

## HIV transmission in MSM: considerations for PrEP scale-up

The modelling exercises described in Narat Punyacharoensin and colleagues' study<sup>1</sup> in *The Lancet HIV* show the value of incorporation of pre-exposure prophylaxis (PrEP) into combination HIV prevention in men who have sex with men (MSM).<sup>2</sup> Through a well conceived set of simulations, the investigators examined the number of infections that could be averted in MSM in the UK by use of PrEP, HIV testing, treatment of HIV-infected individuals, and sexual risk reduction.<sup>3,4</sup> Punyacharoensin and colleagues estimated that the greatest number of infections would be prevented in a practical combination prevention programme that included PrEP alongside annual HIV testing for HIV-negative men and immediate treatment for HIV-positive men. In addition to promising findings from the PROUD study,<sup>5</sup> in which PrEP reduced the risk of HIV infection in MSM by 86%, the evidence is mounting for national policies in the UK and elsewhere that incorporate PrEP as a viable and accessible prevention strategy for MSM.

Punyacharoensin and colleagues' models also emphasise the importance of effective scale-up. The investigators estimated that the numbers of infections averted would be more heavily affected by variations in the proportion of MSM receiving PrEP than by variations in its efficacy.<sup>1</sup> This finding warrants consideration because PrEP scale-up requires a unique combination of expertise and engagement. Traditionally, HIV intervention efforts have differed by recipient serostatus and location of delivery. For HIV-negative individuals, the main goals are prevention and screening, which involve discrete services, such as HIV testing, that are often delivered in community-based organisations or sexual health clinics. These services are segregated from other parts of the health-care system, partly to minimise the effect of stigma.<sup>6</sup> Indeed, young and middle-aged MSM might avoid primary care facilities for their sexual health needs because they fear discrimination.<sup>7</sup> For HIV-positive individuals, the main goal is treatment, which requires ongoing interaction with medical facilities. Delivery of PrEP does not fit neatly into this existing health-care delivery system: it is an intervention for HIV-negative individuals that requires medical expertise and ongoing interaction with the health-care system.

To enable the scale-up of PrEP to effective coverage levels, the public health system must strengthen ties among

community-based organisations, sexual health clinics, and medical providers. These efforts could parallel those for linking of newly diagnosed individuals from testing to care sites,<sup>8</sup> but they could also take different forms, such as medical providers overseeing PrEP programmes at community-based organisations. The diversified expertise arising from collaboration among these different partners would better position the health-care system to address the barriers to uptake and use of PrEP. To maximise success, PrEP implementation needs to include the ability to engage with MSM communities and reach high-risk individuals, and should provide a point of access that is convenient and does not elicit fears of stigma, adherence counselling and monitoring for drug side-effects to ensure that individuals use PrEP effectively, and support for the uptake of complementary behavioural prevention strategies (eg, reduced number of partners and condom use). Additionally, medical providers need guidance about how to manage patients receiving PrEP, and how drug and ancillary care costs should be covered.<sup>9,10</sup> Finally, gay communities should be mobilised and educated about PrEP use and its use not only in prevention of HIV transmission but also in promotion of sexual health and wellbeing.<sup>11,12</sup>

Collaboration among community-based organisations, sexual health clinics, and medical providers would aid the rollout of these complementary components of a PrEP programme and promote cross-training and capacity building. Community-based organisations could assist with community outreach and education, while medical providers could increase capacity and cultural competency in provision of PrEP to MSM. Medical providers might benefit from improved skills during discussions of sexual health, which would help to ensure that at-risk individuals can comfortably ask primary care providers about PrEP, and community-based organisations might benefit from enhanced in-house expertise about biomedical forms of intervention, which would better position them to respond to new prevention approaches and improve upon services to complement medical care for HIV-infected individuals.

Punyacharoensin and colleagues' models emphasise the potential effect that PrEP could have on the HIV epidemic. Work should now be done at the health systems and policy levels to help realise that effect.

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