

## Background

Health numeracy is the ability to understand and utilize numerical concepts and information within the context of making health decisions.<sup>1</sup>

In a systematic review of intervention research by the Agency for Healthcare Research and Quality, health numeracy was found to be more highly correlated with health outcomes than health literacy.<sup>2</sup>

Health numeracy is especially relevant for HIV+ individuals because much of their health information is quantitative (e.g., complex medication schedules, CD4 count, viral load).

HIV+ African Americans (AA) are more likely than other ethnicities to have lower levels of health numeracy<sup>3</sup>, more likely to be nonadherent to HIV medications<sup>4-6</sup>, and less likely to keep clinic appointments related to HIV treatment and care.<sup>7-8</sup> Missed clinic appts in particular have been highly correlated with mortality in HIV+ clients.<sup>9</sup>



## Purpose

The purpose of the proposed study is to develop a culturally-relevant health numeracy intervention to improve treatment adherence in HIV+ AA.

## Methods

Mixed-methods approach

HIV+ AA ( $n = 100$ ) will be recruited from local HIV care clinics and AIDS service organizations in Southeastern U.S. and 24 – 30 will participate in 3 focus groups (8 – 10/group).

Subjective Numeracy Scale (Fagerlin et al., 2007) will be administered to assess self-reported numerical ability and preferences.

Focus group sessions will be conducted to explore HIV+ AA perspectives on the role of numbers in HIV disease management.

## Findings

Formative data gathered from the pilot study will be used to further develop a wallet-sized card/booklet used to track medication schedules, viral loads and CD4 counts, and clinic appts.

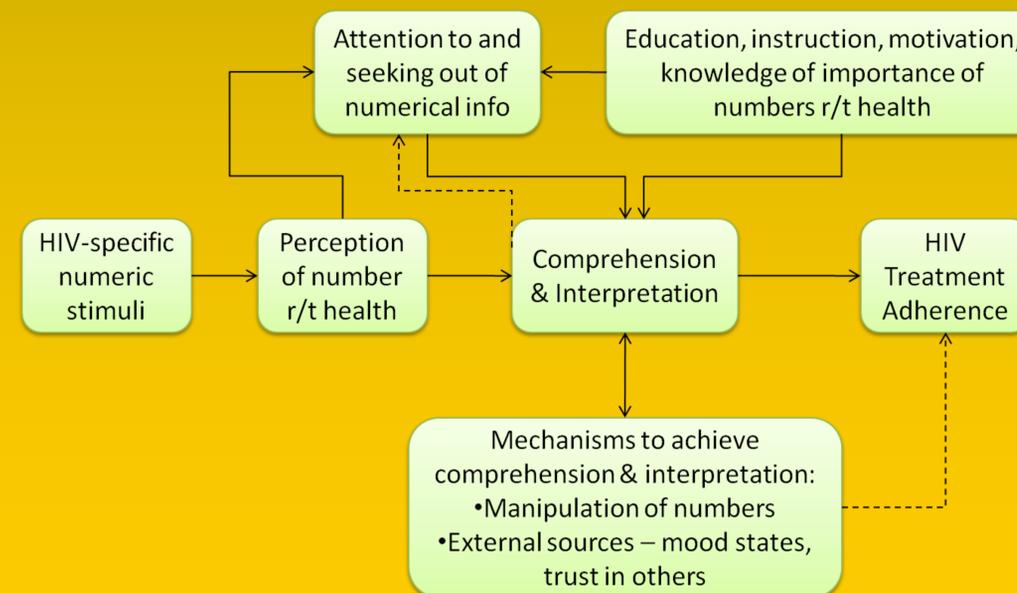


Figure 1. Conceptual model of HIV numeracy and treatment adherence (adapted from Lipkus & Peters, 2009).

## Conclusions/Implications

Although previous work in health literacy and HIV treatment adherence has shown promise, interventions that do not take health numeracy and socio-cultural factors into account have a limited scope of effectiveness.

Findings from the pilot study will help inform the development and tailoring of a health numeracy intervention to improve treatment adherence in vulnerable populations such as HIV+ AA.