

# **Understanding Drug Abusers and Their Healthcare Pathway: Towards Better Management in Hong Kong**

## **Executive Summary**

This study investigated the characteristics of people with a diagnosis of substance abuse and who require treatment in Accident and Emergency (A&E) departments. We also looked at their use of public hospital resources in Hong Kong to better understand the needs of this patient group.

Using the Hospital Authority's electronic medical database, we found a total of 8,423 patients with a diagnosis of substance abuse who went to a Hospital Authority A&E department at a Hong Kong Hospital between 2004 and 2016. Using big data methods, we analysed their medical conditions, patterns of A&E attendances and hospitalisations and compared how healthcare resources were used by patients with and without substance abuse.

Among the patients who attended A&E, the substances most frequently used were opioids (2,395 cases, 27.1%), followed by ketamine (2,177, 24.6%), barbiturate/hypnotics (656, 7.4%), amphetamines (592, 6.7%) and cocaine (181, 2.0%). Opioids and ketamine are the two main substances that contribute to patients with substance abuse returning to hospital. About 40% of patients with substance abuse also had a mental disorder. Patients with substance abuse attended A&E more often (7.49 versus 3.07,  $P < 0.001$ ), had more hospital admissions (3.32 versus 1.29,  $P < 0.001$ ), and stayed longer in hospital (27.62 days versus 8.46 days,  $P < 0.001$ ) than those without substance abuse.

The public healthcare system in Hong Kong can be stretched by excess A&E and hospital visits. To reduce the burden on public healthcare resources and prevent unnecessary hospital visits, early intervention is needed to help patients with substance abuse get the treatment and care they need.