0% ( $\bar{x}$  = 14.75, SD = 16.21) at private for-profit facilities. Of these facilities, 75.0% (6) retain more than 75%, 12.2% (1) retain 50% to 75%, and 12.2% (1) retain 25% to 50% of all clients. In addition, 87.5% (7) of these facilities report an attrition rate of less than 25%.

For private non-profit inpatient facilities, the estimated retention rate ranges from 63.0% to 93.0% ( $\bar{x}$  = 87.40, SD = 11.45) and the attrition rate ranges from 1.0% to 24.0% ( $\bar{x}$  = 10.40, SD = 9.39) of all clients. Of these facilities, 90.0% (9) retain more than 75% of their clients and 10.0% (1) retain 50% to 75% of clients. All of these facilities report that less than 25% of their clients drop out of treatment. Amongst private non-profit outpatient facilities, the estimated retention rate ranges from 0.0% to 85.0% of clients ( $\bar{x}$  = 36.73, SD = 28.39) and the attrition rate ranges from 15.0% to 75.0% ( $\bar{x}$  = 44.01, SD = 18.41). For these facilities, 54.5% (6) retain less than 25% and 9.1% (1) retain more than 75% of clients, with 36.4% (4) reporting that 50% to 75% of clients do not complete treatment. The estimated retention rate for state inpatient facilities ranges from 75.0% to 90.0% ( $\bar{x}$  = 82.50, SD = 10.61) and the attrition rate ranges from 5.0% to 25.0% ( $\bar{x}$  = 15.00, SD = 14.14). Half of these facilities retain 50% to 75% of clients, with the remaining half retaining more than 75% of clients. State facilities do not report an attrition rate greater than 25%.

For DOH-affiliated facilities, the estimated retention rate ranges from 80.0% to 99.0% ( $\bar{x}$  = 87.40, SD = 10.14) and the attrition rate ranges from 1.0% to 20.0% ( $\bar{x}$  = 10.60, SD = 9.26). All of these facilities report retaining more than 75% of their clients and none report an attrition rate greater than 25%. For DSD-affiliated facilities, the retention rate

ranges from 0.0% to 99.0% ( $\bar{x}$  = 63.08, SD = 32.69) and the attrition rate ranges from 1.0% to 75.0% ( $\bar{x}$  = 26.79, SD = 22.55). Of these facilities, 50.0% (12) retain more than 75% of clients and 12.5% (3) retain between 50% and 75% of all clients. In addition, 62.5% (15) report that less than 25% of clients drop out of treatment, whilst 16.7% (4) report that 50% to 75% of clients do not complete treatment. For unregistered facilities, the retention rate ranges from 70.0% to 97.0% ( $\bar{x}$  = 83.04, SD = 10.97), with 60.0% (3) retaining more than 75% of clients and 40.0% (2) retaining 50% to 75% of clients. The attrition rate ranges from 3.0% to 30.0% ( $\bar{x}$  = 16.60, SD = 10.96). Of these facilities, 80.0% (4) report that less than 25% of clients drop out of treatment, whilst 20.0% (1) report that 25% to 50% of clients drop out of treatment.

#### *Variables associated with treatment attrition and retention*

Multiple correlations were performed, revealing several variables associated with attrition and retention. The proportion of Black and Coloured clients is positively correlated with attrition rates ( $R = 0.387$ ,  $p = 0.034$ ;  $R = 0.382$ ,  $p = 0.037$ , respectively). The length of the treatment programme is also positively correlated with attrition ( $R = 0.670$ ,  $p = 0.000$ ). Variables negatively correlated with attrition include the proportion of female clients and the proportion of White clients treated ( $R = -0.386$ ,  $p = 0.035$ ;  $R = -0.447$ ,  $p = 0.013$ , respectively). Organizational factors negatively correlated with attrition include the number of clinical staff, the proportion of costs paid for by the client, and the proportion of costs paid by medical insurance ( $R = -0.417$ ,  $p = 0.027$ ;  $R = -0.365$ ,  $p = 0.047$ ;  $R = -0.407$ ,  $p = 0.026$ , respectively).

Treatment retention is positively correlated with the proportion of White clients ( $R = 0.455$ ,  $p = 0.012$ ), the proportion of clients between 30 and 39 years of age ( $R = 0.384$ ,  $p = 0.040$ ), the proportion of clients older than 50 years of age ( $R = 0.390$ ,  $p = 0.037$ ), the number of clinical staff ( $R = 0.495$ ,  $p = 0.007$ ), the proportion of client self-pay funds ( $R = 0.397$ ,  $p = 0.030$ ) and the proportion of costs covered by medical insurance ( $R = 0.417$ ,  $p = 0.022$ ). Variables negatively associated with treatment retention include the length of the programme ( $R = -0.677$ ,  $p = 0.000$ ) and the proportion of Coloured clients served ( $R = -0.574$ ,  $p = 0.001$ ).

## CHARACTERISTICS OF STAFF AT SUBSTANCE ABUSE TREATMENT FACILITIES IN GAUTENG

This section describes the characteristics of staff employed by substance abuse treatment facilities in Gauteng. Specifically, staff qualifications, staff development activities, and resources for staff are explored. Variations in staff characteristics by facility characteristics such as intensity of treatment, facility ownership, and facility affiliation are also described.

### *Core findings:*

- Private non-profit inpatient facilities have the highest mean number of clinical staff compared to facilities with other types of ownership
- Private non-profit inpatient and private for-profit facilities have the highest mean number of speciality medical and mental health staff, compared to other types of facilities
- DOH-affiliated facilities have a higher mean number of clinical staff than DSD-affiliated facilities
- A higher proportion of DOH-affiliated facilities have speciality medical and mental health staff, compared to facilities with other types of affiliation

### **Characteristics of staff at substance abuse treatment facilities in Gauteng**

Overall, the total number of full-time staff ranges from 0 to 126 ( $\bar{x} = 17.50$ ,  $SD = 24.39$ ). Here full-time staff refers to staff responsible for treatment services and support staff, such as administrators and cleaning staff. Facilities without full-time staff rely on part-time staff. The total number of part-time staff per facility ranges from 0 to 15 ( $\bar{x} = 4.44$ ,  $SD = 3.55$ ). The number of (clinical) staff responsible for the delivery of treatment services ranges from 0 to 26 ( $\bar{x} = 7.89$ ,  $SD = 7.14$ ). The number of new appointments and the number of resignations amongst clinical staff in the 12 months prior to the study ranged from 0 to 9 ( $\bar{x} = 1.36$ ,  $SD = 1.91$ ) and 0 to 6 ( $\bar{x} = 1.18$ ,  $SD = 1.59$ ), respectively.

Table 4 represents the mean number of staff per staffing category for treatment facilities in Gauteng. Two part-time members of staff represent one full time equivalent. Paired sample *t*-tests revealed that the mean number of administrators and clerical staff is significantly higher than the mean number of psychiatrists ( $t = 4.40$ ,  $p = 0.000$ ), doctors ( $t = 3.12$ ,  $p = 0.004$ ), psychologists ( $t = 3.73$ ,  $p = 0.001$ ), occupational therapists ( $t = 4.50$ ,  $p = 0.000$ ), and auxillary nurses ( $t = 3.51$ ,  $p = 0.002$ ).

**Table 4.** Mean number of staff per staffing category for substance abuse treatment facilities in Gauteng (N=31).

	All facilities			
	Min	Max	$\bar{x}$	SD
<i>Psychiatrists</i>	0	2	0.24	0.47
<i>Doctors</i>	0	5	0.83	0.96
<i>Psychologists</i>	0	3	0.62	0.81
<i>Occupational therapists</i>	0	2	0.26	0.49
<i>Social workers</i>	0	9	2.48	2.51
<i>Support counsellors</i>	0	8	1.64	1.87
<i>Registered nurses</i>	0	9	2.40	2.66
<i>Auxillary nurses</i>	0	6	0.59	1.60
<i>Administration/clerical</i>	0	15	2.53	2.84

The mean number of social workers, registered nurses, and support counsellors is significantly higher than the mean number of psychologists ( $t = 3.76$ ,  $p = 0.01$ ;  $t = 3.75$ ,  $p = 0.01$  and  $t = 2.61$ ,  $p = 0.014$ , respectively), psychiatrists ( $t = 4.74$ ,  $p = 0.000$ ;  $t = 4.61$ ,  $p = 0.000$ ;  $t = 4.03$ ,  $p = 0.000$ , respectively), auxillary nurses ( $t = 3.47$ ,  $p = 0.002$ ;  $t = 4.83$ ,  $p = 0.000$ ;  $t = 2.25$ ,  $p = 0.032$ , respectively), and doctors ( $t = 3.60$ ,  $p = 0.001$ ;  $t = 2.28$ ,  $p = 0.035$ ;  $t = 3.59$ ,  $p = 0.001$ , respectively).

### Variations in staff characteristics by organisational factors

#### *Variations in staff by treatment intensity and facility ownership*

For private for-profit facilities, the total number of full-time staff ranges from 1 to 23 ( $\bar{x} = 10.14$ ,  $SD = 8.97$ ) and the total number of clinical staff ranges from 0 to 19 ( $\bar{x} = 5.63$ ,  $SD = 5.90$ ). For private, non-profit inpatient facilities, the number of full-time staff ranges from 0 to 35 ( $\bar{x} = 19.78$ ,  $SD = 12.28$ ) and the number of clinical staff ranges from 0 to 26 ( $\bar{x} = 13.67$ ,  $SD = 8.43$ ). The number of full-time staff ranges from 2 to 20 ( $\bar{x} = 7.87$ ,  $SD = 5.92$ ) for private non-profit outpatient facilities, with the number of clinical staff ranging from 0 to 10 ( $\bar{x} = 4.22$ ,  $SD = 3.35$ ). For state inpatient facilities, the total number of full-time staff ranges from 17 to 126 ( $\bar{x} = 71.50$ ,  $SD = 77.08$ ) and the number of clinical staff ranges from 5 to 10 ( $\bar{x} = 7.50$ ,  $SD = 3.54$ ). Private non-profit inpatient and private for-profit facilities have the highest number of clinical staff, with 44.4% and 25.0% of these facilities employing more than 16 clinical staff, respectively.

Private for-profit treatment facilities report a higher mean number of full-time psychiatrists, medical doctors, psychologists and registered nurses than either state or private non-profit outpatient facilities (Table 5). For private non-profit inpatient facilities, the mean number of registered nurses and social workers is significantly higher than the mean number of support counsellors ( $t = 4.49$ ,  $p = 0.002$ ;  $t = 3.03$ ,  $p = 0.01$ , respectively), auxillary nurses ( $t = 4.81$ ,  $p = 0.001$ ;  $t = 2.43$ ,  $p = 0.038$ , respectively), psychologists ( $t = 4.03$ ,  $p = 0.003$ ;  $t = 2.97$ ,  $p = 0.016$ , respectively), psychiatrists ( $t = 4.93$ ,  $p = 0.001$ ;  $t = 3.63$ ,  $p = 0.006$ , respectively), and doctors ( $t = 4.31$ ,  $p = 0.01$ ;  $t = 3.21$ ,  $p = 0.01$ , respectively). For private non-profit outpatient facilities, the mean number of registered nurses, social workers, and support counsellors is significantly higher than the mean number of auxillary nurses ( $t = 2.97$ ,  $p = 0.014$ ;  $t = 5.26$ ,  $p = 0.000$ ;  $t = 2.94$ ,  $p = 0.015$ , respectively), psychologists ( $t = 2.43$ ,  $p = 0.035$ ;  $t = 4.32$ ,  $p = 0.032$ ;  $t = 2.57$ ,  $p = 0.028$ , respectively) and psychiatrists ( $t = 2.97$ ,  $p = 0.014$ ;  $t = 5.26$ ,  $p = 0.000$ ;  $t = 2.94$ ,  $p = 0.015$ , respectively).

**Table 5.** *Descriptive statistics for each staffing category by treatment intensity and facility ownership, for substance abuse treatment facilities in Gauteng (N = 31)*

	<i>Private for-profit inpatient (N=8)</i>		<i>Private non-profit inpatient (N=10)</i>		<i>Private non-profit outpatient (N=11)</i>		<i>State inpatient (N=2)</i>	
	$\bar{x}$	SD	$\bar{x}$	SD	$\bar{x}$	SD	$\bar{x}$	SD
<i>Psychologists</i>	1.14	1.03	0.80	0.82	0.14	0.32	0.50	0.00
<i>Social workers</i>	1.00	0.58	4.20	3.51	1.81	1.15	3.00	0.00
<i>Support Counsellors</i>	2.36	1.65	0.90	1.02	1.27	1.44	8.00	0.00
<i>Registered nurses</i>	1.29	2.21	4.55	2.93	1.27	1.42	1.00	0.00
<i>Auxillary Nurses</i>	0.86	2.27	1.10	1.91	0.00	0.00	0.00	0.00
<i>Occupational therapists</i>	0.64	0.75	0.20	0.35	0.91	0.30	0.00	0.00
<i>Doctors</i>	0.64	0.57	0.95	0.64	0.86	1.40	0.50	0.00
<i>Psychiatrists</i>	0.57	0.84	0.25	0.26	0.00	0.00	0.50	0.00
<i>Administrators</i>	2.07	1.17	2.80	2.15	2.55	4.17	3.00	0.00

*Variations in staff by type of state affiliation*

For DOH-affiliated facilities, the number of full-time staff ranges from 10 to 23 ( $\bar{x} = 18.20$ ,  $SD = 5.85$ ) and the number of clinical staff ranges from 5 to 20 ( $\bar{x} = 14.20$ ,  $SD = 7.53$ ). For DSD-affiliated facilities, the number of full-time staff ranges from 0 to 126 ( $\bar{x} = 19.10$ ,  $SD = 27.24$ ) and the number of clinical staff ranges from 0 to 26 ( $\bar{x} = 8.17$ ,  $SD =$

7.23). The number of full-time staff ranges from 1 to 20 ( $\bar{x} = 7.00$ ,  $SD = 8.77$ ) and the number of clinical staff ranges from 0 to 4 ( $\bar{x} = 2.33$ ,  $SD = 2.08$ ) at unregistered facilities.

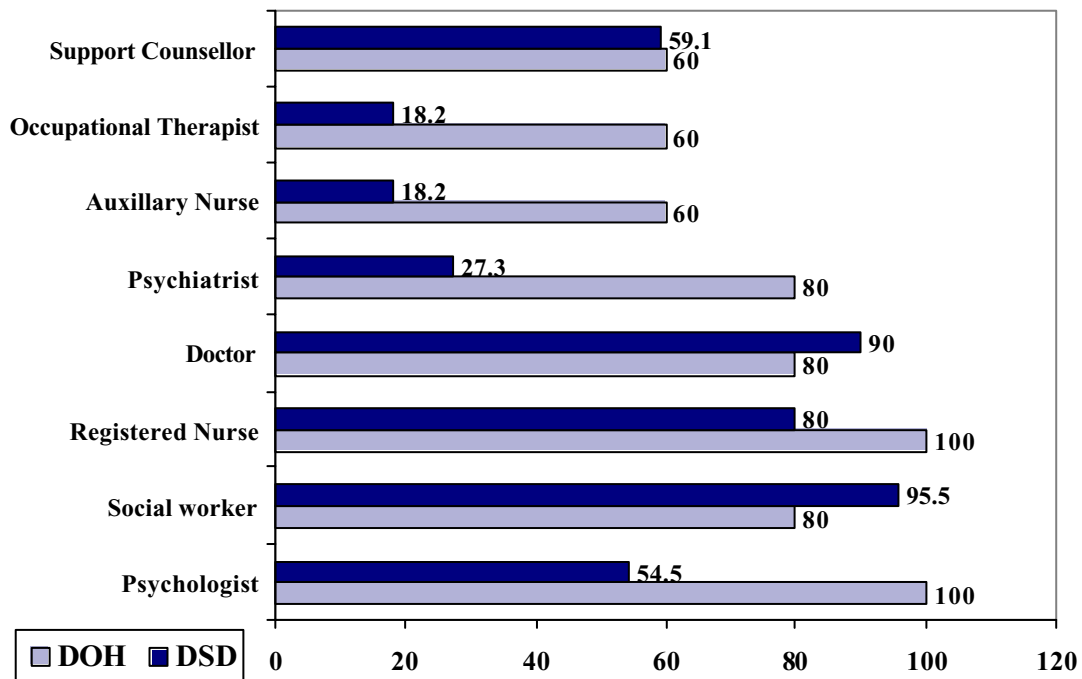
For DOH-affiliated facilities, the mean number of registered nurses is higher than the mean number of auxillary nurses and the mean number of doctors ( $t = 3.09$ ,  $p = 0.037$ ;  $t = 4.46$ ,  $p = 0.000$ ;  $t = 2.91$ ,  $p = 0.04$ , respectively). For DSD-affiliated facilities, the mean number of registered nurses, social workers and support counsellors is significantly higher than the mean number of psychologists ( $t = 4.23$ ,  $p = 0.000$ ;  $t = 4.46$ ,  $p = 0.000$ ;  $t = -2.28$ ,  $p = 0.03$ , respectively), auxillary nurses ( $t = 5.37$ ,  $p = 0.000$ ;  $t = 4.24$ ,  $p = 0.000$ ;  $t = 2.11$ ,  $p = 0.047$ , respectively), and psychiatrists ( $t = 5.00$ ,  $p = 0.000$ ;  $t = 5.30$ ,  $p = 0.000$ ;  $t = 3.39$ ,  $p = 0.003$ , respectively) (Table 6).

**Table 6.** Descriptive statistics for each staffing category by affiliation, for substance abuse treatment facilities in Gauteng ( $N = 31$ )

	<b>DOH</b> ( $N = 5$ )		<b>DSD</b> ( $N = 22$ )		<b>Dual registration</b> ( $N = 3$ )		<b>Unregistered</b> ( $N = 5$ )	
	$\bar{x}$	<b>SD</b>	$\bar{x}$	<b>SD</b>	$\bar{x}$	<b>SD</b>	$\bar{x}$	<b>SD</b>
<b>Psychologists</b>	1.60	1.29	0.50	0.74	1.33	1.44	0.60	0.42
<b>Social workers</b>	1.80	1.30	3.02	2.64	2.33	1.15	0.70	0.45
<b>Support Counsellors</b>	1.70	1.79	1.52	1.98	1.50	1.50	2.00	1.22
<b>Registered nurses</b>	4.60	3.21	2.84	2.67	5.33	3.51	0.00	0.00
<b>Auxillary Nurses</b>	2.80	3.03	0.5	1.37	2.67	3.06	0.00	0.00
<b>Occupational therapists</b>	0.80	0.84	0.16	0.45	0.67	1.15	0.40	0.55
<b>Doctors</b>	1.00	0.79	0.96	1.06	1.33	0.76	0.40	0.22
<b>Psychiatrists</b>	0.90	0.82	0.14	0.23	0.33	0.29	0.10	0.22
<b>Administrators</b>	3.00	1.00	2.14	1.63	2.67	1.15	3.90	6.23

A higher proportion of DOH-affiliated facilities employ psychologists than facilities affiliated with the DSD (Chi-Square = 4.15,  $p = 0.042$ ). Similarly, a higher proportion of DOH-affiliated facilities employ psychiatrists and occupational therapists than facilities registered with the DSD (Chi-Square = 6.77,  $p = 0.009$ ; Chi-Square = 4.04,  $p = 0.045$ ). A significantly greater proportion of facilities registered with the DOH employ registered nurses and auxillary nurses than facilities registered with the DSD (Chi-Square = 8.88,  $p = 0.003$  and Chi-Square = 7.74,  $p = 0.005$ , respectively) (Figure 3).

**Figure 3. Variations in proportion of speciality staff by facility affiliation (N = 31)**



**Staff participation in development activities for substance abuse treatment facilities in Gauteng**

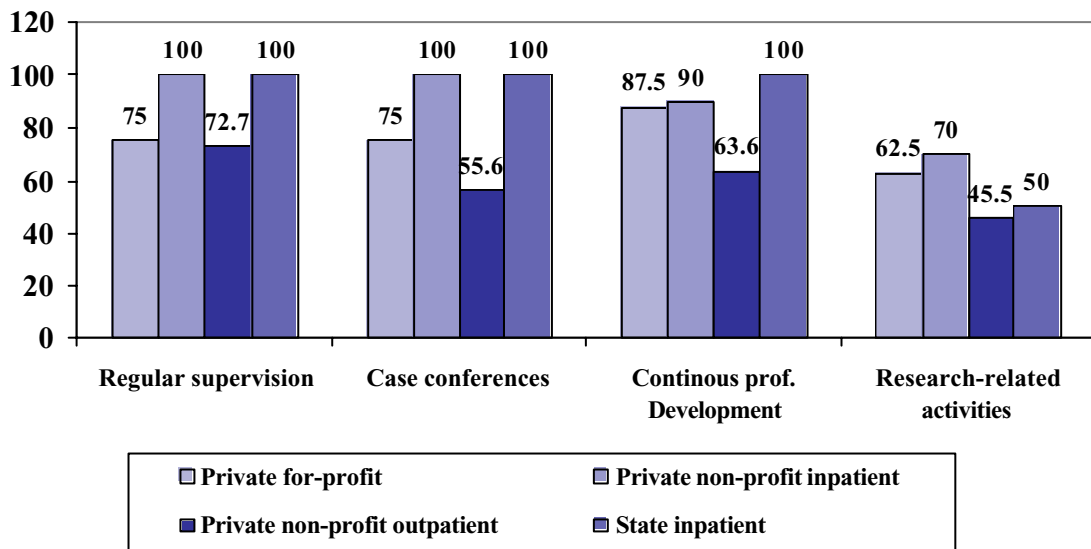
- Core findings:**
- Private non-profit and state inpatient facilities are more likely to require clinical staff to participate in professional development activities than facilities with other types of ownership
  - Facilities with DOH- or dual registration are more likely to require clinical staff to participate in professional development activities than facilities with other types of affiliation
  - Private non-profit outpatient facilities are less likely to have resources to support staff development activities than facilities with other types of ownership
  - DSD-affiliated facilities are less likely to have resources to support staff development than facilities with other types of affiliation

Clinical staff are required by 83.9% of facilities to participate in regular supervision, by 80.6% of facilities to be involved in continuous professional development (CPD) activities and by 79.7% of facilities to participate in case conferences or ward rounds. In contrast, only 58.1% of facilities encourage staff to participate in research-related activities.

*Variations in development activities by facility characteristics*

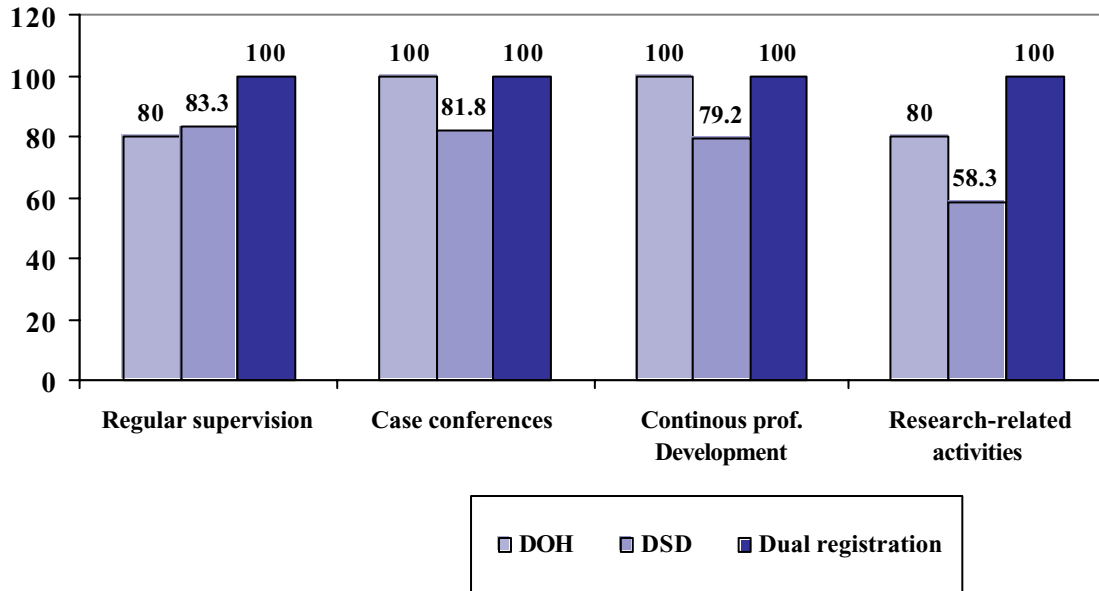
Variations in staff development activities were explored by treatment intensity and type of ownership. A larger proportion of private, non-profit inpatient and state inpatient facilities require their staff to participate in case conferences, CPD activities and regular supervision than either private for-profit or private non-profit outpatient facilities. These differences were not significant (Figure 4).

**Figure 4. Proportion of treatment facilities requiring the professional development of clinical staff by treatment intensity and facility ownership (N = 31)**



Variations in staff development activities were explored by facility affiliation (Figure 10). A higher proportion of facilities with dual registration or registered with the DOH require staff to participate in development activities. Clinical staff are required by 100.0% of facilities registered with the DOH and with dual registration, 81.8% of DSD-affiliated facilities, and 60.0% of unregistered facilities to participate in case conferences. Similarly, 100.0% of facilities registered with the DOH, 79.2% of facilities registered with the DSD and 70.0% of unregistered facilities require clinical staff to participate in CPD activities. All facilities with dual registration require staff to participate in research-related activities and in regular supervision (Figure 5).

**Figure 5. Proportion of treatment facilities requiring the continuous professional development of clinical staff by type of affiliation (N = 31)**



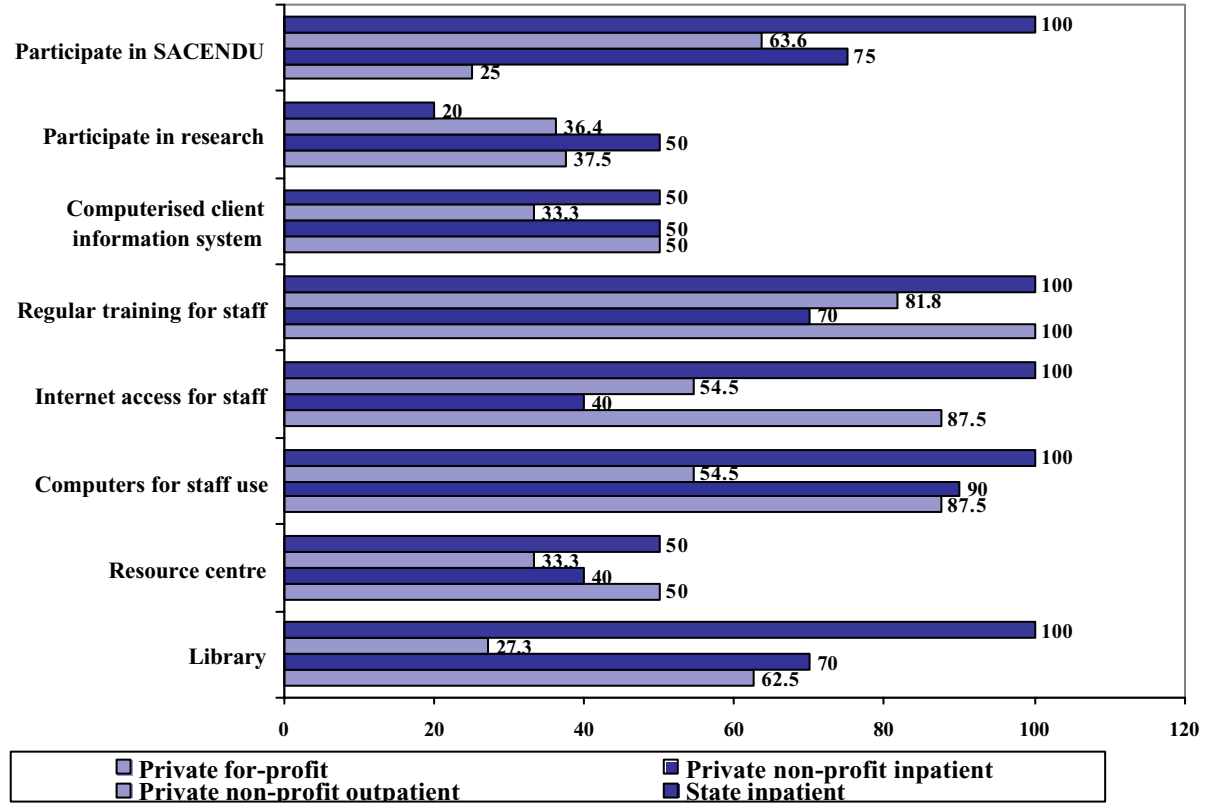
**Resources to support staff development for treatment facilities in Gauteng**

In terms of the resources made available to clinical staff to encourage professional development, 83.9% of facilities provide training workshops for staff and 77.4% provide computers for staff use. A smaller proportion of facilities have internet access (61.3%), a library (54.8%), a resource centre (41.4%), or computerised client files (management information system) (44.8%) available to staff. Approximately 6 out of 10 facilities participate in the SACENDU project (58.1%), but substantially less (38.7%) participate in other research activities.

*Variations in resources to support staff development by facility characteristics*

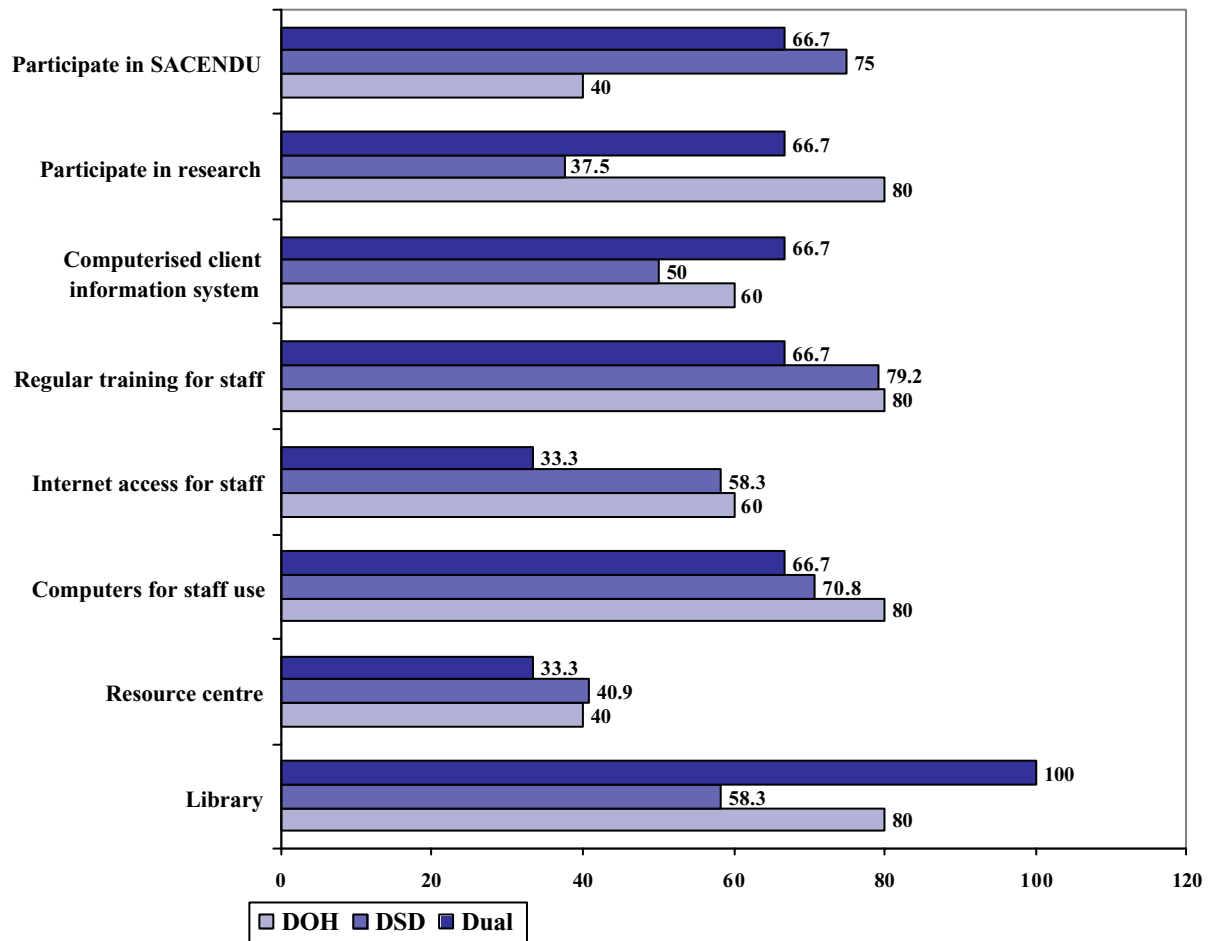
Variations in resources to support staff and encourage professional development by intensity of treatment and facility ownership were examined (Figure 6). Compared to other facilities, a smaller proportion of private, non-profit outpatient facilities provide staff with access to computers, a library, a resource centre or a computerised management information system. These differences were not significant. In contrast, a higher proportion of private for-profit facilities and state inpatient facilities provide staff with access to the internet and regular training for staff than other types of facilities.

**Figure 6.** *Variations in proportion (%) of facilities that provide resources to support continuous professional development of staff by treatment intensity and facility ownership (N = 31)*



Variations in facility resources to support staff and encourage development were explored by facility affiliation (Figure 7). A larger proportion of facilities with dual registration have a computerised management information system and a library for staff use than facilities with other types of registration. A larger proportion of facilities registered with the DOH participate in research compared to facilities with other types of registration. Compared to facilities with other types of registration, a larger proportion of facilities registered with the DSD participate in SACENDU (Figure 7).

**Figure 7.** *Variations in proportion (%) of facilities that provide resources to support continuous professional development of staff by type of affiliation (N = 31)*



**PROFILE OF SERVICES PROVIDED BY SUBSTANCE ABUSE TREATMENT FACILITIES IN GAUTENG**

This section describes the types of treatment services provided by facilities in Gauteng. This section also examines variations in access to services by facility characteristics such as demographic profile of clients served, intensity of care, facility ownership, and facility affiliation. There are two main types of services provided by facilities, namely treatment services proper, and ancillary services. Ancillary services are services directed towards problems that are associated with substance dependence (e.g. psychological dysfunction)(Lee et al., 2001).

## Profile of treatment services offered by substance abuse facilities in Gauteng

### *Core findings:*

- Compared to the provision of core addiction services, significantly fewer facilities provide ancillary mental health services or ancillary medical services
- Compared to the completion of a chemical history, significantly fewer facilities conduct psychological evaluations or psychiatric assessments of clients
- Compared to the provision of individual or group substance abuse counselling services, significantly fewer facilities offer individual or group mental health counselling services
- Compared to the provision of individual or group substance abuse counselling services, significantly fewer facilities offer self-help group participation or occupational therapy services

All facilities offer some form of addiction counselling service and 90.3% of the facilities offer some type of post-treatment aftercare service. In contrast, 67.0% offer medical and detoxification services and less than a third of the facilities (29.0%) offer psychiatric services. The mean number of facilities providing psychiatric services is lower than the mean number of facilities with medical/detoxification, addiction counselling and aftercare services ( $Z = -2.69$ ,  $p = 0.008$ ;  $Z = -4.69$ ,  $p = 0.000$ ;  $Z = -3.90$ ,  $p = 0.000$ , respectively). Similarly, the mean number of facilities providing medical/ detoxification services is lower than the mean number of facilities with addiction counselling and aftercare services ( $Z = -3.32$ ,  $p = 0.001$ ;  $Z = -2.12$ ,  $p = 0.034$ , respectively).

In terms of assessment services, 96.8% of facilities complete a chemical history and 74.2% complete a bio-psycho-social history of their clients. In contrast, less than half of the facilities conduct psychological evaluations (38.7%) or psychiatric assessments of their clients (48.4%). The mean number of facilities completing chemical histories of their clients is significantly higher than the mean number completing bio-psycho-social histories ( $Z = -2.24$ ,  $p = 0.025$ ), psychological evaluations ( $Z = -3.30$ ,  $p = 0.001$ ) and psychiatric assessments ( $Z = -2.84$ ,  $p = 0.005$ ). Similarly, the mean number of facilities completing bio-psycho-social histories of their clients is higher than the mean number completing psychological evaluations ( $Z = -2.32$ ,  $p = 0.020$ ).

All of the facilities provide individual (100.0%) and group addiction counselling services (100.0%), with individual and group life-skills training being provided by 96.8% and 93.5% of facilities respectively. A smaller proportion of facilities offer individual mental

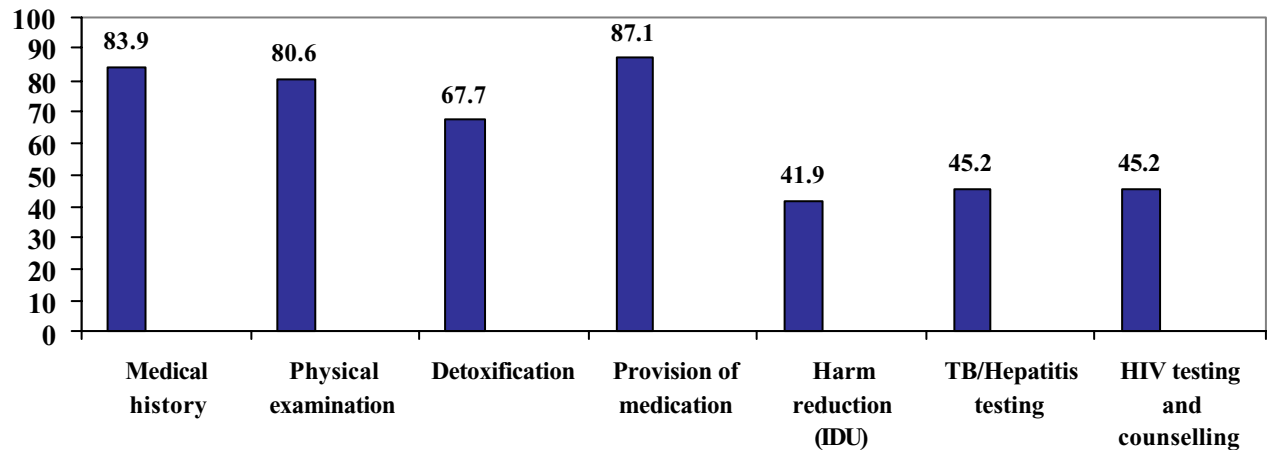
health counselling (74.2%) or group mental health counselling services (58.1%). The mean number of facilities providing individual and group substance abuse counselling is higher than the mean number of facilities providing individual mental health counselling ( $Z = -2.45$ ,  $p = 0.014$ ;  $Z = -2.45$ ,  $p = 0.014$ , respectively), group mental health counselling ( $Z = -3.61$ ,  $p = 0.000$ ;  $Z = -3.61$ ,  $p = 0.000$ , respectively) or group lifeskills ( $Z = -2.00$ ,  $p = 0.046$ ;  $Z = -2.00$ ,  $p = 0.046$ , respectively).

Almost all facilities (93.5%) offer family therapy to their clients. For the most part, this consists of one family session and is used to gather collateral on the presenting client or educate the family about addiction. These family interventions tend not to address family dysfunction. In contrast, 50.0% of facilities offer self-help/mutual-help group orientation and participation as part of their programme (such as Alcoholics Anonymous) and 48.4% offer occupational therapy services. A small proportion of facilities provide additional services such as vocational training (22.6%) and education (16.1%). The mean number of facilities providing individual and group substance abuse counselling is higher than the mean number of facilities providing self-help group participation ( $Z = -3.61$ ,  $p = 0.000$ ;  $Z = -3.61$ ,  $p = 0.000$ , respectively) and occupational therapy services ( $Z = -3.74$ ,  $p = 0.000$ ;  $Z = -3.74$ ,  $p = 0.000$ , respectively).

With regard to ancillary medical services, a larger proportion of facilities complete a full medical history of clients, conduct physical examinations of clients, and provide clients with medication than offer detoxification services to clients. For medical harm-reduction interventions, less than half of the facilities routinely test clients for hepatitis and other infectious diseases, provide HIV risk reduction interventions, or conduct harm reduction interventions among injection drug users (IDU) (Figure 8). The mean number of facilities taking a medical history and providing medication is higher than the mean number providing detoxification services ( $Z = -2.33$ ,  $p = 0.020$ ;  $Z = -2.12$ ,  $p = 0.034$ , respectively). A higher mean number of facilities provide medication, complete medical histories, and complete physical examinations than test for infectious diseases ( $Z = -3.05$ ,  $p = 0.002$ ;  $Z = -3.21$ ,  $p = 0.001$ ;  $Z = -3.00$ ,  $p = 0.003$ , respectively), conduct harm reduction interventions for HIV ( $Z = -3.32$ ,  $p = 0.001$ ;  $Z = -3.46$ ,  $p = 0.001$ ;  $Z = -3.00$ ,  $p = 0.003$ ,

respectively), or interventions for IDU ( $Z = -3.46, p = 0.001$ ;  $Z = -3.61, p = 0.000$ ;  $Z = -3.16, p = 0.002$ , respectively).

**Figure 8.** *Proportion (%) of substance abuse treatment facilities in Gauteng providing medical services to clients (N = 31)*



#### Variations in treatment services by facility characteristics

##### *Core findings:*

- Ancillary mental health services are less likely to be provided at facilities serving high proportions of Black clients than at facilities serving low proportions of Black clients
- A higher proportion of inpatient facilities provide ancillary medical and mental health services than outpatient facilities
- Psychiatric assessments as well as individual and group mental health counselling services are more likely to be offered at inpatient than at outpatient facilities
- Compared to other facilities, significantly more private for-profit and private non-profit inpatient facilities offer group mental health counselling, and access to self-help group participation.
- Compared to other facilities, a higher proportion of DOH-affiliated facilities provide ancillary medical and mental health services
- Psychiatric assessments, psychological evaluations as well as individual and group mental health counselling services are more likely to be offered at DOH-affiliated than at DSD-affiliated facilities
- A greater proportion of facilities with psychologists and psychiatrists provide ancillary mental health services than facilities without these speciality staff
- A greater proportion of facilities with registered nurses and medical doctors provide ancillary medical services than facilities without these speciality staff

#### *Variations by demographic profile of clients served*

A greater mean number of facilities where Black clients comprise more than 50% of the treatment population report providing addiction counselling services ( $Z = -2.83, p =$

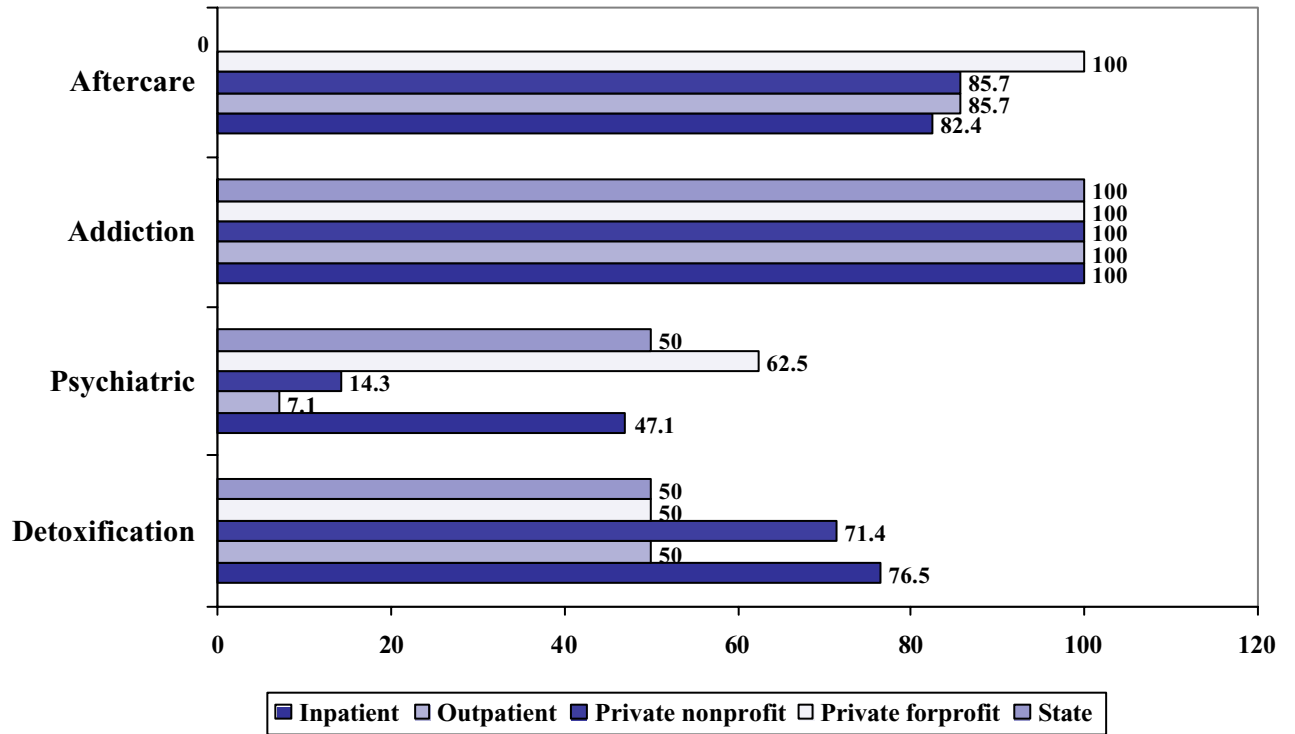
0.005), medical and detoxification services ( $Z = -2.45$ ,  $p = 0.014$ ) and aftercare services ( $Z = -2.83$ ,  $p = 0.005$ ) than psychiatric services. In terms of gender, a significantly greater proportion of facilities in which female clients comprise more than 20% of clients report providing addiction and aftercare services than medical and detoxification services ( $Z = -2.24$ ,  $p = 0.025$ ;  $Z = -2.00$ ,  $p = 0.046$ , respectively) or psychiatric services ( $Z = -3.16$ ,  $p = 0.002$ ;  $Z = -3.00$ ,  $p = 0.003$ , respectively). Similarly, a higher mean number of facilities where clients less than 20 years of age comprise more than 20% of clients report providing addiction and aftercare services than medical services ( $Z = -2.00$ ,  $p = 0.046$ ;  $Z = -2.00$ ,  $p = 0.046$ , respectively) or psychiatric services ( $Z = -3.00$ ,  $p = 0.003$ ;  $Z = -3.00$ ,  $p = 0.003$ , respectively).

In terms of assessment services, facilities with low proportions of Black clients are significantly more likely to conduct psychological evaluations and psychiatric assessments than facilities with high proportions of Black clients (Chi-square = 8.34,  $p = 0.004$ ; Chi-square = 7.31,  $p = 0.007$ , respectively). In terms of counselling services, a greater proportion of facilities with low numbers of Black clients provide individual and group mental counselling than facilities with high proportions of Black clients (Chi-square = 6.14,  $p = 0.013$ ; Chi-square = 4.46,  $p = 0.035$ , respectively). Similarly, facilities that serve low proportions of Black clients are more likely to provide self-help group orientation and participation than facilities with higher proportions of Black clients (Chi-square = 4.07,  $p = 0.044$ ). A greater proportion of facilities where females comprise at least 20% of clients provide group mental health counselling services than facilities with lower proportions of female clients (Chi-square = 6.65,  $p = 0.010$ ).

#### *Variations by treatment intensity and facility ownership*

A higher proportion of inpatient facilities provide ancillary medical services than outpatient facilities. Similarly, a higher proportion of inpatient facilities provide ancillary mental health services than outpatient services (Chi-square = 5.94,  $p = 0.015$ )(Figure 9). A higher proportion of private for-profit facilities provide ancillary mental health services and aftercare services than private non-profit and state facilities (Chi-square = 6.99,  $p = 0.030$ ; Chi-square = 11.99,  $p = 0.002$ )(Figure 9). In contrast, a higher proportion of private non-profit facilities provide medical services than private for-profit or state facilities.

**Figure 9.** *Variations in proportion of facilities (%) providing treatment services by organizational factors (N = 31)*



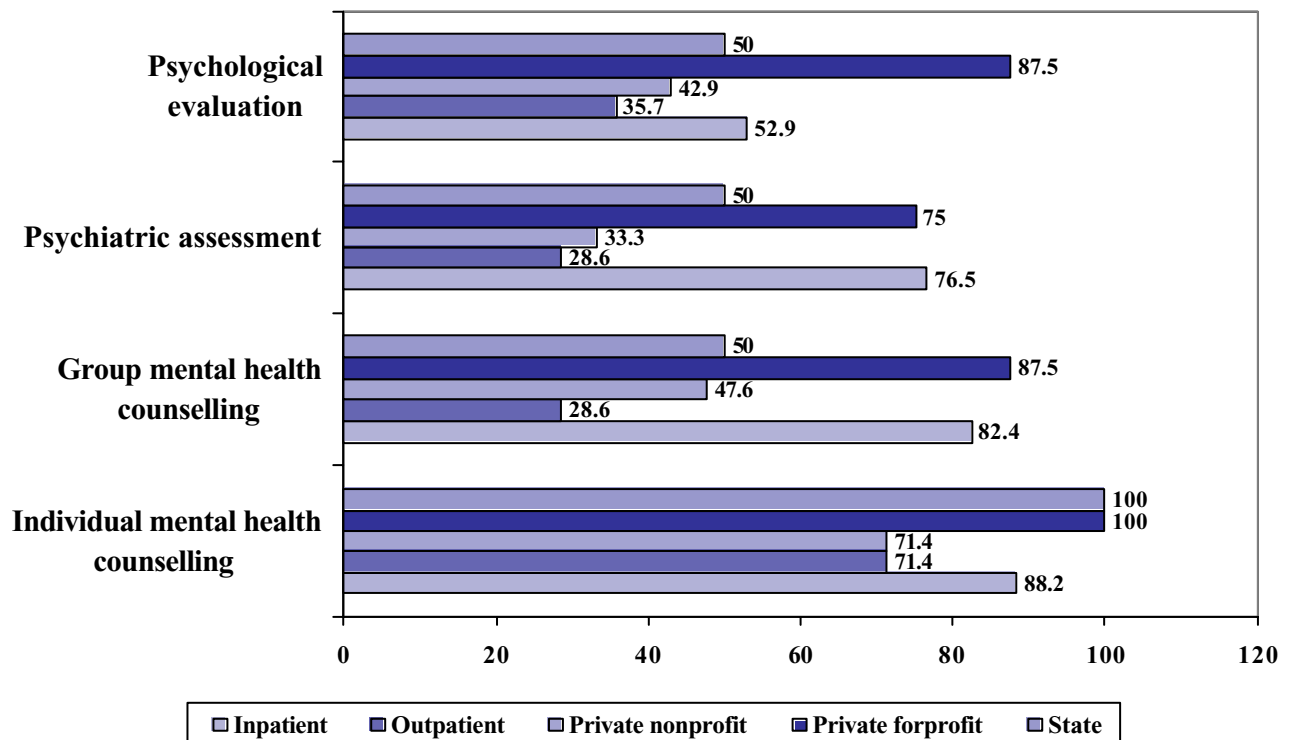
When these factors were considered together, a higher proportion of private, non-profit inpatient treatment facilities provide detoxification services than private for-profit facilities, private non-profit outpatient or state inpatient facilities. In contrast, a significantly higher proportion of private for-profit facilities provide psychiatric services than private non-profit inpatient, private non-profit outpatient or state inpatient facilities (Chi-square = 9.280, p= 0.026) (Table 7).

**Table 7. Variations in treatment services provided by treatment intensity and ownership, for substance abuse treatment facilities in Gauteng (N = 31)**

	<i>Private for profit inpatient (N=8)</i>		<i>Private nonprofit inpatient (N=10)</i>		<i>Private nonprofit outpatient (N=11)</i>		<i>State inpatient (N=2)</i>	
	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>
<i>Biopsychosocial history</i>	7	87.5	8	80.0	6	54.5	2	100.0
<i>Chemical history</i>	8	100.0	9	90.0	9	81.8	2	100.0
<i>Psychological evaluation</i>	6	75.0	4	40.0	1	9.1	1	50.0
<i>Psychiatric assessment</i>	7	87.5	7	70.0	2	18.2	1	50.0
<i>Individual substance abuse counselling</i>	8	100.0	10	100.0	9	81.8	2	100.0
<i>Group substance abuse counselling</i>	8	100.0	10	100.0	11	100.0	2	100.0
<i>Individual mental health counselling</i>	8	100.0	8	80.0	5	46.4	2	100.0
<i>Group mental health counselling</i>	7	87.5	8	80.0	2	18.2	1	50.0
<i>Individual lifeskills</i>	8	100.0	9	90.0	9	81.8	2	100.0
<i>Group lifeskills</i>	7	87.5	9	90.0	9	81.8	2	100.0
<i>Alternative therapies</i>	0	0.0	1	10.0	0	0.0	0	0.0
<i>Self help/support groups</i>	5	62.5	7	77.8	4	36.4	1	50.0
<i>Occupational therapy</i>	5	62.5	6	60.0	2	18.2	2	100.0
<i>Family therapy</i>	7	87.5	10	100.0	10	90.9	2	100.0
<i>Medical history</i>	5	62.5	10	100.0	9	81.8	2	100.0
<i>Physical examination</i>	5	62.5	9	90.0	7	63.6	2	100.0
<i>Detoxification services</i>	4	50.0	9	90.0	5	45.5	1	50.0
<i>Provision of medication</i>	6	75.0	10	100.0	7	63.6	2	100.0
<i>Harm reduction</i>	5	62.5	5	50.0	2	18.2	1	50.0
<i>Testing for TB/Hepatitis</i>	3	37.5	8	80.0	1	9.1	2	100.0
<i>HIV testing/counselling</i>	4	50.0	6	60.0	2	18.2	2	100.0

In terms of assessment services, a higher proportion of inpatient facilities take bio-psycho-social histories of clients than outpatient facilities (Chi-square = 3.88, p= 0.049). Similarly, a higher proportion of inpatient facilities conduct psychiatric assessments than outpatient facilities (Chi-square = 7.11, p= 0.008) (Figure 10). Ownership status is not significantly associated with the extent to which facilities provide assessment services. When these factors were considered together, it was found that a higher proportion of private for-profit inpatient treatment facilities conduct psychiatric assessments than state inpatient, non-profit in- and outpatient facilities (Chi-square = 10.36, p= 0.016). Similarly, a significantly larger proportion of private for-profit inpatient facilities conduct psychological evaluations than either state, private non-profit inpatient or private non-profit outpatient facilities (Chi-square = 8.635, p= 0.035) (Table 7).

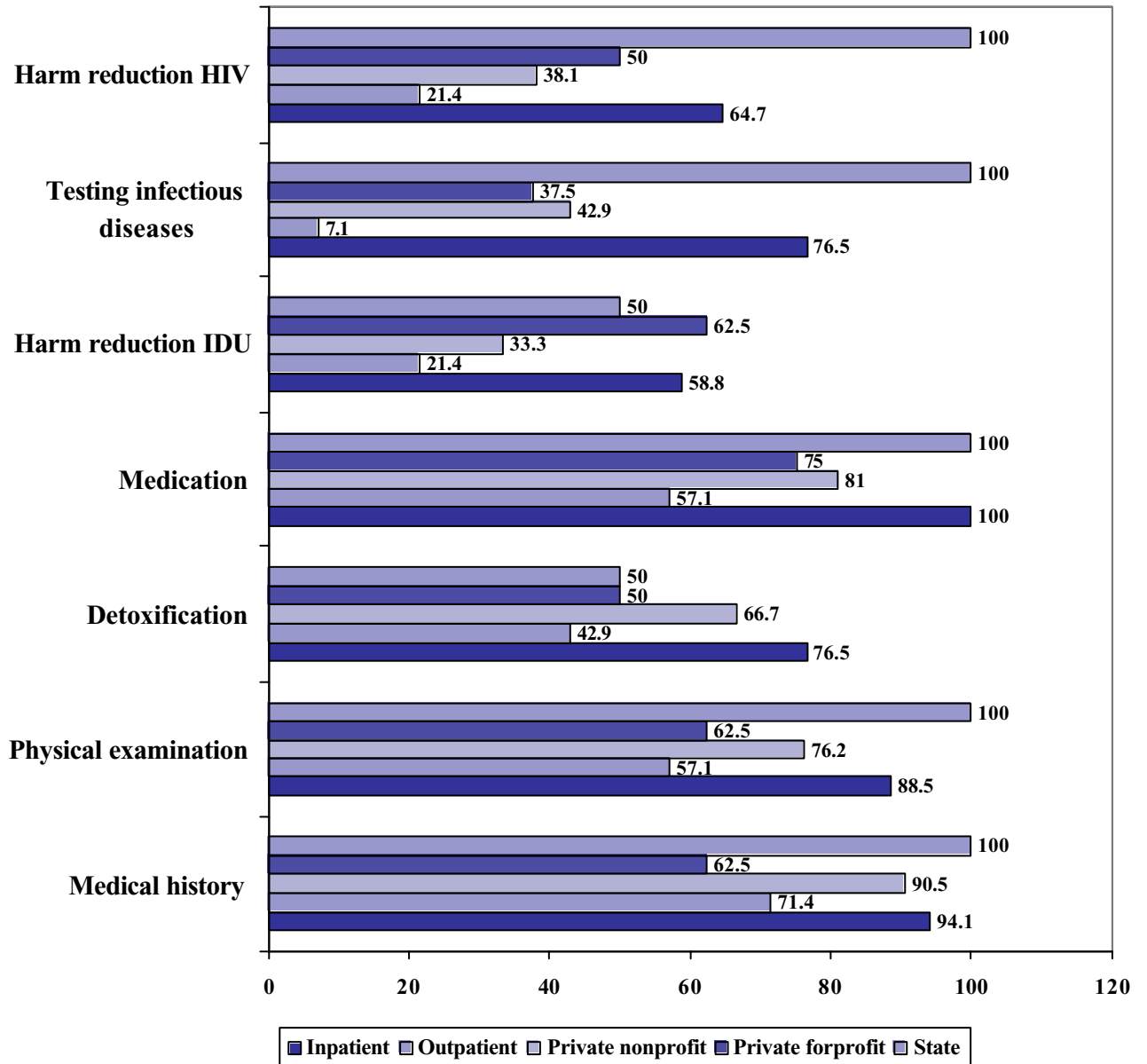
**Figure 10.** *Variations in proportion of facilities (%) providing ancillary mental health services by organizational factors (N = 31)*



In terms of counselling services, a higher proportion of inpatient facilities provide individual and group mental health counselling services than outpatient facilities (Chi-square = 9.12,  $p= 0.003$ ). Ownership status is not significantly associated with the extent to which facilities provide counselling services (Figure 10). When these factors were considered together, it was found that private non-profit inpatient and private for-profit facilities are more likely to provide group mental health counselling than private non-profit outpatient or state inpatient facilities (Chi-square = 12.06,  $p= 0.007$ ). Private for-profit and non-profit inpatient facilities are more likely to provide access to self-help group participation than private non-profit outpatient or state inpatient facilities (Table 7).

A higher proportion of inpatient than outpatient treatment facilities provide medication (Chi-square = 9.03,  $p= 0.004$ ), conduct physical examinations (Chi-square = 3.88,  $p= 0.049$ ), conduct harm reduction interventions for IDU (Chi-square = 4.41,  $p= 0.036$ ), conduct harm reduction interventions for HIV (Chi-square = 5.81,  $p= 0.016$ ) and test for infectious diseases (Chi-square = 14.90,  $p= 0.000$ ). Ownership status is not significantly associated with the extent to which facilities provide counselling services (Figure 11). When these factors were considered together, it was found that a higher proportion of private non-profit inpatient facilities provide medication, complete medical histories and conduct physical examinations than either private for-profit or non-profit outpatient facilities. Detoxification is more likely to be provided by private non-profit inpatient facilities than state inpatient, private non-profit outpatient or private for-profit facilities (Table 7). A higher proportion of state inpatient, followed by private non-profit inpatient facilities test for hepatitis and TB and conduct HIV harm reduction interventions than private for-profit and non-profit outpatient facilities (Chi-square = 13.30,  $p= 0.004$ ; Chi-square = 12.17,  $p= 0.007$ , respectively).

**Figure 11. Variations in proportion of facilities (%) providing ancillary medical services by organizational factors (N = 31)**



*Variations by type of state affiliation*

All facilities with dual registration provide addiction counselling, aftercare, medical, and psychiatric services. A higher proportion of facilities registered with the DOH provide ancillary medical services than DSD-affiliated or unregistered facilities. A significantly higher proportion of facilities registered with the DOH provide psychiatric services than DSD-affiliated or unregistered facilities (Chi-square = 14.637, p= 0.000) (Table 8).

**Table 8.** *Variations in categories of treatment services provided by registration, for substance abuse treatment facilities in Gauteng (N = 31)*

	<b>DOH (N = 5 )</b>		<b>DSD (N = 24)</b>		<b>DOH &amp; DSD (N = 3)</b>		<b>Not registered (N = 5)</b>	
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
<b>Detoxification</b>	4	80.0	16	66.7	3	100.0	3	60.0
<b>Psychiatric</b>	5	100.0	6	25.0	3	100.0	1	20.0
<b>Addiction</b>	5	100.0	24	100.0	3	100.0	5	100.0
<b>Aftercare</b>	5	100.0	19	79.2	3	100.0	5	100.0

In terms of assessment procedures, a significantly higher proportion of facilities with DOH or dual registration conduct psychological evaluations (Chi-square = 7.24, p= 0.007; Chi-square = 4.03, p= 0.004, respectively) compared with DSD-affiliated or unregistered facilities. A larger proportion of DOH-affiliated facilities conduct psychiatric assessments than DSD-affiliated or unregistered facilities (Chi-square = 4.91, p= 0.027) (Table 9).

**Table 9.** *Variations in treatment services provided by registration, for substance abuse treatment facilities in Gauteng (N = 31)*

	<b>DOH (N = 5 )</b>		<b>DSD (N = 24)</b>		<b>DOH &amp; DSD (N = 3)</b>		<b>Not registered (N = 5)</b>	
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
<b>Biopsychosocial history</b>	5	100.0	18	75.0	3	100.0	3	60.0
<b>Chemical history</b>	5	100.0	21	87.5	3	100.0	5	100.0
<b>Psychological evaluation</b>	5	100.0	9	37.5	3	100.0	1	20.0
<b>Psychiatric assessment</b>	5	100.0	11	45.8	3	100.0	2	40.0
<b>Individual substance abuse counselling</b>	5	100.0	24	100.0	3	100.0	5	100.0
<b>Group substance abuse counselling</b>	5	100.0	24	100.0	3	100.0	5	100.0
<b>Individual mental health counselling</b>	4	80.0	18	75.0	2	66.7	5	100.0
<b>Group mental health counselling</b>	4	80.0	12	50.0	2	66.7	4	80.0
<b>Individual lifeskills</b>	5	100.0	21	87.5	3	100.0	5	100.0
<b>Group lifeskills</b>	5	100.0	21	87.5	3	100.0	4	80.0
<b>Alternative therapies</b>	0	0.0	1	4.2	0	0.0	0	0.0
<b>Selfhelp/support groups</b>	3	75.0	14	60.9	2	100.0	2	40.0
<b>Occupational</b>	3	60.0	13	54.2	1	33.3	2	40.0

	<b>DOH (N=5)</b>		<b>DSD (N=24)</b>		<b>DOH &amp; DSD (N=3)</b>		<b>Not registered (N=5)</b>	
<i>therapy</i>								
<b>Family therapy</b>	4	80.0	23	95.8	3	100.0	5	100.0
<b>Medical history</b>	5	100.0	22	91.7	3	100.0	2	40.0
<b>Physical examination</b>	5	100.0	19	79.2	3	100.0	2	40.0
<b>Detoxification services</b>	4	80.0	15	62.5	3	100.0	3	60.0
<b>Provision of medication</b>	5	100.0	20	83.3	3	100.0	3	60.0
<b>Harm reduction</b>	4	80.0	10	41.7	2	66.7	1	20.0
<b>Testing for TB/Hepatitis</b>	4	80.0	12	50.0	3	100.0	1	20.0
<b>HIV testing/counselling</b>	3	60.0	12	50.0	2	66.7	1	20.0

Compared to facilities with other types of affiliation, a smaller proportion of facilities registered with the DSD provide individual or group mental health counselling. In terms of ancillary medical services, a higher proportion of facilities with dual or DOH registration provide medication, conduct physical examinations and offer detoxification services than DSD-affiliated or unregistered facilities. Compared to other facilities, a significantly higher number of facilities registered with the DOH complete medical histories for their clients (Chi-square = 8.75,  $p= 0.033$ ). Similarly, a higher proportion of facilities with dual or DOH registration test for hepatitis and TB (Chi-square = 4.03,  $p= 0.045$ ), conduct HIV harm reduction interventions and conduct harm reduction interventions for IDU (Chi-square = 7.67,  $p= 0.019$ ) than facilities registered with the DSD or unregistered facilities (Table 9).

#### *Variations by speciality staffing resources*

A greater proportion of facilities that employ psychologists and psychiatrists provide ancillary mental health services than facilities without these speciality staff (Chi-square = 7.98,  $p= 0.005$ ; Chi-square = 7.74,  $p= 0.005$ , respectively). More specifically, facilities with psychologists are significantly more likely to complete bio-psycho-social histories (Chi-square = 4.40,  $p= 0.036$ ), complete chemical histories (Chi-square = 5.48,  $p= 0.019$ ), conduct psychological evaluations (Chi-square = 5.09,  $p= 0.024$ ) and conduct psychiatric assessments of clients (Chi-square = 9.81,  $p= 0.002$ ) than facilities without psychologists. A higher proportion of facilities that employ psychiatrists complete bio-psycho-social histories of clients (Chi-square = 4.15,  $p= 0.042$ ) and conduct psychiatric

assessments (Chi-square = 10.60, p= 0.001) than facilities without psychiatrists (Table 10). In terms of counselling services, a greater proportion of facilities with psychologists provide individual and group mental health counselling (Chi-square = 6.62, p= 0.010; Chi-square = 25.12, p= 0.000), individual life-skills training (Chi-square = 5.48, p= 0.019), and refer clients to self-help groups (Chi-square = 5.64, p= 0.025) than facilities without psychologists. In addition, a higher proportion of facilities that employ psychiatrists provide group mental health counselling (Chi-square = 4.93, p= 0.026) than facilities without these speciality staff (Table 10).

In terms of ancillary medical services, a greater proportion of facilities that employ registered nurses and medical doctors complete medical histories (Chi-square = 12.18, p= 0.000; Chi-square = 5.12, p= 0.024, respectively) and conduct physical examinations (Chi-square = 4.04, p= 0.045; Chi-square = 6.56, p= 0.010, respectively) than facilities without these speciality staff (Table 10). In addition, a higher proportion of facilities that employ psychologists conduct harm reduction interventions for IDU and test for infectious diseases than facilities without psychologists (Chi-square = 5.09, p= 0.024; Chi-square = 9.15, p= 0.002, respectively). Compared to facilities that do not employ medical doctors, a higher proportion of facilities with doctors test for infectious diseases (Chi-square = 3.83, p= 0.049) and conduct harm reduction interventions for HIV (Chi-square = 3.83, p= 0.049, respectively) (Table 10).

**Table 10.** *Variations in treatment services provided by speciality staffing resources for substance abuse treatment facilities in Gauteng (N = 31)*

<i>Proportion of facilities providing services</i>	<i>Speciality staff employed</i>				
	<i>Psychologist</i>	<i>Social Worker</i>	<i>Registered Nurse</i>	<i>Doctor</i>	<i>Psychiatrist</i>
<i>Medical services</i>	77.8	61.5	71.4	72.0	66.7
<i>Mental Health services</i>	50.0	30.8	33.3	28.0	66.7
<i>Addiction services</i>	100.0	100.0	100.0	100.0	100.0
<i>Aftercare services</i>	94.4	84.6	85.7	84.0	88.9
<i>Biopsychosocial history</i>	88.9	76.9	81.0	76.0	100.0
<i>Chemical history</i>	100.0	88.5	90.5	88.0	90.5
<i>Psychological evaluation</i>	61.1	46.2	52.4	44.0	55.6
<i>Psychiatric assessment</i>	77.8	57.7	61.9	56.0	100.0
<i>Individual substance abuse counselling</i>	100.0	100.0	100.0	100.0	100.0
<i>Group substance abuse counselling</i>	100.0	100.0	100.0	100.0	100.0

<i>Proportion of facilities providing services</i>	<i>Speciality staff employed</i>				
	<i>Psychologist</i>	<i>Social Worker</i>	<i>Registered Nurse</i>	<i>Doctor</i>	<i>Psychiatrist</i>
<i>Individual mental health counselling</i>	94.4	80.8	76.2	76.0	88.9
<i>Group mental health counselling</i>	94.4	57.7	57.1	60.0	88.9
<i>Individual lifeskills</i>	100.0	88.5	90.5	88.0	100.0
<i>Group lifeskills</i>	94.4	84.6	90.5	88.0	100.0
<i>Selfhelp/support groups</i>	70.6	56.0	60.0	62.5	75.0
<i>Medical history</i>	83.3	88.5	100.0	92.0	88.9
<i>Physical examination</i>	83.3	73.1	85.7	84.0	88.9
<i>Detoxification services</i>	72.2	57.7	66.7	68.0	66.7
<i>Provision of medication</i>	88.9	84.6	90.5	88.0	100.0
<i>Harm reduction</i>	61.1	46.2	52.4	48.0	66.7
<i>Testing for TB/Hepatitis</i>	66.7	42.3	47.6	52.0	66.7
<i>HIV testing/counselling</i>	55.6	46.2	47.6	52.0	44.4

## **ACCESSIBILITY OF SUBSTANCE ABUSE TREATMENT FACILITIES**

This section describes the extent to which substance abuse treatment facilities are accessible to vulnerable clients as well as practices that target barriers to treatment entry and retention for clients from historically underserved groups. The section also describes variations in accessibility by facility characteristics such as intensity of treatment, facility ownership, type of state affiliation, and the demographic profile of clients served.

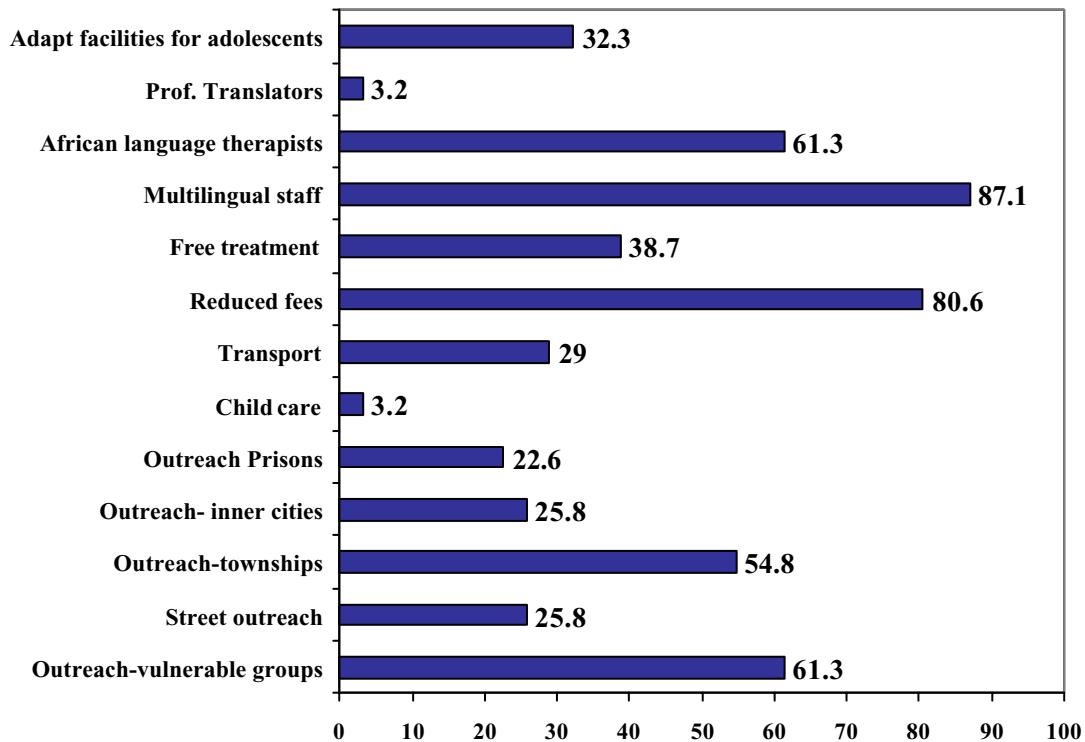
### **Practices that target barriers to treatment entry**

#### ***Core findings:***

- Outreach in township areas is only conducted by 54.8% of facilities
- Most treatment facilities report not providing child care or transport services to clients
- Less than 50% of facilities provide free treatment to poor clients
- 61.3% of facilities employ African-language speaking therapists

Substance abuse treatment facilities in Gauteng perform a number of activities that address the barriers that prevent clients from historically underserved groups from entering treatment. These activities are grouped into (i) practices that improve awareness of substance abuse treatment options, (ii) practices that address logistical barriers such as finance or transport, and (iii) practices that address cultural and linguistic barriers to entering treatment (Figure 12).

**Figure 12. Proportion (%) of substance abuse treatment facilities in Gauteng targeting barriers to treatment entry for vulnerable clients (N = 31)**



*Practices that improve awareness of substance abuse treatment options*

Few treatment facilities perform outreach services among under-served groups. A large proportion of facilities do not conduct street outreach (Chi-square = 7.26,  $p= 0.007$ ), inner city outreach (Chi-square = 7.26,  $p= 0.007$ ) and prison outreach activities (Chi-square = 9.38,  $p= 0.002$ ). Only 54.8% (17) of the facilities offer outreach services in the township areas. Significantly more facilities conduct outreach services among vulnerable groups and in township areas than in the streets ( $Z = -3.32$ ,  $p= 0.001$ ;  $Z = -3.00$ ,  $p= 0.003$ , respectively), inner cities ( $Z = -3.05$ ,  $p= 0.002$ ;  $Z = -3.00$ ,  $p= 0.003$ , respectively), and prisons ( $Z = -3.45$ ,  $p= 0.001$ ;  $Z = -3.16$ ,  $p= 0.002$ , respectively) (Figure 12).

*Activities that address the logistical barriers to accessing treatment*

Few treatment facilities perform activities to address the logistical barriers that prevent people from under-served groups from entering treatment (Figure 12). Significantly more facilities report not providing child care services or transport than those facilities that do

provide these services (Chi-square = 27.13, p= 0.000; Chi-square = 5.45, p= 0.020). Whilst most facilities offer clients reduced fees (80.6%) (Chi-square = 11.65, p= 0.001), only 38.7% offer free treatment slots for clients who can not afford to pay for treatment. The number of free treatment slots available per year ranges from 0 to 700, with half of the facilities providing up to a maximum of 15 free treatment slots per year. Significantly more facilities offer reduced fees to clients than free treatment slots ( $Z = -3.36$ , p= 0.001), transport services ( $Z = -4.00$ , p= 0.000), or child care services ( $Z = -3.05$ , p= 0.001).

#### *Activities targeting cultural and linguistic barriers to accessing treatment*

Significantly more facilities than not employ multilingual staff (Chi-square = 17.07, p= 0.000). Further questioning revealed that, in general, counsellors are fluent in English and Afrikaans only. Only 61.3% (19) of facilities employ African-language speaking therapists (Chi-square = 23.52, p= 0.000). Significantly more facilities employ multilingual staff than African language-speaking therapists ( $Z = -2.83$ , p= 0.005).

#### **Practices that target barriers to engagement and retention in treatment**

##### ***Core findings:***

- 93.5% of facilities employ staff from diverse ethnic backgrounds
- Only 54.8% of facilities use culturally appropriate therapeutic techniques
- Only 61.3% of facilities offer programme services in multiple languages
- Only 36% of facilities provide women focused and gender-sensitive treatment programmes

This section describes activities performed by treatment facilities that target barriers to engagement and retention in treatment for clients from historically under-served groups, particularly Black South Africans, women and young people. Retention activities are grouped into (i) practices that improve the cultural-sensitivity and appropriateness of treatment services, (ii) practices that improve the gender-sensitivity and appropriateness of treatment services, and (iii) practices that improve the age-sensitivity and appropriateness of treatment services.

#### *Practices that improve the cultural-sensitivity and appropriateness of treatment*

Of the 31 facilities, 41.9% (13) use culturally appropriate assessment tools, 39.5% (11) use translated instruments, 54.8% (17) use culturally appropriate therapeutic techniques,

and 61.3% (19) have programmes in multiple languages. Although 93.5% of facilities (29) employ staff from diverse ethnic backgrounds, most facilities only offer programme services and translated instruments in English or Afrikaans.

*Practices that improve the gender-sensitivity and appropriateness of treatment*

Only 35.5% (11) of the facilities provide woman-focused treatment, gender appropriate therapy or use gender appropriate assessment procedures. Only 29.0% (9) of the facilities provide staff with training in gender-related treatment issues and only 3.2% (1) make provision for child care services. Of the 31 facilities, 64.5% (20) are not involved in activities to improve the gender-appropriateness of treatment services.

*Practices that improve the age-sensitivity and appropriateness of treatment*

Treatment facilities perform a variety of activities to improve the age appropriateness of services, with 61.3% (19) employing staff trained to work with adolescents, 45.2% (14) using age-appropriate assessment procedures, 61.3% (19) using age appropriate therapeutic techniques, and 67.7% (21) conducting family-focused interventions. Only 32.3% (10) of facilities adapt facilities for the safety of young people.

**Variations in practices that target barriers to treatment entry**

***Core findings:***

- Outreach services and activities that address the cultural, linguistic and logistical barriers to treatment entry are more likely to be provided at facilities serving high proportions of Black clients than at facilities serving low proportions of Black clients
- A higher proportion of private non-profit outpatient facilities conduct outreach activities than other types of facilities
- A higher proportion of private non-profit facilities perform activities that target the logistical and cultural/linguistic barriers to treatment entry than for-profit or state facilities
- Compared to other facilities, significantly more DSD-affiliated facilities conduct outreach and perform activities that target the logistical and cultural/linguistic barriers to treatment entry

*Variations in practices that target barriers to access by the demographic profile of clients*

A large proportion of facilities in which Black clients comprise more than 50% of the treatment population conduct activities to improve the awareness of substance abuse

treatment options. When compared to other facilities, a significantly greater proportion of facilities with large proportions of Black clients conduct outreach among vulnerable groups (Chi-square = 14.57,  $p= 0.002$ ), street outreach (Chi-square = 9.66,  $p= 0.022$ ), outreach in townships (Chi-square = 20.84,  $p= 0.000$ ), outreach in the inner cities (Chi-square = 10.02,  $p= 0.018$ ) and outreach in prisons (Chi-square = 7.32,  $p= 0.043$ ). In terms of logistical barriers, a significantly greater proportion of facilities with high proportions of Black clients provide transport services (Chi-square = 8.67,  $p= 0.034$ ) and free treatment slots to clients (Chi-square = 9.11,  $p= 0.028$ ) than facilities with low proportions of Black clients. In terms of cultural and linguistic barriers, a significantly greater proportion of facilities with large proportions of Black clients employ African language speaking therapists (Chi-square = 13.03,  $p= 0.005$ ) than facilities with a small proportions of Black clients.

For practices that address the logistical barriers to accessing treatment, a significantly greater proportion of facilities in which female clients comprise more than 20% of the total client population provide transport services (Chi-square = 3.97,  $p= 0.046$ ) and free treatment slots to clients than facilities with smaller proportions of female clients. There are no significant differences between facilities with high and low proportions of female clients on any of the awareness or cultural/linguistic items.

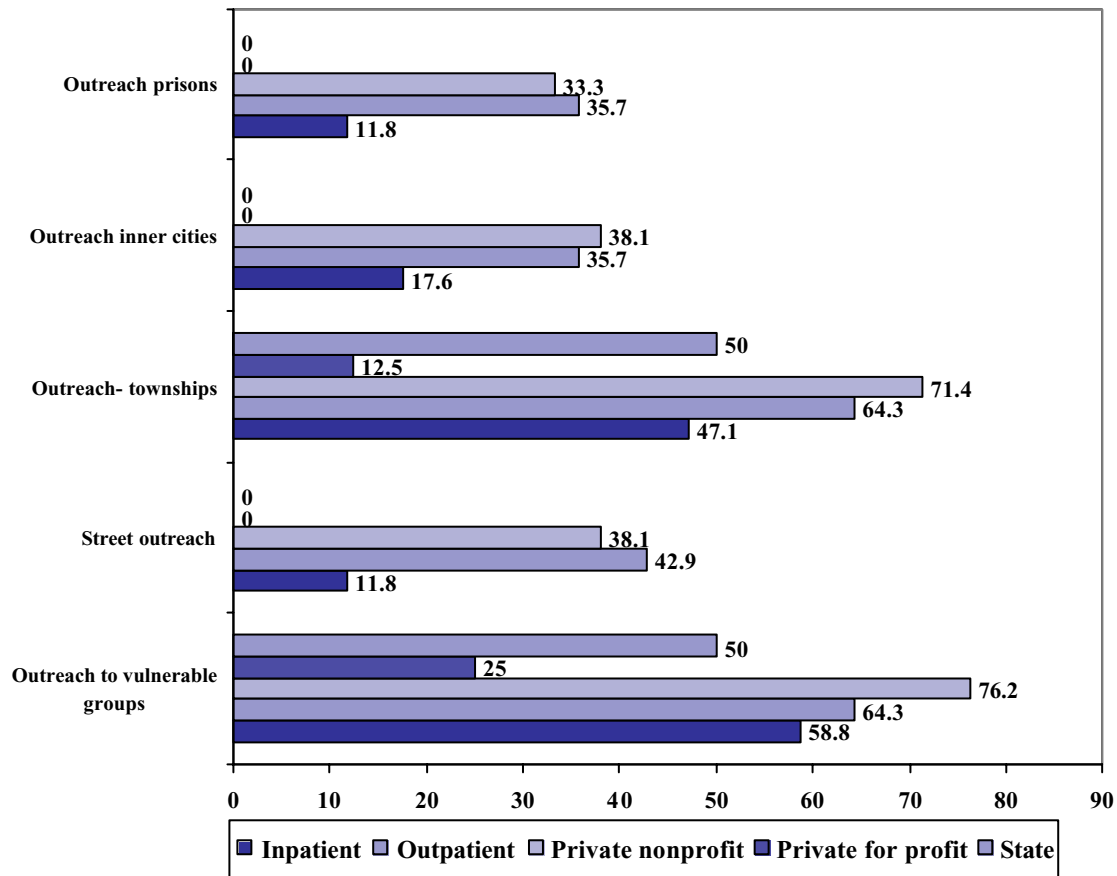
A significantly larger proportion of facilities where clients less than 20 years of age comprise more than 20% of the treatment population report involvement in street outreach (Chi-square = 4.07,  $p= 0.044$ ) and outreach in the inner cities (Chi-square = 4.07,  $p= 0.044$ ), compared to facilities with smaller proportions of clients from this age group. No significant differences emerged between facilities with high and low proportions of clients less than 20 years of age for the items related to the logistical and cultural/linguistic barriers to accessing treatment.

#### *Variations in practices that target barriers to access by treatment intensity and facility ownership*

A higher proportion of private non-profit facilities conduct outreach among vulnerable groups (Chi-square = 6.51,  $p= 0.039$ ), and in township areas (Chi-square = 8.14,  $p=$

0.017) than private for-profit and state facilities (Figure 13). A higher proportion of outpatient facilities conduct street outreach than inpatient facilities (Chi-square = 3.88, p= 0.049).

**Figure 13.** *Variations in proportion (%) of facilities that address lack of awareness of treatment options by treatment intensity and ownership (N = 31)*



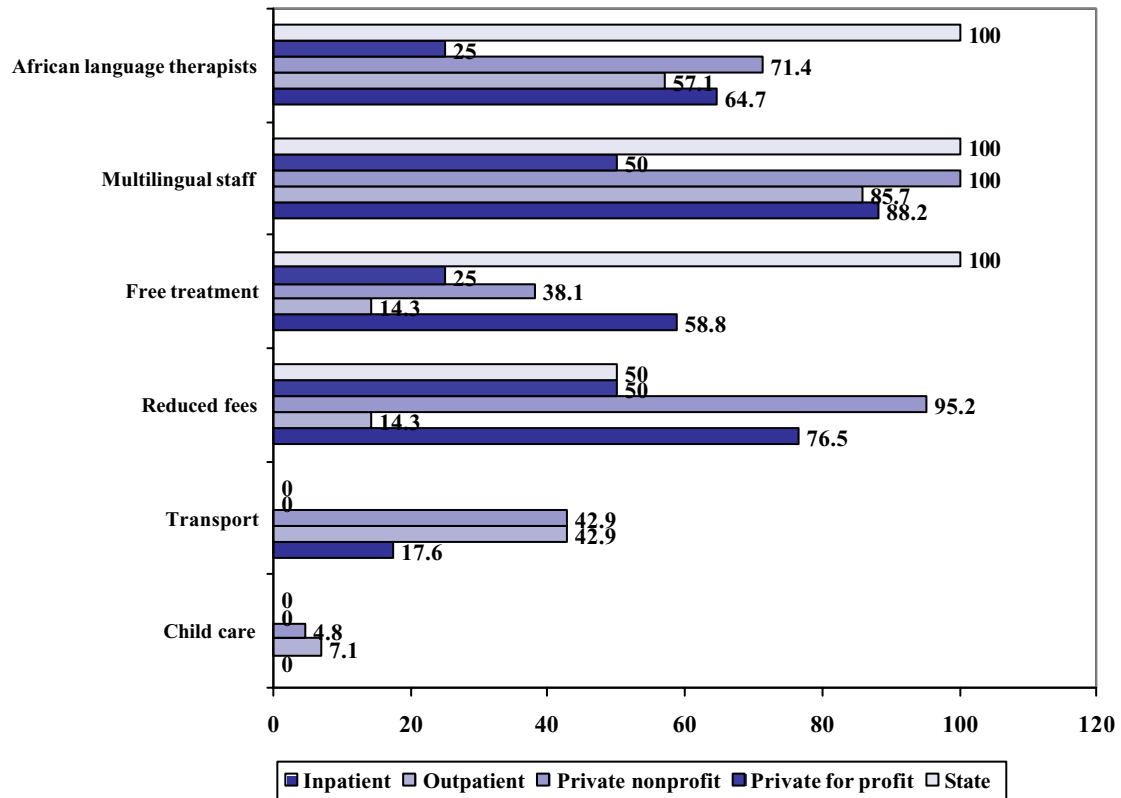
When these factors were considered together, it was found that more private, non-profit outpatient treatment facilities are involved in outreach activities than private for-profit, private non-profit inpatient or state inpatient facilities. Compared to other types of facilities, a higher proportion of private non-profit outpatient facilities conduct street outreach (Chi-square = 8.40, p= 0.038) and outreach in the township areas (Chi-square = 9.15, p= 0.027). State inpatient facilities are the least likely to participate in any form of outreach activity (Table 11).

**Table 11.** *Activities that target barriers to treatment entry by treatment intensity and facility ownership, for substance abuse treatment facilities in Gauteng (N = 31)*

	<i>Private for profit inpatient (N=8)</i>		<i>Private non-profit inpatient (N=10)</i>		<i>Private non-profit outpatient (N = 11)</i>		<i>State inpatient (N = 2)</i>	
	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>
<b><i>Increasing awareness of substance abuse and treatment services</i></b>								
<b><i>Outreach services to vulnerable groups</i></b>	2	25.0	7	70.0	9	81.8	1	50.0
<b><i>Street outreach</i></b>	0	0.0	2	20.0	6	54.5	0	0.0
<b><i>Outreach in townships</i></b>	1	12.5	6	60.0	9	81.8	1	50.0
<b><i>Outreach in inner cities</i></b>	0	0.0	3	30.0	5	45.5	0	0.0
<b><i>Prison outreach</i></b>	0	0.0	2	20.0	5	45.5	0	0.0
<b><i>Logistical barriers</i></b>								
<b><i>Child care</i></b>	0	0.0	0	0.0	1	9.1	0	0.0
<b><i>Transport</i></b>	0	0.0	3	30.0	6	54.5	0	0.0
<b><i>Reduced fees</i></b>	4	50.0	9	90.0	11	100.0	1	50.0
<b><i>Free treatment</i></b>	2	25.0	6	60.0	2	18.2	2	100.0
<b><i>Cultural/linguistic barriers</i></b>								
<b><i>Multilingual staff</i></b>	4	50.0	10	100.0	11	100.0	2	100.0
<b><i>African language speaking therapists</i></b>	2	25.0	7	70.0	8	72.7	2	100.0

A higher proportion of private non-profit facilities provide transport (Chi-square = 6.04, p= 0.049) and reduced fees to clients (Chi-square = 8.88, p= 0.012) than private for-profit and state facilities (Figure 14). Compared to other facilities, a lower proportion of private for-profit facilities employ multilingual staff (Chi-square = 13.20, p= 0.001) and African-language speaking therapists (Chi-square = 6.61, p= 0.037).

**Figure 14.** *Variations in proportion (%) of facilities that address logistical and cultural barriers by treatment intensity and ownership for facilities in Gauteng (N = 31)*



When these factors were considered together, it was found that a higher proportion of private non-profit in and outpatient facilities offer reduced fees to clients than either state or private for-profit facilities (Chi-square = 9.22, p= 0.027). In contrast, a higher proportion of state inpatient facilities provide free treatment to clients (Chi-square = 7.83, p= 0.048) (Table 11). For activities that target the cultural and linguistic barriers to accessing treatment, more private non-profit in and outpatient facilities and more state inpatient facilities employ multilingual staff (Chi-square = 13.20, p= 0.004) and African language speaking therapists than private for-profit facilities (Table 11).

*Variations in the practices that target barriers to access by facility affiliation*

A significantly higher proportion of DSD-affiliated facilities conduct outreach among vulnerable groups than facilities with other types of affiliation (Chi-square = 4.08, p= 0.043). Similarly a higher proportion of facilities registered with the DSD conduct outreach in the streets, inner cities, prisons and townships than facilities with other types

of affiliation. None of the facilities with dual registration conduct outreach in the townships, prisons, inner cities and streets (Table 12).

**Table 12.** *Activities that target barriers to treatment entry by facility affiliation for substance abuse treatment facilities in Gauteng (N = 31)*

	<b>DOH (N=5)</b>		<b>DSD (N=24)</b>		<b>DOH &amp; DSD (N=3)</b>		<b>Not registered (N=5)</b>	
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
<b>Increasing awareness of substance abuse and treatment services</b>								
<b>Outreach services to vulnerable groups</b>	4	80.0	17	70.8	3	100.0	1	20.0
<b>Street outreach</b>	0	0.0	7	29.2	0	0.0	1	20.0
<b>Outreach in townships</b>	1	20.0	15	62.5	0	0.0	1	20.0
<b>Outreach in inner cities</b>	0	0.0	7	29.2	0	0.0	1	20.0
<b>Prison outreach</b>	0	0.0	6	25.0	0	0.0	1	20.0
<b>Logistical barriers</b>								
<b>Child care</b>	0	0.0	1	4.2	0	0.0	0	0.0
<b>Transport</b>	0	0.0	7	29.2	0	0.0	2	40.0
<b>Reduced fees</b>	4	80.0	21	87.5	3	100.0	3	60.0
<b>Free treatment</b>	2	40.0	12	50.0	2	66.7	0	0.0
<b>Cultural/linguistic barriers</b>								
<b>Multilingual staff</b>	4	80.0	22	91.7	2	66.7	3	60.0
<b>African language speaking therapists</b>	2	40.0	17	70.8	1	33.3	1	20.0

For practices that address the logistical barriers to treatment entry, a higher proportion of facilities affiliated with the DSD offer reduced fees (Chi-square = 5.71, p= 0.017) and free treatment to clients than unregistered facilities (Chi-square = 4.96, p= 0.047). In terms of cultural and linguistic barriers to treatment entry, a significantly higher proportion of facilities registered with the DSD employ African language speaking therapists than unregistered facilities or facilities registered with the DOH (Chi-square = 4.08, p= 0.043). A significantly smaller proportion of unregistered facilities employ African language speaking therapists than other facilities (Chi-square = 4.28, p= 0.038) (Table 12).

## Variations in activities to improve treatment engagement and retention by facility characteristics

### *Core findings:*

- Cultural/linguistic barriers to treatment engagement and retention are more likely to be provided at facilities serving high proportions of Black clients than at facilities serving low proportions of Black clients
- A higher proportion of private non-profit facilities target cultural/linguistic barriers to treatment engagement and retention than for-profit or state facilities
- Private for-profit facilities are the least likely to address cultural/linguistic barriers to treatment engagement and retention
- Compared to other facilities, unregistered facilities are the least likely to target cultural/linguistic barriers to treatment engagement and retention

### *Variations in activities to improve treatment engagement and retention by the demographic profile of clients*

When compared to facilities with a small proportion of Black clients, a larger proportion of facilities where Black clients comprise more than 50% of the treatment population use translated programme materials (Chi-square = 6.90,  $p= 0.009$ ), provide programme services in a number of languages, conduct culturally appropriate therapy (Chi-square = 4.23,  $p= 0.040$ ), and employ staff from diverse ethnic backgrounds.

In terms of activities to improve the gender appropriateness of treatment programmes, no significant differences emerged between facilities with high proportions of female clients (greater than 20%) and facilities with lower proportions of female clients for the use of gender appropriate assessment procedures or the use of gender appropriate therapeutic techniques. A significantly greater proportion of facilities where female clients comprise more than 20% of the treatment population provide women-focused treatment services and family-focused interventions than facilities where female clients comprise a smaller proportion of the clientele (Chi-square = 7.04,  $p= 0.008$ ; Chi-square = 5.57,  $p= 0.014$ , respectively).

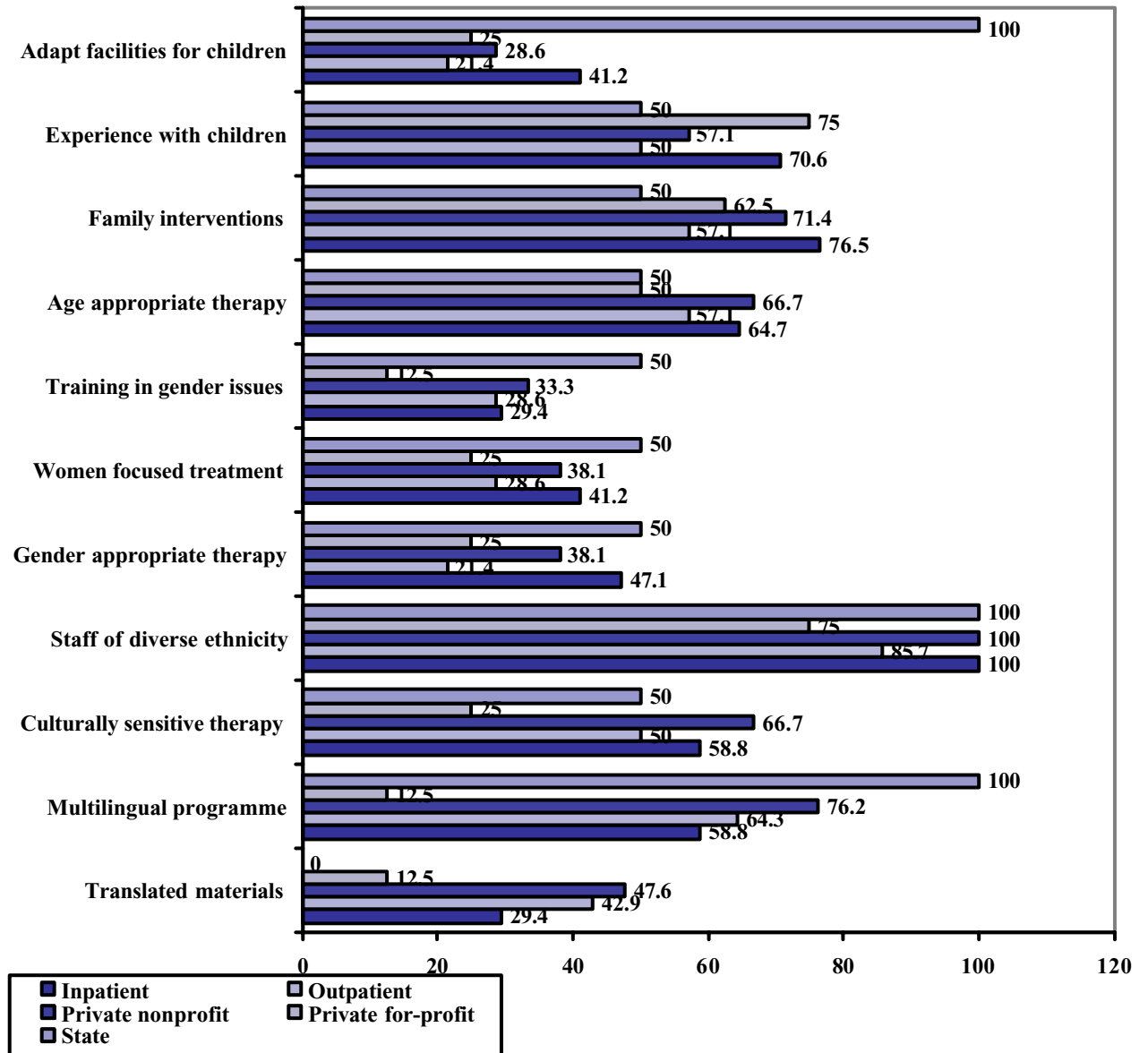
Regarding the use of age appropriate assessment procedures and therapeutic techniques, no significant differences emerged between facilities with high proportions of clients less than 20 years old (greater than 20%) and facilities with lower proportions of clients from this age group. Family-focused interventions are more likely to be provided at facilities

where clients less than 20 years of age comprise more than 20% of the treatment population (Chi-square = 3.94,  $p= 0.049$ ).

*Variations in activities to improve treatment engagement and retention by treatment intensity and facility ownership*

Compared to private for-profit and state facilities, a higher proportion of private non-profit facilities provide programme services in a number of languages (Chi-square = 11.26,  $p= 0.004$ ) and employ staff from diverse ethnic backgrounds (Chi-square = 6.15,  $p= 0.046$ ). Ownership status is not significantly associated with the extent to which facilities target gender and age barriers to treatment engagement and retention (Figure 15). In addition, treatment intensity is not significantly associated with the extent to which facilities target cultural/linguistic, gender and age barriers to treatment engagement and retention (Figure 15).

**Figure 15.** Variations in the proportion (%) of facilities that target barriers to treatment retention by treatment intensity and ownership status (N = 31)



When these factors were considered together, it was found that a significantly higher proportion of private non-profit and state inpatient facilities employ staff from diverse ethnic backgrounds and provide programme services in a number of languages than private for-profit facilities (Chi-square = 6.15, p= 0.046; Chi-square = 11.56, p= 0.009, respectively). A higher proportion of private non-profit (in and outpatient) and state inpatient facilities provide culturally appropriate therapy compared to private for-profit facilities (Table 13).

**Table 13. Variations in activities targeting culture, gender, and age barriers to treatment engagement and retention by treatment intensity and ownership (N = 31)**

	<b>Private for-profit inpatient (N=8)</b>		<b>Private non-profit inpatient (N=10)</b>		<b>Private non-profit outpatient (N=11)</b>		<b>State inpatient (N=2)</b>	
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
<b>Culture-sensitivity</b>								
<i>Translated materials</i>	1	12.5	4	40.0	6	54.5	0	0.0
<i>Multilingual programme</i>	1	12.5	7	70.0	9	81.8	2	100.0
<i>Culturally sensitive therapy</i>	2	25.0	7	70.0	7	63.6	1	50.0
<i>Ethnically diverse staff</i>	6	75.0	10	100.0	11	100.0	2	100.0
<b>Gender-sensitivity</b>								
<i>Gender appropriate assessment</i>	3	37.5	5	50.0	2	18.2	1	50.0
<i>Gender sensitive therapy</i>	2	25.0	5	50.0	3	27.3	1	50.0
<i>Women focused treatment</i>	2	25.0	4	40.0	4	36.4	1	50.0
<i>Training in gender issues</i>	1	12.5	3	30.0	4	36.4	1	50.0
<b>Age sensitivity</b>								
<i>Age appropriate therapy</i>	4	50.0	7	70.0	7	63.6	1	50.0
<i>Family focused interventions</i>	5	62.5	9	90.0	6	54.5	1	50.0
<i>Training in adolescent issues</i>	6	75.0	7	70.0	5	45.5	1	50.0
<i>Adapting facilities for adolescents/children</i>	2	25.0	4	40.0	2	18.2	2	100.0

A higher proportion of private non-profit inpatient and state inpatient facilities use gender appropriate assessment tools and therapeutic techniques and conduct woman-focused treatment than private for-profit and private non-profit outpatient facilities. These differences were not significant. In terms of age-related barriers to engagement and retention, a higher proportion of private for-profit inpatient facilities employ staff trained to work with adolescents and children than private non-profit and state facilities. In contrast, a higher proportion of private non-profit inpatient facilities use age-appropriate therapeutic techniques and conduct family-focused interventions than private for-profit, private non-profit outpatient and state inpatient facilities. These differences were not significant (Table 13).

*Variations in activities to improve treatment engagement and retention by affiliation*

In terms of activities that target cultural/linguistic barriers to retention, a significantly higher proportion of facilities registered with the DSD, DOH, and with dual registration employ staff from diverse ethnic backgrounds than unregistered facilities (Chi-square = 11.17, p= 0.007). A higher proportion of DOH-affiliated facilities and with dual registration use translated instruments than unregistered or DSD-affiliated facilities. In contrast, a higher proportion of facilities registered with the DSD provide programme services in a number of languages than facilities with other types of affiliation (Chi-square = 4.08, p= 0.043). Compared to other types of facilities, unregistered facilities are the least likely to provide programme services in a number of languages (Chi-square = 4.28, p= 0.038) (Table 14).

**Table 14.** *Variations in activities that target culture, gender, and age barriers to treatment engagement and retention by facility affiliation (N = 31)*

	<b>DOH (N =5 )</b>		<b>DSD (N =24 )</b>		<b>DOH &amp; DSD (N = 3)</b>		<b>Not registered (N = 5)</b>	
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>
<b>Culture-sensitivity</b>								
<i>Translated materials</i>	3	60.0	10	41.7	2	66.7	0	0.0
<i>Multilingual programme</i>	3	60.0	17	70.8	2	66.7	1	20.0
<i>Culturally sensitive therapy</i>	3	60.0	15	62.5	2	66.7	1	20.0
<i>Ethnically diverse staff</i>	5	100.0	24	100.0	3	100.0	3	60.0
<b>Gender-sensitivity</b>								
<i>Gender appropriate assessment</i>	3	60.0	9	37.5	2	66.7	1	20.0
<i>Gender sensitive therapy</i>	2	40.0	10	41.7	2	66.7	1	20.0
<i>Women focused treatment</i>	0	0.0	10	41.7	0	0.0	1	20.0
<i>Training in gender issues</i>	1	20.0	8	33.3	1	33.3	1	20.0
<b>Age sensitivity</b>								
<i>Age appropriate therapy</i>	4	80.0	14	58.3	2	66.7	3	60.0
<i>Family focused interventions</i>	4	80.0	16	66.7	3	100.0	4	80.0
<i>Training in adolescent issues</i>	4	80.0	13	54.2	2	66.7	4	80.0
<i>Adapting facilities for adolescents/children</i>	1	20.0	7	29.2	0	0.0	2	40.0

A higher proportion of facilities with dual or DOH affiliation use gender appropriate assessment tools and therapeutic techniques than unregistered or DSD-affiliated facilities. A higher proportion of DSD-affiliated facilities provide women-focused treatment and child care services than facilities with other types of registration. These differences were not significant (Table 14). In terms of activities that target age-related barriers to retention, a higher proportion of DOH-affiliated facilities provide age-appropriate therapy and family-focused interventions than unregistered or DSD-affiliated facilities. These differences were not significant (Table 14).

## **MONITORING AND EVALUATION ACTIVITIES FOR SUBSTANCE ABUSE TREATMENT FACILITIES IN GAUTENG**

This section describes the monitoring and evaluation (M & E) activities of substance abuse treatment facilities in Gauteng. More specifically, variations in monitoring and evaluation by treatment intensity, facility ownership and type of affiliation are explored.

### ***Core findings:***

- Most facilities have structures that allow for the within-treatment monitoring of clients
- None of the facilities routinely monitoring clients (post-treatment) for outcome evaluation purposes.
- In general, items regarding the monitoring and evaluation of treatment programmes were poorly understood

### **Monitoring and evaluation activities at substance abuse treatment facilities in Gauteng**

Within-treatment administrative and procedural activities and structures that facilitate the monitoring of client progress and outcomes were explored. Overall, most facilities have documented treatment plans (96.8%), progress notes (100.0%), collateral contacts (90.3%), and records of case conferences (93.5%) for each client. A smaller percentage have formal discharge plans for each client (77.4%), conduct post-treatment follow-up of clients (77.4%) and monitor clients post-treatment (22.5%). Post-treatment follow-up refers to telephonic or face-to-face contact with a client (once treatment has been completed) in order to informally enquire about client progress. Post-treatment

monitoring refers to a more formalised system of monitoring where self-report questionnaires and/or blood and urine tests are used to establish the extent to which the client has achieved and maintained treatment goals. Further questioning revealed that these two items were poorly understood by facility staff, with none of the facilities routinely monitoring clients (post-treatment) for outcome evaluation purposes.

In terms of monitoring activities, 77.4% of facilities use telephonic monitoring, 74.2% use of blood and urine screening, 87.1% conduct follow-up counselling sessions, and 16.1% administer follow-up questionnaires. Further questioning revealed that most blood and urine screening is conducted within the course of treatment rather than post-treatment. Most post-treatment blood and urine screening is done on an ad hoc basis, either due to a request by family members or as a partial requirement for a court or work-related referral. Facilities do not conduct routine blood and urine screens for the purpose of monitoring client progress and treatment outcomes. Routine client monitoring systems are not in place at any of the treatment facilities.

A number of difficulties emerged when the extent to which services at substance abuse treatment facilities in Gauteng had been evaluated was examined. Almost all facilities had to be telephonically contacted and asked to supply detailed information about evaluation activities due to discrepancies in the quantitative data. The reliability and validity of the quantitative findings is thus questionable. The following information emerged on further questioning. When asked if a formal evaluation of the treatment services had ever been conducted, many facilities replied in the affirmative. However, they could not describe the evaluation design nor could they provide summaries of the findings. In general, respondents displayed a poor understanding of evaluation, with few understanding the differences between outcome, process, and performance evaluations. Understandings of what a formal evaluation entailed also varied from facility to facility. Often reports for external funding agencies or the DSD, which described the treatment service plan and the clients served, were termed “evaluation reports”. Respondents at some facilities were particularly defensive about this part of the audit.

Three facilities (9.7%) report having conducted an outcomes evaluation and 5 (16.1%) a process evaluation of their treatment programmes. In addition, 41.9% (13) of the facilities report having evaluated the extent to which clients were satisfied with the services provided. More than half (51.6%) of the facilities report not having performed any form of evaluation. Although these quantitative results reflect the facilities' responses to the M & E-related items, it should be noted that using widely accepted definitions of programme evaluation, none of the facilities had conducted a formal evaluation of their treatment programme.

*Variations in monitoring and evaluation activities by treatment intensity and facility ownership*

A smaller proportion of private non-profit outpatient facilities make treatment and discharge plans, conduct post-treatment follow-up, and conduct post-treatment monitoring of clients than other types of facilities. These differences were not significant. A significantly smaller proportion of private non-profit outpatient facilities have a computerised management information system for client records or keep records of case conferences (Chi-square = 10.84,  $p= 0.013$ ; Chi-square = 10.65,  $p= 0.014$ , respectively).

A significantly higher proportion of private non-profit inpatient facilities use telephone monitoring than state, private for-profit, and private non-profit outpatient facilities (Chi-square = 9.94,  $p= 0.019$ ). A significantly lower proportion of state inpatient facilities provide follow-up counselling compared to other types of facilities (Chi-square = 15.21,  $p= 0.002$ ). State inpatient facilities are the least likely to report any type of client follow-up or monitoring activity.

*Variations in monitoring and evaluation activities by type of affiliation*

A smaller proportion of DSD-affiliated facilities have documented treatment plans, records of case conferences, and a formal management information system for client records than facilities with other types of affiliation. These differences were not significant. A smaller proportion of unregistered facilities conduct post-treatment follow-

up and monitoring of clients than facilities with other types of affiliation. These differences were not significant.

In terms of monitoring activities, a significantly higher proportion of facilities with dual registration use follow-up questionnaires (Chi-square = 6.27,  $p= 0.012$ ). A larger proportion of facilities with dual or DOH registration use blood and urine drug screens compared to unregistered facilities or facilities registered with the DSD. This difference was not significant. In terms of evaluation activities, a significantly higher proportion of facilities with dual registration report conducting outcome and process evaluations than facilities with other types of affiliation (Chi-square = 12.34,  $p= 0.000$ ; Chi-square = 6.27,  $p= 0.012$ ; Chi-square = 5.26,  $p= 0.022$ , respectively).

### **PART 3: DISCUSSION OF KEY FINDINGS FROM THE MRC AUDIT OF SUBSTANCE ABUSE TREATMENT FACILITIES IN GAUTENG**

While substance abuse treatment facilities in Gauteng offer a range of services to clients, this audit shows that access to services varies extensively among facilities. This variation is associated with several organisational factors including facility ownership, affiliation, and resources. The following sections describe the accessibility of substance abuse treatment services in terms of the availability of services, the diversity of services provided, and the extent to which barriers to clients entering, engaging and being retained in treatment are addressed by treatment facilities in Gauteng. Variations in these components of access are discussed in terms of facility characteristics. Finally, recommendations are made for improving the accessibility of treatment services.

#### **AVAILABILITY OF SUBSTANCE ABUSE TREATMENT SERVICES**

Facility ownership is one characteristic that impacts on the availability of treatment services. In Gauteng, most treatment facilities are privately owned. Privately owned facilities consist predominantly of private, non-profit treatment facilities, with private for-profit treatment services comprising just over a quarter of all facilities. State inpatient treatment services comprise the smallest proportion of the sample. These findings are consistent with findings from an audit of substance abuse treatment facilities in Cape Town (Myers & Parry, 2003). While these findings should be interpreted in the context of shifts in state policy from the direct provision of services to the purchasing of services from non-governmental organizations within the community and a shift towards primary health care; even in this context, the state provides few resources. For example, 53% of the facilities received state funding that covered less than a quarter of their costs. It is thus clear that the responsibility for substance abuse treatment rests heavily on the private sector.

Although state facilities treat and have the capacity to treat a greater number of clients than private non-profit or private for-profit facilities, these facilities are not necessarily more accessible than private facilities. There are only two state substance abuse

treatment facilities in Gauteng and these operate at only half of their capacity. Compared to private for-profit and private non-profit facilities, a higher proportion of state facilities have waiting lists for treatment slots. State facilities also tend to have more clients on their waiting lists than other types of facilities.

### **DIVERSITY OF SERVICES PROVIDED**

There is accumulating evidence which supports the relationship between the quality and range of treatment services provided to clients and treatment outcomes (Lee et al., 2001). Despite growing evidence of an association between the availability of ancillary treatment services (e.g. psychological and medical care) and treatment outcomes, and evidence-based practice guidelines that emphasise the need to integrate ancillary medical and mental health services with core addiction services (Durkin, 2002; Lee et al., 2001), substance abuse treatment programmes in South Africa generally fail to meet this treatment standard. In Gauteng, clients are provided with medically-oriented services and mental health-oriented services much less frequently than core addiction services. This is similar to findings from the audit of specialist substance abuse treatment facilities in Cape Town (Myers & Parry, 2003).

More specifically, facilities in Gauteng focus primarily on treating the core substance abuse problem and rarely provide ancillary services that target the problems associated with and/or contributing to the substance use problem. This is confirmed through the finding that ancillary mental health services are less accessible to clients than core addiction services. For example, psychiatric assessments and psychological evaluations are significantly less likely to be conducted at substance abuse treatment facilities than other forms of assessment. Similarly, the most accessible counselling services are individual and group addiction counselling, group life-skills, and family therapy, with more than 90% of facilities providing these services. Individual and group mental health counselling and self-help group participation are provided on a less frequent basis to clients. This is cause for concern given that substance-abusing individuals often have high rates of co-occurring disorders (Myers et al., in press) and often report high levels of psychosocial dysfunction (Durkin, 2002).

Although substance abuse treatment facilities in Gauteng provide ancillary medical services more frequently than facilities in Cape Town (Myers & Parry, 2003), these services are still less accessible than core addiction services. Facilities are more likely to provide medical assessment services than detoxification or harm reduction services, such as testing for infectious diseases, harm reduction interventions for injection drug users and/or HIV risk behaviour. This supports findings from the audit of substance abuse treatment facilities in Cape Town (Myers & Parry, 2003). These findings are cause for concern given evidence that many substance abusing individuals suffer from the direct health consequences of substance use and multiple indirectly related physical and mental health problems (such as HIV/AIDS and TB) – this suggests that primary and mental health services (of both a palliative and preventative nature) are important aspects of quality substance abuse treatment (Friedman et al., 1999). The small proportion of facilities that conduct HIV harm reduction interventions is also of concern due to the association between substance abuse and risky sexual practices (Wechsberg et al., 1998).

#### **Variations in the diversity of services provided by organisational factors**

Organizational factors within treatment facilities appear to be associated with the range of services to which clients have access, particularly ancillary medical and mental health services. It is not surprising that organizational factors influence the extent to which “optional” services peripheral to the facility’s core function are delivered, considering that the primary focus of substance abuse treatment facilities is the delivery of core addiction services.

#### ***Variations in the provision of medical services by organisational factors***

Facility ownership and treatment intensity are two organisational factors associated with the accessibility of ancillary medical services in substance abuse treatment facilities in Gauteng. These services are more accessible in inpatient than outpatient treatment facilities, with a significantly greater proportion of inpatient facilities providing medical assessment, detoxification and harm reduction interventions than outpatient facilities. Ownership status is also associated with access to ancillary medical services, with a greater proportion of state and private non-profit facilities providing medical assessment and detoxification services than private for-profit facilities.

Considered together, these two factors appear to interact to influence whether ancillary medical services are provided at facilities. For example, a higher proportion of private non-profit inpatient and state inpatient facilities provide medically-oriented services than private non-profit outpatient or private for-profit facilities, with more private non-profit inpatient and state inpatient facilities providing medical assessment services than either private for-profit or non-profit outpatient facilities. In addition, a greater proportion of state inpatient, followed by private non-profit inpatient facilities report conducting harm reduction services than private for-profit and non-profit outpatient facilities.

These findings suggest that medically-oriented services are more accessible at treatment facilities characterised by an inpatient level of care and a non-profit ownership status. The association between inpatient treatment and greater accessibility to ancillary medical services is in keeping with prior research which reported that outpatient facilities generally provide less direct, on-site access to ancillary services than inpatient facilities (Friedman et al, 2003; McLellan et al., 1999). A possible explanation for this could be that clients requiring inpatient treatment have greater health and psychosocial needs than clients requiring outpatient treatment. As a result, outpatient facilities may not have had a great demand for ancillary medical services. Although problem severity should be one of the key factors that influence the intensity and range of treatment services received, the affordability of services often overrides other decision-making criteria in South Africa. Many clients for whom inpatient treatment is indicated may only be able to afford outpatient care. For these clients, the limited availability of ancillary medical care at outpatient facilities may negatively impact on their treatment outcomes.

In addition, the association between ownership status and the accessibility of medical services is in keeping with international research reports of private for-profit facilities providing a more limited range of services than state and non-profit units (Friedman et al., 1999; McLellan et al., 1999). A possible explanation for these findings could be differences in organizational goals. Private for-profit facilities are likely to place more emphasis on the goal of profit-maximisation than other types of facilities. This goal could result in limits being placed on the provision of non-essential services in order to reduce

overheads. In contrast, state and non-profit facilities may place more emphasis on the goal of public welfare (thus placing fewer limits on the provision of ancillary services) than for-profit facilities (Friedman et al., 1999).

Another factor that seems to interact with facility ownership and treatment intensity to influence the accessibility of ancillary medical services is affiliation with other organizations. This is supported by evidence of (i) the strong association between the type of state affiliation and the intensity of care provided (with a greater proportion of facilities registered with the DOH or with dual registration providing inpatient rather than outpatient treatment services) as well as (ii) the association between the provision of ancillary medical services and type of state affiliation (with facilities with dual or DOH registration being more likely to provide access to ancillary medical care than facilities registered with the DSD). More specifically, significantly more facilities affiliated with the DOH or with dual affiliation provide medical assessment, detoxification, and harm reduction services than facilities registered with the DSD.

A partial explanation for these findings may lie in the division of responsibility for the treatment and management of substance use disorders between the DOH and the DSD, with the DOH responsible for medical treatment and the DSD responsible for prevention and community rehabilitation activities (Parry, 1997). Historically, facilities affiliated with the DOH have provided inpatient treatment services with a strong biomedical focus. These facilities would thus be more likely to provide ancillary medical services than facilities affiliated with the DSD.

The accessibility of ancillary medical services also appears to be associated with the extent to which facilities have speciality staffing resources. International research has shown that the accessibility of medical services is strongly associated with the proportion of medically trained staff employed by facilities (Durkin et al., 2002; Friedman et al., 1999). Findings from this study tend to confirm this explanation, with medically-oriented services being more accessible at facilities employing doctors, nurses, and auxillary nurses than at facilities without these speciality staff resources. More specifically, a greater proportion of facilities employing doctors, registered nurses and auxillary nurses

provide medical assessment services, medication, and detoxification services and conduct harm reduction interventions than facilities without these speciality staff.

The link between the provision of ancillary medical services and speciality staffing resources may also help account for the association between type of state affiliation and the accessibility of medical services. As facilities registered with the DOH often serve as training sites for doctors, nurses and other health professionals, these facilities may have more staff equipped to perform medical assessments, detoxification and harm reduction interventions. The finding that a greater proportion of facilities with DOH or dual registration employ doctors, registered nurses and auxillary nurses than facilities affiliated with the DSD supports this explanation. Further support for this claim is provided by the finding that the mean number of clinical staff, psychiatrists, doctors, registered nurses, and auxillary nurses is greater at facilities with DOH or dual registration than at facilities affiliated with the DSD.

In addition, as medical internship and training posts are paid for by the state, the overall costs of employing speciality staff are reduced. This may free up financial resources and allow for (i) additional staff to be employed and (ii) resources to be allocated to support, train and develop clinical staff. The finding that facilities affiliated with the DOH have a higher staff-client ratio than facilities affiliated with the DSD appears to support this explanation. The finding that facilities with dual or DOH registration are more likely to provide support and resources to staff (such as participation in continuous professional development activities, access to a library and a computerised management information system) than facilities registered with the DSD also lends support to this explanation.

This is potentially important as high staff-client ratios and the availability of resources in substance abuse treatment facilities have been identified as important organisational factors influencing access to ancillary medical services (Friedman et al., 1999).

In summary, these findings suggest that the organisational characteristics of substance abuse treatment facilities in Gauteng (such as facility ownership, intensity of treatment provided, facility affiliation with the state, speciality staffing, and organisational resources) may interact to influence whether facilities provide ancillary medical services.

This is in keeping with findings from treatment services research conducted in the USA (Durkin et al., 2002; Friedman et al., 1999; Friedman et al., 2003).

*Variations in the provision of mental health services by organisational factors*

Facility ownership and treatment intensity are also associated with the accessibility of ancillary mental health services. These services are more accessible at inpatient than outpatient treatment facilities, with a greater proportion of inpatient facilities providing psychiatric assessments and group mental health counselling services than outpatient facilities. Ownership status is also associated with access to ancillary mental health services, with a greater proportion of private for-profit facilities providing these types of services than state and private non-profit facilities. This is in keeping with findings from the audit of substance abuse treatment facilities in Cape Town (Myers & Parry, 2003).

Considered together, these two factors appear to interact to influence whether substance abuse treatment facilities in Gauteng provide ancillary mental health services. For example, a higher proportion of private for-profit inpatient facilities provide mental health services than private non-profit inpatient, state inpatient, and private non-profit outpatient facilities. More specifically, compared to other types of facilities, private for-profit inpatient treatment facilities are the most likely to conduct psychiatric assessments and psychological evaluations and private non-profit outpatient facilities are the least likely to provide any form of ancillary mental health service.

These findings suggest that ancillary mental health services are more accessible at treatment facilities characterised by an inpatient level of care and a private for-profit ownership status. These services also appear to be least accessible at treatment facilities characterised by an outpatient level of care and a (public or private) non-profit ownership status. The association between for-profit ownership status and greater accessibility to ancillary mental health services is in keeping with findings from the audit of similar facilities in Cape Town (Myers & Parry, 2003). However these findings contradict international research findings of for-profit facilities being less likely to provide ancillary mental health services than non-profit facilities (Friedman et al., 1999). This finding could be a result of intensity of care being more strongly associated with the provision of

mental health services than ownership status. This explanation appears to be supported by the finding that ownership status (considered alone) was not *significantly* associated with the provision of specific mental health services and the finding that intensity of care (considered both separately and together with ownership status) significantly distinguished between facilities on mental health service variables. This explanation, however, requires further investigation as this study did not specifically examine the relationships between independent variables.

The association between inpatient treatment and greater accessibility to ancillary mental health is in keeping with prior research which reported that outpatient facilities generally provide less direct access to ancillary mental health services than inpatient facilities (Friedman et al, 2003; McLellan et al., 1999). As mentioned earlier, a possible explanation for this could be that clients requiring inpatient treatment have greater mental health needs than clients requiring outpatient treatment. As a result, outpatient facilities may not have had a great demand for ancillary mental health services. However, as many South African clients for whom inpatient treatment is indicated may only be able to afford outpatient care, outpatient facilities may still have clients who require ancillary mental health services. For these clients, the limited availability of mental health services may negatively impact on their treatment outcomes.

In addition, the association between intensity of care and other organisational factors may provide further explanations for these findings. Facility affiliation is one factor that appears to interact with treatment intensity to influence whether facilities provide ancillary mental health services. Evidence of (i) the strong association between the type of state affiliation and the intensity of care provided (with a greater proportion of facilities registered with the DOH providing inpatient rather than outpatient treatment services) as well as (ii) the association between the provision of ancillary mental health services and type of state affiliation (with facilities affiliated to the DOH being more likely to provide access to mental health care than facilities registered with the DSD) lends support to this explanation. More specifically, significantly more facilities affiliated with the DOH provide psychological evaluation and psychiatric assessment services than facilities registered with the DSD.

The availability of speciality staffing resources may also help account for the greater likelihood of mental health services being provided at inpatient treatment facilities affiliated with the DOH. International research findings suggest that the accessibility of mental health services is strongly associated with the proportion of staff (employed by facilities) that are trained to deliver these speciality services (Durkin et al., 2002; Friedman et al., 1999). Findings from this study tend to confirm this explanation, with mental health services being more likely to be provided at facilities employing psychiatrists and psychologists than at facilities without these speciality staff resources. More specifically, a greater proportion of facilities employing psychiatrists conduct psychiatric assessments than facilities without psychiatrists. In addition, facilities employing psychologists are more likely to conduct psychiatric assessments, perform psychological evaluations and provide individual mental health counselling and group mental health counselling services than facilities without psychologists.

The above findings also help explain the association between type of state affiliation, ownership and intensity of care, and the accessibility of mental health services. As with other medical staff, facilities registered with the DOH often serve as training sites for psychiatrists and psychologists and may therefore have a higher staff component trained to deliver psychiatric and psychological services. Evidence that a greater proportion of facilities affiliated to the DOH employ psychiatrists and psychologists than facilities registered with the DSD provides support for this claim. It is not surprising that these types of services are more likely to be provided in facilities affiliated with the DOH, given that the DOH has historically been responsible for the provision of mental health treatment services. As most mental health services were provided at an inpatient, tertiary level of care, it is also not surprising that ancillary mental health services are more likely to be provided at facilities characterised by inpatient levels of care.

While the relative scarcity of mental health treatment services in non-profit outpatient facilities and facilities registered with the DSD could be interpreted as a deficit in services or a consequence of cost cutting initiatives, these findings could also be a reasonable response to clients with fewer unmet mental health needs (Friedman et al.,

1999). The finding that private for-profit, followed by private non-profit inpatient facilities treat a higher proportion of clients over 40 years of age and a higher proportion of females than either state or private non-profit outpatient facilities, together with the finding that facilities registered with the DOH provide services to a greater proportion of women and older clients than facilities registered with the DSD, lends some support to this claim- especially in the light of evidence which suggests that clients with these gender and age profiles may have more severe mental health problems and require more mental health services than clients with other demographic profiles (Booth & McLaughlin, 2000). The finding that ancillary mental health are significantly more likely to be provided at facilities that serve a high proportion of clients older than 40 years of age provides additional support for this explanation. This points to the need for further research that explicitly examines the needs of clients entering substance abuse treatment, the extent to which these needs are met in treatment and the degree to which clients are satisfied with services received at treatment facilities.

In summary, this study suggests that the organisational factors of ownership, state affiliation, intensity of care, and staff resources, together with the characteristics of the clients served may interact to influence whether ancillary mental health services are provided to clients. This is in keeping with findings from treatment services research conducted in the USA (Durkin et al., 2002; Friedman et al., 1999; Friedman et al., 2003) as well as findings from an audit of substance abuse treatment facilities in Cape Town (Myers & Parry, 2003).

#### **TARGETING BARRIERS TO TREATMENT ACCESS, ENGAGEMENT AND RETENTION FOR CLIENTS FROM UNDERSERVED GROUPS**

Several studies have identified barriers that prevent clients from underserved groups accessing, engaging and being retained in treatment (Beardley et al, 2003; McCaul, 2001). These barriers, if unaddressed, may negatively impact on treatment outcomes (Beardley et al., 2003; Joe et al., 1999). Although substance abuse treatment facilities in Gauteng report conducting a range of activities that target these barriers for Black and female clients, the extent to which these barriers are targeted varies considerably among facilities.

### **Targeting barriers to treatment entry and retention for Black clients**

Despite the finding that Black clients are under-represented and White clients are over-represented in substance abuse treatment facilities in Gauteng, few facilities provide services aimed at addressing the barriers that prevent Black clients from accessing, engaging, and being retained in treatment. These barriers include a lack of awareness of treatment options, stigma related to substance abuse treatment, difficulties in paying for transport to facilities located in urban centres, difficulties in paying for treatment, linguistic difficulties in participating in programmes where few facilities employ African-language speaking therapists, and the questionable cultural appropriateness of programmes developed in Western settings for Black clients (Myers et al., in press).

Although evidence suggests that outreach activities improve awareness of treatment options and reduce stigma for under-served groups (Marsh et al., 2000), only a small proportion of facilities conduct activities that target a lack of awareness about options for substance abuse treatment. More specifically, just over half of the facilities conduct outreach among vulnerable groups and in township areas, and less than a third conduct street outreach, outreach in inner cities, or outreach in prisons. Similarly, few treatment facilities perform activities that address the logistical barriers (such as transport and reduced fees) that prevent Black clients from accessing and being retained in treatment. Facilities that do report addressing logistical barriers are more likely to address financial barriers relating to treatment costs than other practical barriers, such as transport. For example, most facilities offer reduced fees to clients, with a smaller proportion providing free treatment slots for clients who cannot afford to pay for treatment. In contrast, less than a third of facilities provide clients with transport services. Facilities should give serious consideration to ways in which the practical barriers and hidden costs associated with treatment, such as transport, can be addressed for clients from underserved groups, as addressing these barriers has been shown to significantly improve treatment retention (Friedman et al., 2001).

In addition, few facilities provide services that target the cultural and linguistic barriers that prevent Black clients from accessing and being retained in substance abuse

treatment. Although a high proportion of facilities report employing multilingual staff and staff from ethnically diverse backgrounds, further questioning revealed that for the most part, staff are fluent in English and Afrikaans only, and are White, Coloured or Asian/Indian. This is confirmed by the finding that less than two-thirds of facilities employ African language speaking therapists. Similarly, less than two-thirds of facilities offer multilingual programmes. Of concern is the finding that less than half of the facilities use culturally sensitive and appropriate assessment and therapeutic approaches. These factors may not only inhibit Black clients from seeking treatment, but may also impact on the extent to which Black clients engage in treatment, with black clients being more likely to seek treatment at facilities which actively address the logistical and cultural/linguistic barriers they experience.

The strong association between the proportion of Black clients served at treatment facilities in Gauteng and the likelihood of treatment facilities targeting barriers to access and retention provides some support for this explanation. For example, compared to facilities with smaller proportions of Black clients, a significantly greater proportion of facilities where Black clients comprise more than half of the treatment population conduct outreach among vulnerable groups, street outreach, township outreach, outreach in the inner cities, and outreach in prisons. Similarly, facilities with high proportions of Black clients are more likely to address logistical barriers (such as transport and treatment costs) and cultural/linguistic barriers (through employing African language speaking therapists, providing multilingual treatment services and conducting culturally appropriate therapy) than facilities with smaller proportions of Black clients. Although treatment facilities may serve a higher proportion of Black clients because they actively target barriers to access and retention, it is also possible that certain facilities provide these services because a high proportion of their clientele are Black South Africans. Further investigation into the relationships amongst demographic profile, treatment needs, and barriers to access and retention for clients of treatment facilities in South Africa is thus required.

In summary, it thus seems that, to a large extent, treatment facilities in Gauteng have failed to address the cultural, linguistic and logistical barriers that potentially prevent

Black clients from seeking, engaging and being retained in treatment. This pattern of findings largely mirrors that found among treatment facilities in Cape Town (Myers & Parry, 2003). If inequities in treatment service delivery are to be addressed, these barriers need to be targeted as a matter of urgency. The large body of evidence which points to a causal relationship between treatment engagement, retention and client outcomes (Joe et al., 1999) further highlights the importance of targeting these barriers.

### ***Variations in activities to target barriers to treatment entry for Black clients***

Organisational factors such as ownership, intensity of care, and affiliation are also associated with whether substance abuse treatment facilities in Gauteng target barriers to treatment entry, engagement, and retention for Black clients.

Facility ownership and treatment intensity appear to interact to influence whether treatment facilities in Gauteng target barriers that Black clients experience. Outreach activities (aimed at improving awareness of treatment options among Black clients) are more likely to be conducted by outpatient than inpatient facilities, with a larger proportion of outpatient facilities conducting street outreach, outreach among vulnerable groups, outreach in townships, and outreach in inner cities than inpatient facilities. Outpatient facilities are also more likely to address logistical barriers to treatment than inpatient facilities, with a greater proportion of these facilities providing transport than inpatient facilities.

Ownership status is also linked to whether treatment facilities in Gauteng target barriers to entry and retention, with a greater proportion of private non-profit (followed by state facilities) targeting barriers to access and retention than private for-profit facilities. For example, significantly more private non-profit facilities provide outreach services in the township areas and among vulnerable groups than other types of facilities. Similarly, private non-profit facilities are more likely to address the logistical barriers to treatment entry and retention than other types of facilities, with private non-profit services being more likely to offer reduced fees and transport services to clients. Private non-profit facilities and state facilities are also significantly more likely to address the cultural and linguistic barriers to treatment entry and retention for Black clients, with a higher

proportion of these facilities employing multilingual staff from diverse ethnic backgrounds, employing African-language-speaking therapists, and offering a multilingual treatment programme than private for-profit facilities. Compared to facilities with private non-profit or state ownership status, private for-profit facilities are the least likely to address barriers to treatment entry and retention for Black clients. This pattern of findings mirrors that found among treatment facilities in Cape Town (Myers & Parry, 2003).

Considered together, these two factors appear to interact to influence whether substance abuse treatment facilities address barriers to treatment. For example, more private non-profit outpatient treatment facilities conduct outreach activities than private for-profit, private non-profit inpatient or state inpatient facilities. More specifically, more private non-profit outpatient facilities conduct street outreach and outreach in the township areas than other types of facilities. Similarly, a higher proportion of private non-profit in and outpatient facilities offer reduced fees and transport services to clients than either state or private for-profit inpatient facilities. In addition, private for-profit inpatient facilities are, compared to other types of facilities, the least likely to target cultural and linguistic barriers to treatment entry and retention, with a smaller proportion of these facilities employing multilingual staff from diverse ethnic backgrounds, employing African language speaking therapists, and providing a multilingual treatment programme.

These findings suggest that facilities characterised by an outpatient level of care and private non-profit ownership are more likely to target barriers to treatment entry, engagement, and retention for Black clients than facilities characterised by for-profit ownership and an inpatient level of care. This is in keeping with findings from an audit of similar facilities in Cape Town (Myers & Parry, 2003). Ownership status seems to be the key variable accounting for differences between facilities; with intensity of care less strongly associated with “barriers to treatment entry and retention”-related variables. This explanation is supported by findings that intensity of care (considered alone) is not significantly associated with any of the “barriers to treatment entry and retention”-related variables. Furthermore, the finding that ownership status (considered both separately

and together with intensity of care) differentiates between facilities on several barriers to treatment entry and retention” -related variables tends to confirm this explanation.

A possible explanation for these findings could lie in the organizational goals of for-profit and non-profit facilities. Private for-profit facilities are likely to place more emphasis on the goal of profit-maximisation than other types of facilities. This goal could lead to organizations limiting their involvement in nonessential activities in order to reduce overhead costs (Friedman et al., 1999). In addition, as private for-profit facilities are more likely to depend on private funding (such as health insurance or client self-pay fees) and less likely to receive state subsidies for treatment than private non-profit facilities, it may not be within the interests of these organisations to target clients that cannot afford the costs of treatment. As socio-economic status and race are still closely associated in South Africa, it is not surprising that private for-profit facilities are more likely to serve White than Black clients. Furthermore, with a treatment population dominated by White and Coloured clients (for whom English or Afrikaans is the language of choice) the relative lack of activities targeting treatment barriers for Black clients should not just be interpreted as a deficit in services- especially given that there may not yet be a strong demand for culturally and linguistically-sensitive programmes at private for-profit facilities.

Facility affiliation is another factor which may interact with ownership and intensity of care to influence whether facilities target the barriers Black clients experience. Evidence of (i) the strong association between the type of state affiliation, ownership status, and the intensity of care provided (with most private non-profit outpatient facilities being registered with the DSD) as well as (ii) the association between activities that target barriers to treatment entry and retention and type of state affiliation (with facilities affiliated to the DSD being more likely to target barriers to treatment entry and retention for Black clients than facilities affiliated with the DOH) lends support to this explanation. More specifically, significantly more facilities affiliated with the DSD conduct outreach activities (specifically outreach among vulnerable groups, street outreach, outreach in the inner cities, prison outreach and outreach in the townships) and employ African-language-speaking therapists than facilities with other types of state affiliation.

In summary, this study suggests that ownership, state affiliation, and intensity of care and the demographic profile of the clients seeking treatment may interact to influence whether facilities target barriers to treatment entry and retention for Black clients. This is in keeping with findings from an audit of substance abuse treatment facilities in Cape Town (Myers & Parry, 2003).

### **Targeting barriers to treatment entry and retention for female clients**

Although substance abuse treatment services are under-utilised by women (Myers et al., in press), few facilities in Gauteng provide services aimed at addressing some of the barriers that prevent women from accessing, engaging, and being retained in treatment. These barriers include limited access to services due to a lack of an independent income to pay for treatment, limited resources to arrange for independent childcare (Booth & McLaughlin, 2000), and the lack of women-sensitive treatment programmes that focus on the special needs of women (such as domestic violence and sexual assault) (Booth & McLaughlin, 2000).

Despite evidence that targeting logistical barriers to treatment entry, engagement, and retention improves treatment retention and outcomes for female clients (Wechsberg et al., 2001), few treatment facilities perform activities that address the practical concerns of female substance abusers (such as transport, childcare and treatment costs). Although a high proportion of facilities report addressing financial barriers associated with the direct costs of treatment, a significantly smaller proportion of facilities report addressing the indirect costs of treatment (such as childcare and transport) that may prevent women from accessing and staying in treatment. For example, less than 10% of facilities report providing childcare services for female clients. This pattern of findings mirrors that found amongst treatment facilities in Cape Town (Myers & Parry, 2003).

In addition, approximately two-thirds of facilities provide no services aimed at addressing the gender-related barriers that may prevent female clients from accessing and being retained in substance abuse treatment. More specifically, only 35% of facilities provide women-focused treatment and use gender sensitive assessment and therapeutic

approaches. Similarly, less than a third of facilities provide training for clinical staff in gender-related treatment issues. This is of concern as the failure to have a gender-sensitive treatment approach may limit the extent to which female clients engage in treatment (Booth & McLaughlin, 2000).

The strong association between the proportion of female clients served at treatment facilities in Gauteng and the likelihood of treatment facilities targeting barriers to access and retention provides some support for this explanation. For example, compared to facilities with smaller proportions of female clients, a significantly greater proportion of facilities where female clients comprise more than 20% of the treatment population address logistical barriers (such as childcare, transport and treatment costs) and provide women-focused treatment services and family-focused interventions than facilities where female clients comprised a smaller proportion of the clientele. Although treatment facilities may serve a higher proportion of female clients because they actively target barriers to access and retention, it is also possible that certain facilities provide these services because a high proportion of their clients are female. Further investigation into the relationships amongst demographic profile, treatment needs, and barriers to access and retention for clients of treatment facilities in South Africa is thus required.

In summary, it thus seems that, to a large extent, treatment facilities in Gauteng have failed to target the barriers to treatment entry, engagement and retention which women may experience. This pattern of findings largely mirrors that found among treatment facilities in Cape Town (Myers & Parry, 2003).

#### **THE ROLE OF MONITORING AND PROGRAMME EVALUATION IN SUBSTANCE ABUSE TREATMENT FACILITIES IN GAUTENG**

Research has emphasised the importance of monitoring and evaluating (M & E) the process and outcomes of substance abuse treatment, not only because M & E helps identify areas in which treatment programmes and service delivery can be improved, but also because evidence of treatment effectiveness can be used to inform decision-making about the rational distribution of human and financial resources to treatment services (Cole, 1999).

Although most treatment facilities report having good administrative systems and structures that facilitate the monitoring of clients within-treatment, a significantly smaller proportion of facilities report monitoring clients post-treatment. More specifically, while most facilities record case conferences, document individual treatment plans and make progress notes for clients, a significantly smaller proportion of facilities report forming individual discharge plans and formally monitoring client progress post-treatment.

While several facilities report the post-discharge follow-up of clients, in general these follow-up activities are informal, unsystematic and undocumented. Specifically, most facilities provide clients with a follow-up counselling session or conduct telephonic monitoring. Although a high proportion of facilities report using blood and urine screens to monitor clients, these screens are mostly used within treatment and are rarely used for monitoring client progress post-treatment (for outcome evaluation purposes). In addition, most monitoring activities are conducted on an ad hoc basis (often on the request of family members or as part of court-mandated treatment) with routine post-discharge monitoring systems not being in place at any of the facilities. These findings mirror findings from the audit of substance abuse treatment facilities in Cape Town (Myers & Parry, 2003).

Poor understandings of the terms “monitoring” and “evaluation” and the activities that constitute evaluation reflect the need among substance abuse practitioners and policy makers for training in i) the importance of monitoring and evaluation for programme planning ii) basic principles of monitoring and evaluation (such as the concept of evaluation and the identification of suitable indicators for monitoring and evaluating substance abuse treatment programme), and iii) establishing systems for the routine monitoring of clients and evaluation of service delivery and treatment outcomes.

## **RECOMMENDATIONS**

### **To improve the availability and utilization of substance abuse treatment facilities**

- As private, non-profit treatment facilities are not only the main providers of substance abuse treatment services in Gauteng but are also the largest providers of treatment

services to historically under-served groups, it is recommended that funding to these facilities be increased.

- The number of state facilities for substance abuse needs to be increased. The establishment of state-funded outpatient facilities may be a means of providing cost-effective substance abuse treatment services that are accessible to all sectors of the population.
- Research needs to examine the lengthy waiting lists at non-profit and state facilities, especially as shorter waiting periods would mean that more clients could be served. Shorter waiting periods have also been associated with better outcomes. The feasibility and effectiveness of interventions aimed at shortening the waiting list (e.g. by making the treatment programme of shorter duration) or at maintaining motivation for treatment among individuals on the list should be explored.
- Research which identifies the factors underpinning the under-utilization of substance abuse treatment facilities in Gauteng (such as client loads, staff competencies, and facility resources) needs to be conducted. Interventions that target the factors identified by research as underpinning this under-utilization should be designed, implemented and their impact evaluated.

**To improve the diversity of services and range of services provided through increasing access to ancillary treatment services**

- A comprehensive, integrated range of services that includes access to ancillary medical and mental health treatment services should be accessible at all treatment facilities and all clients should be assessed for co-occurring mental health disorders and ancillary health problems
- Ancillary medical and mental health treatment services could be provided directly, on-site or indirectly through referral to external agencies.
- Where facilities do not directly provide access to ancillary services, a case management approach should be utilized to ensure that clients receive the external ancillary services as planned.
- The role of the case manager should be to ensure that clients are linked to external service providers and that they are able to access these services. One way of doing

this is through pre-contracting external service providers to ensure that they are available to provide ancillary services when these services are required.

- Co-ordination and linkages between DSD and DOH should be improved. This will facilitate the delivery of a comprehensive range of integrated health and social services at all facilities, irrespective of their type of state registration.

**To increase the capacity of treatment services so that appropriate and accessible services can be provided, especially to clients from under-served groups**

- Awareness should be raised among treatment providers about the importance of addressing barriers to treatment entry, engagement and retention for the treatment outcomes of clients from historically underserved groups. Treatment providers require training in suitable methods of targeting these barriers.
- Logistical barriers to treatment can be addressed through increasing the number of beds available for impoverished clients and also through addressing the indirect costs associated with treatment (e.g. transport and childcare). These indirect costs may prevent poorer clients from seeking, engaging or completing treatment.
- Cultural and linguistic barriers to treatment entry, engagement and retention among Black clients should be addressed as a matter of urgency.
- Linguistic barriers can be addressed through offering treatment services in a number of languages (when the clients served speak a number of languages), employing multilingual staff as members of the clinical/treatment team, employing African language speaking therapists, and ensuring that the treatment programme materials are available in a number of languages.
- Cultural barriers can be addressed through employing multilingual staff from diverse ethnic cultures and employing Black/African therapists. As facilities often struggle to find Black/African substance abuse practitioners, a longer term solution would be to encourage African language-speaking students of the health and other allied professions to enter the substance abuse field.
- The capacity of treatment service providers to deliver appropriate treatment for all clients, which is also accessible to clients from underserved groups can be improved through the professionalization of the substance abuse treatment field.

**To professionalize the substance abuse treatment field in order to improve the quality and appropriateness of treatment services**

- Speciality training for substance abuse practitioners should be introduced into South Africa. Under this system, health and social service professionals would be required to obtain additional qualifications and a speciality registration in substance abuse with the Health Professions Council of South Africa.
- Speciality training that leads to the licensing and accreditation of non-professional counsellors as “addiction counsellors” needs to be introduced into South Africa. Once this system is introduced, individuals should not be allowed to provide treatment services without being a licensed and accredited addiction counsellor or professional.
- The licensing and accreditation of all practitioners (professionals and counsellors) in the field of substance abuse will help protect clients against uninformed and poorly trained service providers, will provide licensed service providers with greater credibility, and will bring the field more in line with international best practice.
- Part of the licensing and accreditation requirements for addiction practitioners should include ongoing professional development activities and continued training.
- Practitioners will have to demonstrate core counselling competencies as part of the licensing and accreditation process. Several core competencies have been recognised as essential to the delivery of effective and appropriate services. These core competencies include cultural and gender-sensitivity.
- An association for addiction practitioners needs to be developed as a matter of urgency. Part of this association’s mandate should be to lobby for the professionalization of the substance abuse field.

**To improve treatment service planning and delivery through research and monitoring and evaluation activities**

- As part of the monitoring of the quality of substance abuse treatment services in South Africa, a national treatment audit should be conducted on a regular basis (at least once every 2 years). Findings from this national audit should be used to inform decision-making about the allocation of funding and other resources to existing

facilities, based on the extent to which they provide services to historically under-served groups.

- To prevent duplication of services, enable maximisation of scarce resources, and to ensure that facilities registered and endorsed by the state deliver adequate and appropriate services, there should be a single organisation or body that manages the facility registration process.
- Substance abuse treatment facilities should, as a condition of licensure and funding, conduct comprehensive evaluations of their treatment programmes once every five years. These programme evaluations should be conducted by an external evaluator.
- Facilities should be inspected on an annual basis for the purpose of renewing their registration. Individuals responsible for the registration of facilities should inspect these facilities in person and unannounced. Such individuals should not only be trained in principles of best practice, human rights issues, and legislative requirements, but should also have experience in the field of substance use disorders.
- Although national minimum standards for the provision of inpatient substance abuse treatment are currently being developed, national minimum standards for outpatient treatment services should also be developed as a matter of urgency. In addition, a policy framework that supports and outlines the implementation and evaluation of these standards needs to be developed.
- Research which evaluates the relative efficacy of treatment programmes that provide comprehensive services (that include both core addiction treatment services and ancillary mental health and medical treatment services) and programmes that provide core addiction services only is required. Findings from research may provide justification for the provision of a more comprehensive range of services at substance abuse treatment facilities.
- Interventions aimed at improving the cultural and gender-sensitivity of treatment programmes need to be designed, implemented, and evaluated.

## REFERENCES

Alterman, A., Langenbucher, J., & Morrison, R.L. (2001). State-level treatment outcome studies using administrative databases. Evaluation Review, 25: 162-183.

Beardsley, K., Wish, E.D., Fitzelle, D.B., O'Grady, K., Arria, A.M. (2003). Distance travelled to outpatient drug treatment and client retention. Journal of Substance Abuse Treatment, 25: 279-285.

Best, D., Noble, A., Ridge, G., Gossop, M., Farrel, M., Strang, J. (2002). The relative impact of waiting time and treatment entry on drug and alcohol use. Addiction biology, 7: 67-74.

Booth, B.M., & McLaughlin, Y.S. (2000). Barriers to and Need for Alcohol Services for Women in Rural Populations. Alcoholism: Clinical and experimental research, 24, 1267-1275.

Carise, D., McLellan, A.T., & Gifford, L.S. (2002). Developing a national addiction treatment information system. Unpublished manuscript.

Cole, G.E. (1999). Advancing the development and application of theory-based evaluation in the practice of public health. American Journal of Evaluation 20 (3): 453-471.

Durkin, E.M. (2002). An organisational analysis of psychosocial and medical services in outpatient drug abuse treatment programs. Social Service Review, 406-429.

Edelstein, I., Weber, V., Pillay, Y. (1997). The role of the private sector. In. Foster, D., Freeman, M., & Pillay, Y. (eds.). Mental health policy issues for South Africa pp. 132-142. Cape Town: Medical Association of South Africa.

Friedmann, P.D., Lemon, S.C., Stein, M.D. (2001). Transportation and retention in outpatient drug abuse treatment programmes. Journal of Substance Abuse Treatment, 21: 97-103.

Friedmann, P.D., Alexander, J.A., D'Aunno, T.A. (1999). Organisational correlates of access to primary care and mental health services in drug abuse treatment units. Journal of Substance Abuse Treatment, 16: 71-80.

Friedmann, PD., Lemon, SC., Durkin, EM., D'Aunno, TA. (2003). Trends in comprehensive service availability in outpatient drug abuse treatment. Journal of Substance Abuse Treatment, 24: 81-88.

Gossop, M., Marsden, J., Stewart, D. (2001). National Treatment Outcome Research Study (NTORS) after five years. United Kingdom: Department of Health.

Grant, B., & Petrie, M. (2001). Alcohol and other drug treatment services. Development of a national minimum data set. Canberra: Australian Institute of Health and Welfare.

Joe, G.W., Broome, K.M., Rowan-Szal, G.A., Dwayne Simpson, D. (2002). Measuring patient attributes and engagement in treatment. Journal of Substance Abuse Treatment, 22: 183-196.

Lee, M.T., Reif, S., Ritter, G.A., Levine, H.J., Horgan, C.M. (2001). Access to services in the substance abuse treatment system. In Glanater, M (ed). Alcoholism. Volume 15: Services research in the era of managed care. Organisation, Access, Economics, Outcome, pp 137-156. New York: Kluwer Academics.

McCaughrin, W.C. & Howard, D.L. (1996). Variation in access to outpatient substance abuse treatment: organisational factors and conceptual issues. Journal of Substance Abuse, 8: 403-415.

McClellan, AT., Hagan, TA., Levine, M., Meyers, K., Gould, F., Bencivengo, M., Durell, J., Jaffe, J. (1999). Does clinical case management improve outpatient addiction treatment. Drug and Alcohol Dependence, 55: 91-103.

McCaul, M.E., Svikis, D.S., Moore, R.D. (2001). Predictors of outpatient treatment retention: patient versus substance use characteristics. Drug and Alcohol Dependence, 62: 9-17.

McKay, J.R. & Weiss, R.V. (2001). A review of temporal effects and outcome predictors in substance abuse treatment studies with long-term follow-ups. Preliminary results and methodological issues. Evaluation Review, 25: 113-161.

Marsh, J.C., D'Aunno, T.A., Smith, B.D. (2000). Increasing access and providing social services to improve drug abuse treatment for women with children. Addiction, 95 (8): 1237-1247.

Mejita, C. & Bokos, P.R. (1997). Improving substance abuse treatment access and retention using a case management approach. Journal of Drug Issues, 27: 1-9.

Myers, B. & Parry, C.D.H. (2003). Report on Audit of Substance Abuse Treatment Facilities in Cape Town (2002). Parow: Medical Research Council.

Myers, B., Parry, C.D.H., Plüddemann, A. (in press). Indicators of substance abuse treatment demand in Cape Town. Findings from the SACENDU project: 1998-2002. Curationis

Parry, C.D.H. (1997). Alcohol, drug abuse, and public health. In. Foster, D., Freeman, M., & Pillay, Y. (eds.). Mental health policy issues for South Africa pp. 290-315. Cape Town: Medical Association of South Africa.

Parry, C.D.H. & Bennetts, A. (1998). Alcohol Policy and Public health in South Africa. Cape Town: Oxford University Press.

Parry, C.D.H., Bhana, A., Plüddemann, A., Myers, B., Siegfried, N., Morojele, N.K., Flisher, A.J., & Kozel, N. (2002). The South African Community Epidemiology Network on Drug Use (SACENDU): Description, findings (1997-1999), and policy implications. Addiction, 97. 969-976.

Parry, C.D.H., Bhana, A., Myers, B., Plüddemann, A., Flisher, A.J., Peden, M., & Morojele, N.K. (2002). Alcohol use in South Africa: Findings from The South African Community Epidemiology Network on Drug Use (SACENDU) Project. Journal of Studies on Alcohol, 63, 430-435.

Simpson, DW. (2001). Background for treatment process research. Texas: Texas Christian University.

Torres, M. I., Mattick, R. P., Chen R., & Baillie, A (1995). Clients of Treatment Service Agencies: March 1995 Census Findings. Canberra: Australian Government Publishing Service.

Wechsberg, W.M., Craddock, S.G., Hubbard, R.L. (1998). How are women who enter substance abuse treatment different from men. A gender comparison from the Drug Abuse Treatment Outcome Study (DATOS). Drugs and Society, 13: 97-115.