

# Peer-delivered needle and syringe services result in a significant reduction in receptive syringe sharing

Harrod ME<sup>1</sup>, Trist, A<sup>1</sup>, Pepolim L<sup>1</sup>, Geddes L<sup>2</sup>, Iversen J<sup>2</sup>

<sup>1</sup>NSW Users and AIDS Association

<sup>2</sup>Kirby Institute for Infection and Immunity in Society

## Factors associated with receptive syringe sharing

### Relationships:

- San Francisco: Living with and being in a sexual relationship with an injecting partner (Morris et al, 2014)

### Policing

- Russia: Extrajudicial arrests for needle possession (Lunze et al, 2014)
- USA: Police hassling PWUD (Wagner, 2013)
- Mexico: Police hassling PWUD (Volkman, 2011)

### Experience/cultural factors

- USA, Australia: being younger (Broz, 2014; Horyniak, 2013)
- USA: Recent migration from Puerto Rico (Gelpi-Acosta, 2011)

## **Factors associated with receptive syringe sharing in Australia**

- **Being a bisexual woman (Iversen et al, 2015)**
- **Homelessness (Topp, 2013)**
- **Accessing syringes exclusively from pharmacies (Bryant, 2010)**

## **Factors associated with reductions in receptive syringe sharing**

- **California: Syringe Exchange Programs with “distributive” policies – distribution according to need rather than how many syringes were returned had lower odds of reusing syringes (OR = 0.43, 95% CI = 0.27, 0.71)**
- **Mexico: Increasing self-efficacy around injecting behavior through an interactive intervention (Pitpitan, 2016)**



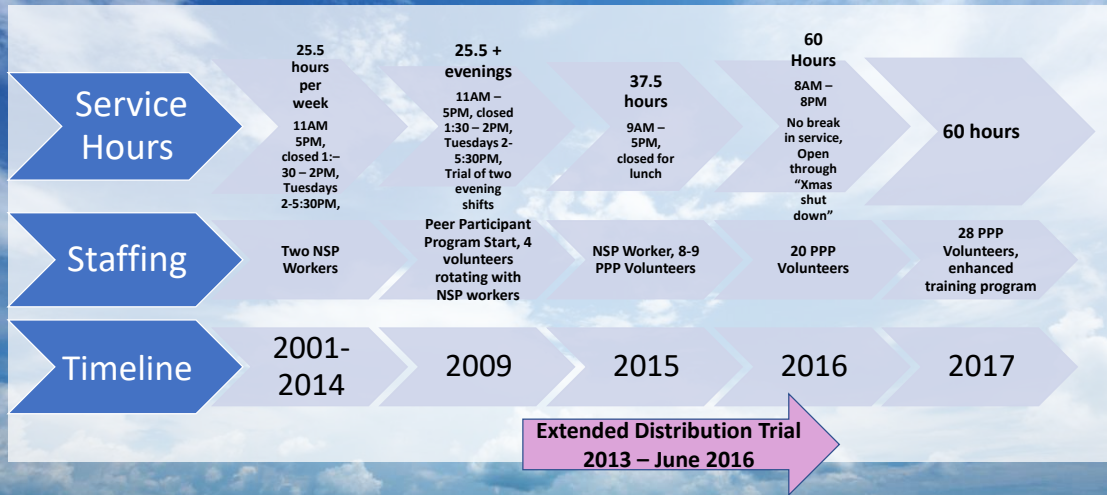
## **NUAA NSP**

- **NSP started in 1980s with peers involved from the inception**
- **NUAA (the agency) established in 1989 with peer distribution component of services**
- **NSP part of our current performance agreement**
- **In 2015 we increased resources to NSP services**
  - **Volunteer training enhanced**
  - **Support for volunteers increased**
  - **Aimed to establish evidence base for peer-delivered NSP**

## **Overview of NUAA Service**

- **Staffed by peer worker and team of peer volunteers**
- **No limits**
- **Self-service**
- **Opening hours continuous from 8AM – 8PM**
- **Volunteers participate in monthly training including harm reduction, brief interventions, advocacy, boundaries**

# Timeline and overview of Crown Street NSP



# The evolution of volunteer training



2009

- EOI
- Induction to NUAA and NSP
- On-site training



2010 onwards

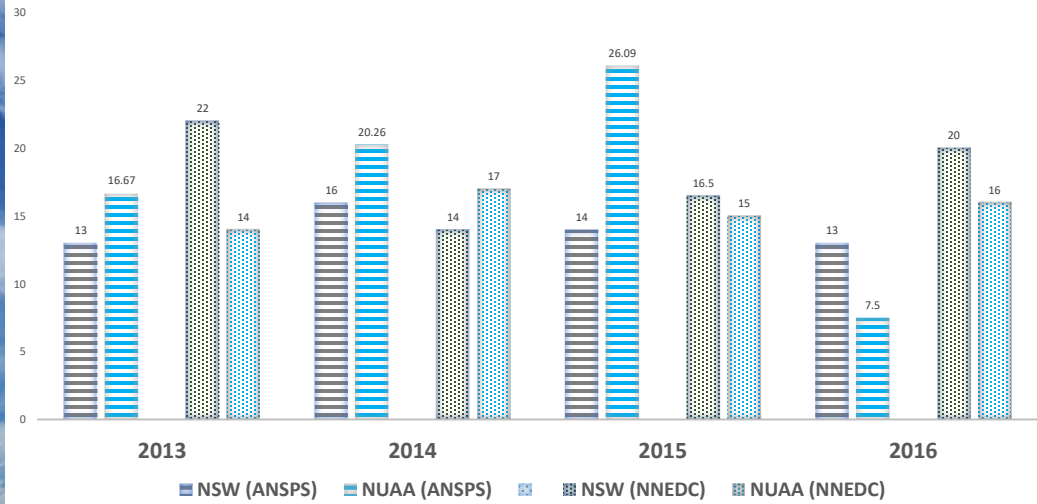
- EOI
- Induction to NUAA and NSP
- Buddy shifts



2016-2017

- EOI
- Induction
- Training
  - NSP
  - Safer Using
  - Peer Education
  - Brief Interventions
  - Advocacy
  - Computer skills

### RECEPTIVE SYRINGE SHARING PREVIOUS MONTH, 2013 - 2016 – NSW VS NUA A



## NNEDC 2017: Methods

- NNEDC: NSW NSP Enhanced Data Collection
  - Funded by NSW Ministry of Health, conducted by the Kirby Institute
  - Conducted over a 2-week period annually (in February/March)
  - N=30 primary and n=20 secondary NSP services participated in 2017
- Survey measures all occasions of service
  - 5,378 total occasions of service in NSW
  - 560 occasions of service at NUA A NSP → 10% of NSW
- Service users only complete survey once
  - 3,607 individual participants across NSW
  - 344 individual participants at the NUA A NSP → 10% of NSW



## Results: Demographic NUAA vs NSW

Variable	NUAA	NSW	OR	95% CI
Gender = Female	18.52	26.28	0.64	0.47 – 0.89
Gender = Trans	0.22	2.22	7.69	2.5 – 24.1
Sexual preference = bisexual	11.11	7.30	2.03	1.3 – 3.1
Sexual preference = homosexual	5.49	24.11	5.94	4.2 – 8.4
Age = older than 46	37.04	30.8	1.42	1.04 – 1.94
Less than three years experience injecting	5.56	11.15	0.46	0.27 – 0.8
Last drug injected = PIEDS	2.22	15.09	0.13	0.06 – 0.30
Homeless	37.04	24.47	1.82	1.39 – 2.37
On Centrelink	67.78	60.62	1.37	1.04 – 1.78
Mental health issues	26.67	21.28	1.34	1.07 – 1.79
Arrest in previous 12 months	23.33	16.99	1.49	1.10 – 2.01
Present at Overdose	14.81	8.89	1.78	1.24 – 2.57
Sexual relationship with PWID	11.11	7.39	1.57	1.04 – 2.36

## Results: Sharing variables

- **Receptive syringe sharing previous month**
  - NUAA = 15.19
  - NSW = 20.31
  - OR = 0.7, CI {0.49 – 0.99}
- **Distributive sharing previous month**
  - NUAA = 11.11
  - NSW = 7.39
  - OR = 1.57, CI {1.04 – 2.36}

## Results: Logistic regression

- Service users who attended the NUAA NSP were less likely to:
  - Use a syringe after it has been used by another person
  - Be female
  - Last drug injected was performance and image enhancing drug
- Service users who attended the NUAA NSP were more likely to:
  - Identify as bisexual
  - Identify as homosexual
  - Have been homeless in the previous 12 months
  - Have been present at an overdose in the previous 12 months

## Discussion

- Expansion of NSP was done with **NO INCREASED ORGANISATIONAL RESOURCES** rather a re-focus of priorities
- Increased hours and focus on service delivery resulted in a concomitant increase in occasions of service, volume of equipment distributed has also increased
- NUAA NSP has consistently had a lower rate of receptive sharing than non-peer staffed NSP services
- Rate of RSS at NUAA service lower in spite of greater proportion of high-risk service users. Our rates are significantly lower than other services in our area (South East Sydney Local Health District)
- These findings are consistent with the Australian Needle and Syringe Program Survey (ANSPS or “fingerprick” survey) where NUAA RSS was 7.5% vs 19.3% in the rest of Australia (n=40, p=0.06)



## **Conclusion**

- **A focus on service delivery and health education results in improved outcomes (!)**
- **If you give people who inject drugs the tools to look after their health in a stigma-free service, they'll look after their health**
- **We must work towards a environment where identified peer workers are part of the standard of care in all harm reduction services**

## **Acknowledgements**

- **The NSW Users and AIDS Association is funded by the NSW Ministry of Health (thank you for your 30 years of continuous support!)**
- **We are also grateful to the Central and Eastern Sydney Primary Health Network who have funded our volunteer program**
- **Paul Giblin, Louise Aquilina, Andrew Trist and our team of volunteers were instrumental in recruiting survey participants in 2017**
- **Lucy Pepolim has been training and supporting NUAA volunteers since 2010**
- **Big thank you to service users and survey participants**