

# Management of alcohol and other drug issues in Special Health Accommodation during the COVID-19 Delta variant outbreak in Sydney, 2021

In response to community transmission of COVID-19 Delta Variant in New South Wales (NSW), patients were admitted to Special Health Accommodation (SHA) with often complex psychosocial and medical needs including addiction. SHA functioned as a subacute hospital in repurposed apartment blocks and provided integrated health care to people with COVID-19 or close contacts, if otherwise unable to isolate [1]. We reviewed the outcomes of patients who received remote Addiction Medicine consultation, onsite clinical support and provision of alcohol during SHA admission, July–October 2021.

As illicit drugs were prohibited in SHA, drug withdrawal due to abrupt cessation risked death or hospitalisation. Identification of substance use occurred during nursing admission assessment with the question ‘Do you have any addiction to alcohol, drugs or tobacco?’.

An alcohol provision guideline was developed for SHA, informed by a harm reduction approach and an understanding of the challenges of isolation. Alcohol provision enabled access to a familiar coping strategy and prevented withdrawal without compromising staff or patient safety [2, 3]. Patients reporting >40 g alcohol/day (four Australian standard drinks) were flagged on admission with nurse unit managers and doctors. The alcohol policy was explained to patients who could place orders with their preferred retailers. Deliveries were provided to patients unless intoxicated, limited daily to 6 × 375 ml beers (5–8 standard drinks) or pre-mixed drinks (9–13 standard drinks), 750 ml wine or champagne (7–8 standard drinks) or 375 ml spirits (11 standard drinks), with a second delivery later in the day (excluding spirits) permitted based on nursing review and discretion. Further variations required escalation to co-directors of nursing, typically where usual consumption significantly exceeded the amounts provided, with medical review as required.

Opioid agonist treatment was provided according to NSW Clinical Guidelines [4, 5]. Pharmacological withdrawal management for substances other than alcohol and

nicotine was in accordance with NSW Withdrawal Guidelines [6].

Onsite assessment and monitoring by nursing and allied health staff was supported by medical and other specialist health care from Royal Prince Alfred (RPA) Virtual Hospital. Addiction Medicine consultation was provided remotely by RPA Hospital Drug Health Services. RPA Pharmacy delivered prescribed withdrawal medication for nurses to administer.

SHA was an untested high-risk environment for withdrawal management, with reduced visual surveillance of patients in an apartment environment. Clinician experience was varied and most were not trained in Addiction Medicine.

We retrospectively collected data from electronic medical records. Severe withdrawal was defined as delirium, delirium tremens, seizure or psychosis attributable to alcohol and other drug (AOD) withdrawal. Sydney Local Health District (LHD) Human Research Ethics Committee (X21-0473) approved the study.

A total of 5810 patients were admitted to SHA from 1 July to 31 October 2021. Addiction Medicine consultation was provided to 58 (1.0%): median age 37 years, 23 female, 42 psychiatric co-morbidities, 39 non-Sydney LHD residents, nine homeless. This was a vulnerable patient group with high rates of comorbid mental illness, and the majority were non-Sydney LHD residents, living in social housing or boarding houses, or homeless. Close collaboration across Sydney LHD teams and other government and non-government agencies provided integrated health and social care. It is noteworthy that in the 4 months pre-Delta outbreak (March–June 2021) there were only two SHA Addiction Medicine consultations.

Most were COVID-19 positive on admission while nine were close contacts. Most were admitted from the community, but some transferred from hospital, airport or prison. Eight were detained under Section 62, *Public Health Act 2010* (NSW) to mitigate risks to public health [7]. Section 62 allows authorised medical officers to make

a public health order if a person with COVID-19, or someone exposed to and at risk of developing COVID-19, is behaving in a way that poses a risk to public health. The order allows detainment and treatment for up to 14 days, to reduce the likelihood that the person will spread COVID-19.

AOD issues were identified during nursing admission assessment in most and Addiction Medicine phone consultations occurred on median day two of SHA admission.

Polysubstance use was common, with a mean of three substances used in the past month: 40 were daily nicotine smokers, 28 methamphetamine users, 25 cannabis smokers, 18 heroin users, 18 on opioid agonist treatment, 14 daily alcohol drinkers, 11 illicit benzodiazepine users, 9 gamma-hydroxybutyrate (GHB) users and 1 cocaine user.

Forty daily smokers reported a mean of 14 cigarettes/day. Smoking of self-funded cigarettes on SHA balconies was permitted (unless locked, if self-harm risk), which likely contributed to lower rates of problematic nicotine withdrawal than in hospital. Free nicotine replacement therapy was provided, although only one-quarter of daily smokers utilised this.

Of the 58 persons who received Addiction Medicine consultation, 14 reported daily alcohol drinking, often of substantial quantities: their median consumption was 18 standard drinks per day. Therefore, many were drinking considerably less while in SHA due to the alcohol limits imposed. Three had a history of alcohol withdrawal seizures. At SHA, eight utilised benzodiazepines to manage withdrawal, four continued drinking and two had already completed alcohol withdrawal during recent hospitalisation. Alcohol withdrawal scales were completed by on-site nurses to monitor patients and guide administration of benzodiazepines where prescribed. There were no referrals for severe alcohol withdrawal, suggesting that early identification of at-risk patients, early Addiction Medicine consultation and provision of benzodiazepines and alcohol were effective.

Opioid agonist treatment was continued in 18 and initiated in 11 patients. Two patients were transferred to SHA to maintain daily dosing of methadone, unavailable in other COVID-19 accommodation, and as they were unsuitable for takeaway doses despite increased access during COVID-19 [8].

In the preceding month, 28/58 used methamphetamine and 25/58 smoked cannabis: 16/28 and 9/25 respectively required pharmacological withdrawal management with olanzapine and/or diazepam. 11/58 used illicit benzodiazepines and 8/11 were managed with a tapering regimen. We identified a high frequency of GHB users (9/58 in past month, 7 daily users of 10–100 ml) reflecting the high prevalence of GHB use in polysubstance users (23%) [9]. None had complicated

withdrawal and all were managed with tapering diazepam, plus one with baclofen.

Challenging patient behaviours were seen due to the impact of isolation particularly for those with psychiatric illness, trauma and forensic history. Deteriorating patients were transferred to tertiary hospital by ambulance as needed. Six hospital transfers for AOD issues occurred but all were transferred back to SHA following ED review or brief admission. No severe incidents related to AOD intoxication, withdrawal or deaths occurred. Some continued to use substances by arranging delivery of heroin or other drugs.

Limited alcohol provision appeared safe and may have future applications such as in housing complex lockdowns or quarantine [10]. Alcohol has been made available to patients in other supervised care settings such as managed alcohol programmes [11].

Only 5/58 were available for follow-up via telephone (routine, to offer support and service linkage) at a median of 45 days post discharge. Four out of the five experienced illicit substance withdrawal managed with pharmacotherapy prescribed in SHA, expressed appreciation for support for unplanned withdrawal, and reported reduced substance use since discharge. Low follow-up rates likely introduced selection bias, as those unavailable were likely to have ongoing substance use. Review of medical records demonstrated that 26/58 presented to hospital with AOD issues <90 days post discharge, indicating that ongoing substance use was more extensive than our follow-up suggested.

This observational cohort data suggests that some patients traditionally considered high risk and requiring hospitalisation for AOD withdrawal management might be managed with remote Addiction Medicine support or shared care arrangements with general practitioners. Virtual health appears to be a feasible modality to deliver generalist care with specialist support with clearly defined protocols, at geographical or physical distance, such as in isolation. Accordingly, this approach seems suitable for continuing evaluation in larger cohorts.

## **AUTHOR CONTRIBUTIONS**


Each author certifies that their contribution to this work meets the standards of the International Committee of Medical Journal Editors.

## **CONFLICT OF INTEREST**

The authors have no competing interests or financial disclosures.

## **ETHICS STATEMENT**

Sydney Local Health District (LHD) Human Research Ethics Committee (X21-0473) approved the study.

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