

What is likely to have happened in November 2020 is that the switch from nevirapine to dolutegravir has resulted in the removal of the effect of the NNRTI on warfarin activity. This effect was not immediately captured by INR (that resulted apparently in range) because nevirapine has a terminal half-life of 30 h; accordingly, the drug was present in the body for at least 2 weeks after its discontinuation. Subsequently, when dolutegravir completely replaced nevirapine, there was a remodelling of the activity of warfarin that resulted in the episodes of bleeding, confirmed later by the very high INR values. The COVID-19 pandemic has complicated the situation, hampering the proper INR assessment during the switch from nevirapine to dolutegravir. The adjustments in the warfarin dosing, made by the patient independently without consulting with her doctors engaged in COVID-19 clinics, did not reduce INR, leading to suboptimal control of anticoagulant therapy. Noteworthy, a shift from warfarin to a direct oral anticoagulant (edoxaban or dabigatran) was recommended from healthcare providers of GAP outpatient clinic to minimize DDIs and improve the quality of life of the patient.

In conclusion, this is a good example on how the lack of a DDI may potentially become clinically relevant if not properly managed. We believe that our case could be instrumental to recall on the importance of a careful assessment of the overall therapies before embarking in antiretroviral treatment switches even with potentially DDIs-free regimens, particularly in situations characterized by a limited patient monitoring, as in the COVID-19 pandemic. Accordingly, the US Guidelines for HIV/AIDS suggest that persons for whom a regimen change is planned should consider delaying the switch until close follow-up and monitoring are possible [7].

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outpatient visits. M.B. and C.R. analysed the data. This study was carried out as part of our routine work.

Conflicts of interest

There are no conflicts of interest.

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Employing telehealth within HIV care: advantages, challenges, and recommendations

The coronavirus disease 2019 (COVID-19) pandemic has added new challenges to providing care for people with HIV (PWH) [1,2]. However, challenges also present opportunities, and COVID-19 has catalyzed the implementation of telehealth [3], which may improve care for

HIV and co-occurring behavioral health issues. The latter is important given 48% of PWH in the United States struggle with substance use disorders (SUDs) [4], and 50% have unmet behavioral health needs [5]. Before COVID-19, telehealth services for SUDs were underused but

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regulatory changes may support expansion of telehealth for SUD treatment [6]. Below, we discuss key advantages and challenges of telehealth, and offer recommendations to address these challenges.

Employing telehealth within HIV care has several key advantages. One is reducing stigma-related delays in care. For example, many PWH report high levels of stigma and consequent self-isolation [7]. However, virtual platforms can help mitigate some of the perceived intimidation associated with face-to-face treatment, especially as virtual spaces unencumber clients from fears of running into someone they know or being seen on their way to or from an appointment [8]. A second is improving access to care. Transportation issues are a common barrier to care for HIV and behavioral health [9], yet this barrier may be eliminated when one has the option of an appointment from their home. Using an online format may also help increase the availability of convenient appointment times, broaden access to care for those living in rural areas, and increase access to a wider range of specialists [10]. A third is providing administrative and financial benefits. No-show appointments have negative effects on healthcare systems including providers' workflow, healthcare costs, capacity of healthcare clinics, and patient satisfaction because of wait times [11]. Offering telehealth sessions may lead to reductions in no-show appointments, greater flexibility in scheduling, and lower overhead costs associated with service provision.

Employing telehealth within HIV care also has several key challenges. First, virtual therapy sessions require a basic set of technological resources and readiness for online interactions. However, clients with financial struggles may lack devices with these options or may not have access to sufficient cellular data needed to use telehealth cost-efficiently. Second, there are learning curves to using digital platforms. Learning to navigate virtual platforms and complete electronic paperwork requires a certain level of technological savviness, which can be intimidating or unintentionally alienating for individuals with lower literacy skills or limited experience with the type of technology [12]. Third, many have concerns about privacy. Privacy concerns and distrust of advanced technology that stem from security breaches occurring globally could reduce patients' willingness to seek telehealth treatment [13]. Indeed, concerns regarding the safety of private information in the context of telehealth were frequently cited in a survey of PWH conducted before the pandemic [14]. Finally, employing telehealth can be challenged because of concerns of losing the intimacy of face-to-face interactions. The strength of the personal connection between clinician and patient is often the main determinant of successful behavioral health interventions. Personal connection is limited in the virtual space as body language is less visible, and verbal communication is more easily misinterpreted. In a pre-pandemic survey, PWH raised concerns about effective communication during telehealth

sessions [14]. Further, many clients struggle to find a private space for virtual sessions, such as clients who live with partners who may be abusive or do not know their serostatus or clients living in group homes [15].

To help overcome challenges to implementing telehealth, we offer the following strategies:

1. To improve accessibility, low-cost, short-term solutions include distributing smartphones and hot spots or covering monthly fees to enable Wi-Fi and mobile app use. In the long-term, it is critical to take steps to eliminate the persistent digital divide including expanding digital infrastructure to rural areas.
2. Trainings to enhance technology proficiency and confidence could improve comfort among practitioners and clients, thereby increasing their likelihood of engaging in telehealth.
3. To help reduce issues of privacy and distrust, practitioners might consider hybrid in-person/virtual approaches, with initial sessions to establish patient-clinician relationships and complete paperwork in person followed by virtual telehealth sessions.
4. To help develop or maintain good rapport, we recommend seeking input from PWH about communications about telehealth services to clients who have been shown to be successful in re-engaging those lost to care.

Although we do not recommend all behavioral health services shift to telemedicine after the pandemic, telehealth may be an important additional support for PWH to enable them to remain in care and achieve durable viral suppression.

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