

## **EVALUATING THE COST-EFFECTIVENESS OF PEPFAR PREVENTION PROGRAMS**

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### **PROJECT DESCRIPTION**

The UCSF Institute for Global Health (IGH) is working through the through the University Technical Assistance Project (UTAP) with the United States Centers for Disease Control and Prevention (CDC) with funding from the President's Emergency Plan for AIDS Relief (PEPFAR) to assess the cost, impact, and cost-effectiveness of PEPFAR prevention programs. UCSF is developing and applying a system to assess the cost and cost-effectiveness of HIV prevention in each PEPFAR target country and overall. This effort includes refining a flexible and user-operable cost-effectiveness analysis tool; incorporation (as available) of country-specific data on HIV epidemic environment and programs; the review of new evidence on prevention effectiveness; estimating overall PEPFAR prevention cost-effectiveness; and providing more detailed cost-effectiveness assessments for target countries.

The method used to estimate cost per HIV infection averted and to examine prevention spending options is cost-effectiveness analysis (CEA). CEA allows program directors and analysts to assess, in one coherent analytic framework, the factors that affect the spending needed to achieve each HIV infection averted. These factors include:

- 1) HIV epidemic conditions (e.g. HIV prevalence and incidence)
- 2) Prevention program design and cost
- 3) Estimated reductions in the risk of new HIV infections due to prevention programming

CEA can be tailored to local situations, to the extent that local data are available. In addition, software CEA tools have been developed that allow decision makers to explore alternative prevention program configurations. HIV prevention programming can therefore be adjusted to maximize cost-effectiveness and thus program and activity effectiveness, in the context of other considerations and constraints guiding program content.

### **SIGNIFICANCE**

The cost-effectiveness of HIV prevention (the estimated program and activity cost per HIV infection averted) is a critical resource for the refinement of PEPFAR prevention programming. Such data permits countries to consider improved allocations of prevention resources (e.g. a shift in the mix of prevention strategies) in order to increase prevention impact (e.g. estimated HIV infections averted).

**PROJECT END DATE:** 2008