

International Journal of Population Data Science

Journal Website: www.ijpds.org



RELEASE: demographic and criminological differences in post-imprisonment mental health and substance use-related service use

Jan Savinc¹, Richard Kjellgren², Catriona Connell², Nadine Dougall³, Amanj Kurdi⁴, Alastair Leyland⁵, Jim Watson⁶, and Kate Hunt⁷

¹Edinburgh Napier University, Edinburgh, United Kingdom; Scottish Centre for Administrative Data Research, Edinburgh, United Kingdom

²University of Stirling, Stirling, United Kingdom; Salvation Army Centre for Addiction Services and Research, Stirling, United Kingdom

³Edinburgh Napier University, Edinburgh, United Kingdom

⁴University of Strathclyde, Glasgow, United Kingdom

⁵University of Glasgow, Glasgow, United Kingdom

⁶University of West of Scotland, Ayr, United Kingdom

⁷University of Stirling, Stirling, United Kingdom

To (1) describe the demographic, health* and criminological characteristics of people released from prison; (2) examine their associations with post-imprisonment service use. Retrospective observational cohort study of all individuals released from Scottish prisons in 2015 ($n=8,313$). Scottish Prison Service data were linked with records covering community prescriptions, death registrations, admissions to general and psychiatric hospitals, outpatient contacts, and unscheduled care. Four years of service use before and following the release (index) date were extracted. Incidence rates for service contacts with a diagnosis or code related to mental health (MH) or substance use (SU) across all nine services were computed, adjusted for time-in-community. Negative binomial models were fitted to estimate the rates of service contact per time-in-community for each service. The cohort was

92% male, 97% white, 96% heterosexual, and 45% from large urban areas. Mean index age was 34.8 ($SD=10.8$) years, and pre-index mean days in prison were 524 ($SD=433$). Prior service contact was a strong predictor of service contact in the follow-up period, especially for inpatient and emergency contacts. Time in prison, and the number of prison episodes, were associated with higher rate of service contacts, as was female sex and disclosed disability. Age and release type had varied effects across services. It is vital for policymakers and practitioners in health and criminal justice to review how they accommodate varied population needs, and to minimise the iatrogenic harms of imprisonment. Linkage of prison and health records enables unique insights into this vulnerable and overlooked population.

