NAPCRG 52nd Annual Meeting — Abstracts of Completed Research 2024.

Submission Id: 6158

Title

Feasibility and Acceptability of Using an Electronic Patient-Reported Outcome Measure via a Patient Portal in HIV care

Priority 1 (Research Category)

Research methodology and instrument development

Presenters

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Abstract

Context: Adherence to antiretrovirals (ART) is essential for people with HIV (PWH), but many face barriers. The I-Score is a new electronic patient-reported outcome measure (ePROM) of ART adherence barriers to be used in HIV care.

Objective: To assess the feasibility and acceptability of administering the I-Score on a patient portal.

Study Design Analysis: 6-month one-arm implementation pilot study.

Setting: A large hospital-based clinic in Montreal, Canada.

Population: PWH on ART, speaking French or English, owning a smartphone, willing to use the patient portal, reporting adherence issues.

Intervention/Instrument: Patients visited their HIV physician at Time 1 (T1), 3 months (T2), and 6 months (T3). Before visits, they completed the I-Score. After visits, they completed a survey on sociodemographic characteristics (T1), and feasibility and acceptability of the I-Score.

Outcome Measures: Feasibility was assessed with consent and retention rates; frequency of technological problems; and the 4-item Feasibility of Intervention Measure (FIM). Acceptability was evaluated with the adapted 6-item Acceptability E-scale for web-based PROMs (AES); and the 4-item Acceptability of Intervention Measure (AIM). We provide descriptive statistics.

Results: Out of 34 PWH with identified adherence issues, 32/34 (94%) consented. Average age was 48 years (standard deviation (SD)=15), 12/32 (38%) were women, 19/32 (59%), migrants, and 10/32 (31%)

lived below the poverty line. Overall, 26/32 (81%) completed the study, for a total of 78 visits; 4 were lost-to-follow-up and 2 withdrew due to difficulties with technology. During T1, T2, and T3, there were 12/26 (46%), 17/26 (65%), and 16/26 (62%) participants, respectively, reporting no technological problem. Problems met included needing to: remind patients to complete the I-Score before medical visit (15 visits); re-initialize passwords (8); resolve connectivity issues (2); and re-install the patient portal (2). Physicians could not access I-Score results at 4 visits; 10 visits were postponed due to difficulties. Average scores on FIM increased from 17/20 (T1;SD=5), to 18/20 (T2;2), to 19/20 (T3;2). Average AES increased from 24/30 (SD=5), to 26/30 (3), to 27/30 (3). Average AIM scores passed from 16/20 (5), to 18/20 (2), to 17/20 (3).

Conclusions: The feasibility and acceptability of using a patient portal to administer the I-Score ePROM was high for vulnerable PWH, but use was challenged by patient literacy and technology.