Response by Professor John Saunders to Supplementary Questions from the General Purpose Standing Committee No. 2 of the NSW Parliament Legislative Council Inquiry into Drug and Alcohol Treatment

1. **Could you provide information regarding neurobiology?**

Over the past 20 years there has been considerable research into the neurobiological mechanisms by which dependence on psychoactive substances and indeed addiction in general develops. In essence, there is a re-setting of key neurocircuits in the brain which are responsible for reward, alertness and reactivity, control of basic behaviours and salience (prioritisation).

These changes develop in response to a pattern of repetitive substance use (or repetitive behaviours such as gambling) which originally arise from personal choice, peer and other social influences and the learning of behaviours. Importantly, changes in the neurocircuits lead to a powerful, partly subconscious, drive to use a particular substance (or engage in other repetitive activities) in a self-perpetuating way and typically without thought for the consequences.

This fundamental neurobiological research provides a ready explanation for what on the surface would seem to be highly maladaptive and wilful behaviours. However, the (largely) subconscious nature of the driving force means that the person with the dependence for addiction is swept along by a driving force over which they have minimal or no control.

Understanding of the neurobiological mechanisms is important for people with the disorders, health professionals, policy makers and the community at large so that they do not jump to conclusions that dependencies and addictions are essentially self-inflicted disorders. These disorders are in the subconscious realm and as such require appropriate treatment including medication, therapy and social support to help the person cease use and move into recovery.

To obtain further information about the neurobiological mechanisms, I recommend a WHO book on the Neurobiology of Addiction, and reviews and books by Koob and LeMoal, and by Volkow.

2. **How widely are brief interventions used and is it a general service provided by GPs and hospitals?**

Historically the provision of any intervention for alcohol or drug disorders has been uncommon in general practice, with studies from the BEACH Project showing only 0.2% of consultations had a component of alcohol treatment and less than 0.1% (estimated) of drug problems treatment.

In terms of ***routine questions on alcohol and tobacco use or brief screening***, this is undertaken by many general practitioners as part of their assessment of a new patient or periodic assessment of existing patients. The inquiry may consist of 2-3 questions or the use of the AUDIT questionnaire for alcohol, and 2-3 questions or a brief questionnaire on tobacco. Routine enquiry about illicit drug use is uncommon. I do not have any recent quantitative information on these activities but suggest you contact Dr. Helena Britt.

Routine inquiry is usually made of alcohol and tobacco use of patients admitted to hospital. This is included in the initial medical assessment and also in the nursing assessment. The extent of this various from hospital to hospital and is not as systematised as it could be.

The provision of a ***brief therapeutic intervention*** in general practice and hospitals is much less common, although general practitioners may provide some brief advice and offer a booklet if patients are identified through their initial questions as having an alcohol use disorders or currently smoke cigarettes. In hospitals a patient with an alcohol or drug use disorder may be referred to the Drug and Alcohol Consultation Service, depending on the provision of such a service in that hospital. Interventions for smoking cessation are widely available in hospitals and tend to comprise prescription of nicotine replacement therapy, but may include a brief intervention.

There is a considerable opportunity to provide more systematic screening and brief structured interventions for alcohol use disorders in both general practice and public hospital outpatient clinics and wards.

Members of the Committee may note the contractual requirement of the Scottish Government that regional health authorities need to meet targets for screening and brief alcohol interventions as part of the agreement between the government and the regional health authorities for health care provision. Brief interventions for other drugs are extremely rare in general practice and the public hospital system.

3. **Could you provide the evidence in relation to the susceptibility of people with psychiatric disorders and substance dependence?**

There are many studies which have looked at the co-occurrence of mental health disorders and substance dependence in (1) the community as a whole and (2) patients attending for clinical management of one or other type of disorder. The first major national epidemiological survey was the Epidemiologic Catchment Area (ECA) Study conducted in the United States in the 1970s. This showed that there was a substantially increased (and statistically significant) risk of substance dependence occurring in patients with certain mental health disorders compared with the general population who had no psychiatric disorders.

The risk of developing substance dependence was particularly high in patients with certain types of depression, social anxiety, schizophrenia and bipolar disorder.

Studies have been conducted of the general population in Australia since the 1990s, for example the National Survey of Mental Health and Wellbeing and also questions are included in the National Household Surveys conducted every three years. These show similar associations between psychiatric disorders and substance dependence as in the US study.

Studies have also been conducted of substance use disorders among patients with psychiatric disorders presenting for treatment, and, correspondingly, of psychiatric disorders in patients with substance use disorders who present to alcohol and drug treatment facilities. These show high levels of co-morbidity.

Please see attached PowerPoint slides for some details.

4. **Are the historical figures available for the number of public section rehabilitation programs and beds available and the current status?**

Please refer to attached table which I have prepared for the Committee. Please note that this is based on my recall of the situation and limited written records. With regard to the current status, I would suggest the Committee seeks information directly from the NSW Ministry of Health. Sometimes however there is a difference between the service provision that is understood to be available and that which is available in practice.

5. **Do you have evidence about the number of young people accessing rehabilitation programs and for what periods of time and the numbers who commence but do not finish?**

I do not have this information available and suggest the Committee inquires of the Australian National Council on Drugs and also of the Mental Health and Drug and Alcohol Office of the NSW Ministry of Health. An annual census of rehabilitation programs is undertaken and it should be possible to extract the information you need from the data available.

6. **Is there any post-treatment follow up to understand if the program was successful in the long-term or if people returned to dependence?**

I assume this question refers to rehabilitation programs for young people. I do not have such information available. Again, it should be available from the NSW Ministry of Health for rehabilitation programs that receive State funding. It should be available from the corresponding Federal Department where the funding is of federal origin. Other sources of information would be the Australian National Council on Drugs and Professor John Toumbourou of the University of Melbourne who has conducted studies evaluating rehabilitation programs for young people.

JB SAUNDERS/ 3.5.13.

Provision of Alcohol and Drug Dependence Detoxification, Treatment and Rehabilitation Programs in NSW Public Hospitals

Geographical Area	Historical Provision of Public Sector Treatment and Rehabilitation Inpatient Facilities	Current Status and Provision
Central Sydney	Acute, non-medicated detoxification unit of 20 beds at Royal Prince Alfred Hospital ("Basement 82") opened in 1982.	This Unit was closed in approximately 1998 and was not replaced.
Central Sydney	Medical ward for treatment of alcohol and drug-related medical disorders, including severe detoxification states, opened in 1988. Twelve beds on Ward E11 North at Royal Prince Alfred Hospital.	Facility closed in 1996. Patients can be admitted if necessary to RPA Hospital but, as I understand, no dedicated ward.
Central Sydney	McKinnon Detoxification Unit at Rozelle Hospital, 30 beds, opened in early 1950s.	This Unit was closed in the late 1990s and replaced by a detoxification Unit, Ward 64 at Concord Hospital (see below).
Central Sydney		Ward 64 provides acute medicated detoxification. Current bed complement not known to me.
Central Sydney	Alcohol-related brain damage rehabilitation facility in Wards 3, 5 & 6 at Rozelle Hospital, amounting to 81 beds.	These facilities were closed in the late 1990s and not replaced.
Central Sydney	Alcohol and Drug Rehabilitation Unit ("Palm Court") of 14 beds opened in mid-1990s at Rozelle Hospital.	This Unit was closed with the closure of Rozelle Hospital. Replaced by Ward 65 at Concord Hospital.
Central Sydney		Ward 65 provides an inpatient rehabilitation program – current size and specification not known.
Northern Sydney	Alcohol dependence rehabilitation program of 30 beds ("Bridgeview House") within Macquarie Hospital, North Ryde.	This Unit was closed in the late 1990s, and was not replaced.

Northern Sydney	Phoenix House, a 12-16 bed rehabilitation program, was opened in early 1990s and closed in mid-2000s.	No replacement public sector facility. However, rehabilitation service provided by a non-government organisation.
Northern Sydney	Herbert Street Clinic, a 20-bed detoxification unit opened in 1980s at Royal North Shore Hospital.	This Unit continues to provide short-term detoxification for alcohol and drug dependence.
Northern Sydney		Four beds opened in September 2012 to provide in-patient treatment for patients committed under the involuntary provisions of the Drug and Alcohol Treatment Act (2007).
Eastern Sydney	An acute non-medicated detoxification unit ("Gorman House") of 20 beds was opened in 1982 in the vicinity of St. Vincent's Hospital, Darlinghurst.	This facility continues and I understand patents can take sedative medication to assist their detoxification.
Eastern Sydney	Langton Clinic, opened in mid-1950s, provided 44 beds for alcohol and drug detoxification and treatment for up to 28 days.	The inpatient beds were closed progressively in the 1990s and closed completely in 1996.
Eastern Sydney	Six beds were provided at Sydney Hospital for acute medical detoxification of patients with alcohol and drug dependence who also require admission for medical disorders.	As I understand, this facility is still available.
Western Sydney	A 30-bed detoxification Unit ("Wisteria House") was available for many years at Cumberland Hospital. It provided detoxification for alcohol and drug dependence and a rehabilitation program.	As I understand, detoxification provision is still available at Cumberland Hospital but not the rehabilitation program.
Nepean District	Medical detoxification unit opened at Nepean Hospital in the mid-1990s.	The unit continues to provide detoxification.
Nepean District	Four beds provided for compulsory treatment for the trial program of the Drug and Alcohol Treatment Act (2007).	This facility was closed in 2012 and replaced by those at Royal North Shore Hospital and Bloomfield Hospital, Orange.
Southern Sydney	No specific detoxification or alcohol and drug rehabilitation facilities provided; instead patients were referred to the Langton Clinic.	Lack of detoxification and rehabilitation continues.

South Western Sydney	Alcohol and drug detoxification unit provided at Corella Lodge, Fairfield Hospital.	The Unit continues to provide detoxification.
Central Coast District	Two wards provided at Morisset Hospital for the treatment of alcohol and drug dependence patients, including those with brain damage and comorbid psychiatric disorders.	To the best of my knowledge these facilities no longer exist, with Morisset Hospital being entirely a forensic hospital.
Central Coast District		A medicated detoxification of 15 beds is available at Wyong Hospital for patients who have co-existing medical disorders.
Hunter and New England Districts	In-patient facility provided at Armidale Hospital.	Current provision not known.
Hunter and New England Districts	In-patient acute detoxification facility located at the Mater Hospital.	Current provision not known.
Central West District	Two wards at Bloomfield Hospital, Orange, provided detoxification and rehabilitation for alcohol and drug dependence for country New South Wales. Also included several patients committed under the Inebriates Act (1912).	Provision has been reduced over the years. Current status not known to me.
Central West District		Six beds provided at Bloomfield Hospital to provide for compulsory treatment under the Drug and Alcohol Treatment Act (2007).
Southern New South Wales	Four beds available for detoxification at Queanbeyan Hospital.	Extent of detoxification provision currently available not known to me.

JOHN B SAUNDERS/ 3.5.13. Prepared for the NSW Legislative Council Inquiry into Drug and Alcohol Treatment.