MOST QUITS: Using Multiphase Optimization STrategy to Optimize a Cost-effective, Sustainable and Scalable Smoking Cessation Package for Smokers in HIV Clinical Care

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The adverse health impact of cigarette smoking on persons living with HIV is profound and effective treatments for long-term abstinence remain elusive. Further, implementation of effective evidence-based interventions in HIV clinical care is often limited. There is an acute need for interventions that address patient barriers to quitting and clinical barriers to effectively treating a broad heterogeneous population of smokers living with HIV (SLWH).

This poster will present an overview of MOST QUITS – a study grounded in the Multiphase Optimization STrategy (MOST) and designed to develop a smoking cessation intervention optimized for cost-effectiveness, sustainability and scalability in HIV clinical care. The project includes a factorial trial testing four intervention components aimed at barriers to quitting and maintaining long-term abstinence among SLWH. Components include: Motivational Interviewing (Off/On); Peer Mentoring (Off/On); Text-messaging (Off/On); and Varenicline (Off/On). These components have shown promise in research but have been under-utilized to help SLWH quit and have not been tested in an optimization trial. Working in collaboration with New York City Health and Hospitals (H+H), the largest municipal public healthcare system in the U.S., we are recruiting 500 SLWH across eight HIV clinics, randomizing participants to 1 of 16 non-blinded intervention conditions, and assessing abstinence outcomes at 6, 12 and 24 weeks. We are also collecting mixed methods data on costs, reach, fidelity, acceptability and appropriateness among SLWH, stakeholders and study interventionists to assess implementation. We will use data from the trial and the implementation assessment to identify the optimized intervention by conducting an innovative multi-criteria decision analysis to select the subset of the four components that achieves the highest level of cost-effectiveness and is both scalable and sustainable in HIV clinical care. In this abstract, we will provide an overview of the study design, present data from the preliminary studies that informed the factorial trial and discuss the preparation phase of our work that led to the development of the optimization trial.