

# Changes in needle and syringe presentations point to the successes of Australian harm reduction policy and practice

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The effectiveness of needle and syringe programs (NSPs) at preventing transmission of HIV among people who inject drugs is well documented, with increasing evidence of their role in preventing the spread of hepatitis C virus.<sup>1,2</sup> Australia, in particular, has earned a well-deserved reputation as an international leader in this harm reduction space following the establishment of the first NSP in Sydney in 1986.<sup>3</sup> Since then, the establishment of an Australia-wide harm reduction program, providing sterile needles and syringes, anonymously, with no or very few restrictions on service provision, and via multiple models of delivery, has helped avert an HIV epidemic among people who inject drugs and led to needle/syringe coverage levels among the highest internationally.<sup>3</sup>

The NSP National Minimum Data Collection (NSP NMDC) project, implemented since 2016, provides information on the dynamic nature of needle/syringe provision to people who inject drugs via Australia's network of NSPs.<sup>4</sup> Importantly, the latest iteration of the report points to the changing nature of needle/syringe provision across the country, highlighting both areas of success and room for improvement.

The 2021 NSP NMDC report estimates a relatively stable population of ~74,000 Australian people who inject drugs between 2011/12 and 2020/21.<sup>4</sup> Despite this stability in population, 'occasions of service' provided by any NSP-type (defined as contact between NSP staff and a NSP client for needle/syringe dispensation/disposal, advice or related services) declined by 30% between 2017-2021, from an estimated 765,000 annual occasions of service to 525,000.<sup>4</sup> This trend was accelerated by the COVID-19 pandemic in 2020.<sup>4</sup> However, in the same period, there was a 16% increase in the total number of national NSP outlets (a combination of primary/secondary NSPs, syringe dispensing machines and pharmacies; from 3,627 outlets to 4,218), and a 2.5% increase in the total number of needles/syringes distributed (49 million–50.2 million), although if COVID-19 limitations on distribution in 2020/21 are discounted, the increase to the 2019/20 year was 18% (49 million–57.8 million).<sup>4</sup> The Australian NSP Survey (ANSPS) also reports a significant decline in receptive needle/syringe sharing (injecting with another person's previously used needle/

syringe) among NSP clients between 2016 and 2020 (19% to 16%), though without a matched decline in sharing of ancillary injecting equipment (e.g. spoons, filters, etc.).<sup>5</sup> Together, these trends point to the significant successes of NSPs in Australia.

While the data show a drop in presentations at NSPs by nearly a third over the past five years, national needle/syringe distribution and coverage is near its highest ever levels, suggesting that over time, NSP clients have become increasingly enabled to acquire greater numbers of needles/syringes in fewer visits. In many settings, NSPs are a normalised facet of the public landscape, often integrated within general health services, such as community clinics and hospitals, greatly increasing NSP accessibility. People who inject drugs can access sterile injecting equipment on a near unlimited basis, principally without the need for exchange (with some exceptions across jurisdictions).<sup>3</sup> Low threshold distribution allows people who inject drugs to acquire needles/syringes over and above their immediate needs and store for later, a practice associated with greater coverage at the individual level.<sup>6</sup>

Though these data are encouraging, there remains room for improvement. Despite reports of receptive needle/syringe sharing declining over the 2016-2020 period,<sup>7</sup> 16% of ANSPS respondents reporting the practice in the last month remains very high. While the expansion of NSP sites and modalities is dominated by pharmacies,<sup>4</sup> the proportion of needles/syringes distributed via pharmacies has remained stable between 2017-2021, suggesting the increase in distribution is primarily via services designed for people who inject drugs, such as primary/secondary NSPs.<sup>4</sup> Access to these targeted services should be increased as much as possible, particularly as prior research suggests lower coverage among those primarily acquiring injecting equipment via non-NSP sources, such as pharmacies.<sup>8</sup> Further, restrictive NSP distribution policies, such as those based on the exchange of previously used needles/syringes, have previously been associated with reduced coverage at the individual level.<sup>9</sup> To optimise coverage, the highest level of access to sterile injecting equipment should be prioritised, both by increasing the availability of low-threshold, highly accessible, public NSP distribution and by

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exploring novel distribution methodologies. While the reported trend was apparent prior to the COVID-19 pandemic,<sup>4</sup> changes in distribution practices in response to COVID-19 public health measures may provide some guidance. For example, some NSPs expanded outreach services, such as mobile home delivery and postal distribution services.<sup>10,11</sup> Such innovations, if sustained, may help further increase NSP coverage.

Australia is rightly recognised internationally as a global leader in harm reduction, including NSPs,<sup>3</sup> with recent data suggesting that even as NSP clients may be minimising or reducing their frequency of interaction with services, low-threshold policies mean it is still possible to increase needle/syringe acquisition and hence, improve coverage. However, despite our successes, injecting risk, particularly the receptive sharing of needles and syringes, persists at high levels and needs to be further reduced, potentially by increasing the number of targeted primary/secondary NSPs and access to these services.

### Conflict of interest

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