

### Strategy 3.3: Foster partnerships for collaborative research

#### *HIV prevention revolution: the NSW HIV Prevention Partnership Project*

The NSW HIV Prevention Partnership Project is a priority-driven population health research project. This project was successful in attracting competitive grant funding in the NHMRC Partnership Project Grants Scheme, and additional funding from UNSW, to leverage the investment from NSW Health. It was established to undertake monitoring and evaluation activities to assess progress and inform the implementation of the 2012-2015 and 2016-2020 NSW HIV Strategies. The principal partners are NSW Health and the Kirby Institute at UNSW Sydney. Other project partners are the AIDS Council of NSW (ACON) and Positive Life NSW, The Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM), and the Centre for Social Research in Health at UNSW Sydney.

The *NSW HIV Strategy 2016-2020* set an ambitious goal for the virtual elimination of HIV transmission in NSW. The realisation of this goal requires maximising the benefits of new biomedical approaches to HIV prevention, such as rapid HIV testing, pre-exposure prophylaxis (PrEP) for people at high risk of HIV infection, and antiretroviral treatment for people diagnosed with HIV. NSW Health has invested heavily in these HIV prevention strategies and improved monitoring systems were needed to assess the targeting of prevention strategies, and to identify and address gaps.

The project has built population health research capability among project partners through enhancing existing data collection systems and supporting the creation of new systems. One example was to expand coverage of the existing ACCESS network and support the implementation of software at publicly funded sexual health clinics and general practices that anonymously links patients between different services. This network has extremely high coverage of gay and bisexual men and people living with HIV, two key groups for HIV prevention programs. The linkage process has enabled the creation of virtual population-level cohorts to monitor key prevention indicators, such as HIV testing frequency and the proportion of people with HIV who maintain an undetectable HIV viral load, which renders them non-infectious. This system then formed the basis of data collection for the EPIC-NSW trial of HIV PrEP, allowing clinics to enrol a large number of trial participants rapidly, and so making a major contribution to the falling rates of HIV infection in NSW.

Working groups with representatives from project partners meet regularly to review and advise on monitoring data in key HIV prevention modalities: HIV testing, PrEP, HIV treatment, behavioural risk surveillance, and molecular epidemiology. The involvement of policymakers, program implementers, clinicians and researchers in all aspects of the project has enabled rapid research translation into policy and practice change. A culture of collaboration between the key organisations has flourished, cementing partnerships for the implementation of the HIV Strategy and extending to other projects, including the HIV pre-exposure prophylaxis trial, EPIC-NSW, demonstrating *Population Health Research Strategy 3.3 (Foster partnerships for collaborative research)*.

Some key outputs from the project have been the ongoing contribution of data to the *NSW HIV Strategy Quarterly Data Reports*, which publish all key HIV monitoring data in NSW, and a paper published in the peer review literature which demonstrated that in 2016 NSW was, after Sweden, the second jurisdiction in the world to meet the UNAIDS 90-90-90 targets for the diagnosis and treatment of people living with HIV. Several other publications are currently being written that will describe the project processes and outcomes.

#### Further reading

Keen P, Gray RT, Telfer B, Guy R, Schmidt HM, Whittaker B, et al. The 2016 HIV diagnosis and care cascade in New South Wales, Australia: meeting the UNAIDS 90-90-90 targets. *J Int AIDS Soc* 2018; 21(4): e25109.

Di Giallonardo F, Pinto AN, Keen P, Shaik A, Carrera A, Salem H et al. Limited sustained local transmission of HIV-1 CRF01\_AE in New South Wales, Australia. *Viruses* 2019; 11(5). pii: E482.

Grulich AE, Guy R, Amin J, Jin F, Selvey C, Holden J, et al; Expanded PrEP Implementation in Communities New South Wales (EPIC-NSW) research group. Population-level effectiveness of rapid, targeted, high-coverage roll-out of HIV pre-exposure prophylaxis in men who have sex with men: the EPIC-NSW prospective cohort study. *Lancet HIV* 2018; 5(11): e629-37.

Zablotska IB, Selvey C, Guy R, Price K, Holden J, Schmidt HM, et al; EPIC-NSW study group. Expanded HIV pre-exposure prophylaxis (PrEP) implementation in communities in New South Wales, Australia (EPIC-NSW): design of an open label, single arm implementation trial. *BMC Public Health* 2018; 18(1): 210.