

**S1 Table. Description of Single-Sex Model State variables.**

Variable	Description
$S_u$	Susceptible youth who have never tested for HIV/AIDS
$S_a$	Susceptible youth who have ever tested for HIV/AIDS
$I_u$	Infected youth who have never tested for HIV/AIDS
$I_a$	Infected youth who have ever tested for HIV/AIDS
$T_u$	Infected aware youth who are not adherent to ART or consistent condom use
$T_a$	Infected aware youth who are adherent to ART and use condoms consistently