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- Schaefer R, Schmidt H-MA, Ravasi G, et al. Adoption of guidelines on and use of oral pre-exposure prophylaxis: a global summary and forecasting study. Lancet HIV 2021: 8: e502–10.
- 2 Zhang J, Li C, Xu J, et al. Discontinuation, suboptimal adherence, and reinitiation of oral HIV pre-exposure prophylaxis: a global systematic review and meta-analysis. *Lancet HIV* 2022; **9**: e254–68.

- Phillips AN, Bershteyn A, Revill P, et al. Cost-effectiveness of easy-access, risk-informed oral pre-exposure prophylaxis in HIV epidemics in sub-Saharan Africa: a modelling study. *Lancet HIV* 2022; **9**: e353–62.
- 4 Koss CA, Havlir DV, Ayieko J, et al. HIV incidence after pre-exposure prophylaxis initiation among women and men at elevated HIV risk: a population-based study in rural Kenya and Uganda. PLoS Med 2021; 18: e1003492.
- 5 Ortblad K, Mogere PA, Omollo V, et al. Pharmacy-based PrEP initiation and continuation in Kenya: findings from a pilot. Conference on Retroviruses and Opportunistic Infections; Feb 12–16, 2022 (abstr 928).
- 6 Pascom ARP, Veras N, Pinho REG, et al. Impact of COVID-19 pandemic on HIV care in Brazil. Conference on Retroviruses and Opportunistic Infections; March 6–11, 2021 (abstr 741).
- 7 Schmidt H-MA, Schaefer R, Nguyen VTT, et al. Scaling up access to HIV pre-exposure prophylaxis (PrEP): should nurses do the job? *Lancet HIV* 2022; published online March 28. https://doi.org/10.1016/ S2352-3018(22)00006-6.
- 8 Vannakit R, Janyam S, Linjongrat D, et al. Give the community the tools and they will help finish the job: key population-led health services for ending AIDS in Thailand. J Int AIDS Soc 2020; **23:** e25535.
- 9 Ngure K, Ortblad K, Mogere PA, et al. Six-month PrEP with HIV self-testing to improve delivery in Kenya: a randomized trial. Conference on Retroviruses and Opportunistic Infections; Feb 12–16, 2022 (abstr 146).



## Can COVID-19 changes reduce stigma in African HIV clinics?

Published Online March 22, 2022 https://doi.org/10.1016/ \$2352-3018(22)00045-5 There is an extensive body of literature showing that HIV stigma is a barrier to HIV care at every level of the care cascade.<sup>1</sup> HIV stigma reduces HIV testing, disclosure, engagement in treatment, adherence to medication, and retention in care.<sup>2</sup> Stigma is also related to poor social support and increased depression, both of which worsen health outcomes.<sup>1</sup>

HIV stigma interventions that have been proposed and completed globally show small, targeted changes in stigma; however, overall, the efficacy of stigma interventions is disappointing,<sup>3,4</sup> perhaps because interventions are often designed by those outside the communities served. Thus, although further work on stigma interventions is vital, particularly those that have been initiated locally with the involvement of community members, perhaps in order to improve HIV care the focus should be shifted to clinic systems.

Since the late 2000s, standard HIV drugs and care models have been used in low-income countries. Individuals came to the clinic in the morning, waited in a large area to see the clinicians, queued for drugs in a communal space, and received adherence counselling in a public place. Although efficient and convenient for the providers, this strategy has led to care delivery that does not protect the privacy of people with HIV and promotes inadvertent disclosure of HIV status. Many surveys and studies show clients will go to a clinic further away to avoid disclosure of HIV status. Clients cite poor privacy as a substantial barrier to HIV care and express their desire for changes to this care model.<sup>5</sup>

Similar to privacy concerns, there is a concern around the use of resources. Usual care includes a clinic visit at least quarterly to see a clinician and collect medication. These frequent visits are a substantial time and transportation burden to those presenting for care. Additionally, visits with people who are stably virally suppressed reduces time for people newly presenting for care or those struggling with treatment. In the USA and elsewhere, people with virally suppressed HIV are seen only once or twice a year. For years there have been calls for differentiated service delivery (DSD) models that aim to make treatment more clientcentred by reducing clinic visits,<sup>6</sup> and which seek to reduce costs to the client and the facility. DSD models also aim to improve health outcomes.<sup>6</sup> However, institutional inertia, among other constraints, has prevented these DSD models from being implemented systematically.7

During the COVID-19 crisis, HIV clinics globally pivoted their care delivery model. Virtual visits became the norm in the USA and other high resource settings. In low resource settings in sub-Saharan Africa, such as Uganda, clinics implemented social distancing practices for both staff and clients. Clinics called each client to check-in, sent drugs in larger quantities via motorcycle taxis, switched from open clinics to scheduled clinics, and reduced barriers to those transferring between clinics or obtaining drugs from the client's non-primary clinic due to travel restrictions.<sup>8</sup> The focus deprioritised visits for long-term virally suppressed individuals, to visits for individuals with acute issues, new diagnoses, or for those newly re-initiating care. Although these strategies help reduce transmission of SARS-CoV-2, they might offer an opportunity to improve privacy and care delivery with an unintended but essential effect on reducing stigma.

All these innovative methods to reduce clinic volume would probably improve privacy. Fewer people in a clinic would reduce the likelihood of unintentional disclosure. Clinicians could provide medications in larger quantities via mobile dispensation or via a person of contact for multiple co-located individuals. Shifting the focus to clients newly presenting for care could improve engagement and allow time for assisted disclosure to partners and case tracking. As the community becomes aware that clinics are more private than before, stigma about attending clinics might reduce over time. These changes are in line with advocacy initiatives.<sup>6</sup> The pandemic could be a catalyst for change.

Overall, the COVID-19 crisis has been devastating globally, especially in resource-limited areas.<sup>8</sup> However, the pandemic also presents an opportunity. As health-care systems have adapted to reduce the risk of SARS-CoV-2 transmission, they have shown that there is bandwidth for new care delivery models that might be more client-centred.<sup>9</sup> Additionally, improving clinic privacy would have many downstream improvements for the HIV care cascade. The global pandemic might have shifted institutional inertia, which could provide an opportunity to enact these changes.<sup>10</sup> During the

pandemic, the full implementation of changes, especially those requiring staff oversight, might be difficult to achieve given the risk of acquiring COVID-19; however, in the long term, making changes to the health system for HIV care could be powerful.

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- 1 Turan B, Budhwani H, Fazeli PL, et al. How does stigma affect people living with HIV? The mediating roles of internalized and anticipated HIV stigma in the effects of perceived community stigma on health and psychosocial outcomes. AIDS Behav 2017; 21: 283–91.
- 2 Rueda S, Mitra S, Chen S, et al. Examining the associations between HIV-related stigma and health outcomes in people living with HIV/AIDS: a series of meta-analyses. BMJ Open 2016; 6: e011453.
- 3 Mak WWS, Mo PKH, Ma GYK, Lam MYY. Meta-analysis and systematic review of studies on the effectiveness of HIV stigma reduction programs. Soc Sci Med 2017; 188: 30–40.
- 4 Smith MK, Xu RH, Hunt SL, et al. Combating HIV stigma in low- and middleincome healthcare settings: a scoping review. J Int AIDS Soc 2020; 23: e25553.
- 5 Lofgren SM, Tsui S, Atuyambe L, et al. Barriers to HIV care in Uganda and implications for universal test-and-treat: a qualitative study. AIDS Care 2021; published online July 27. https://doi.org/10.1080/09540121.2021.1946000.
- Huber A, Pascoe S, Nichols B, et al. Differentiated service delivery models for HIV treatment in Malawi, South Africa, and Zambia: a landscape analysis. Glob Health Sci Pract 2021; 9: 296–307.
- 7 ICAP Global Health. Differentiated service delivery in Uganda. https:// cquin.icap.columbia.edu/the-work/uganda/ (accessed Feb 4, 2022).
- 8 Linnemayr S, Jennings Mayo-Wilson L, Saya U, et al. HIV care experiences during the COVID-19 pandemic: mixed-methods telephone interviews with clinic-enrolled HIV-infected adults in Uganda. AIDS Behav 2021; 25: 28–39.
- Grimsrud A, Ehrenkranz P, Sikazwe I. Silver linings: how COVID-19 expedited differentiated service delivery for HIV. J Int AIDS Soc 2021; 24 (suppl 6): e25807.
- 10 Rosen S, Grimsrud A, Ehrenkranz P, Katz I. Models of service delivery for optimizing a patient's first six months on antiretroviral therapy for HIV: an applied research agenda. Gates Open Res 2020; 4: 116.