INTRODUCTION

Kenya’s Fourth National AIDS Strategic Plan includes scaling up targeted oral pre-exposure prophylaxis (PrEP) for key populations. To support this scale-up, the USAID- and PEPFAR-funded Health Policy Project (HPP) and the Bill & Melinda Gates Foundation–funded Kenya PrEP Demonstration Project collaborated with the National AIDS & STI Control Program (NASCOP) and the Sex Worker Outreach Program (SWOP) to conduct prospective costing of oral PrEP services for sex workers (SWs) in Kenya to be provided by SWOP—a network of HIV/STI prevention and care clinics for SWs.

METHODOLOGY

The study team developed “bottom-up” and “top-down” costing methodologies to assess provider costs for a comprehensive package of PrEP services for SWs through SWOP clinics in Kenya. Bottom-up costs were estimated from facility-based data and through process flow diagrams based on PrEP service delivery and type of visit (see Figure 1). Top-down costs allocated 2012 costs for each cost category based on the anticipated proportion of PrEP client visits. From January to February and June to August 2013, teams collected data from SWOP clinics’ financial records and asset registers, the Kenya Medical Supplies Agency, and interviews.

RESULTS

The bottom-up estimated cost per client per year to provide a comprehensive package of PrEP services was US$602. The top-down cost per client per year was US$597 in Year 1 and US$408 in Year 2 (see Figure 2).

Bottom-up Method

The bottom-up method found that, based on the established costs, the estimated annual unit cost of providing oral PrEP to one sex worker at SWOP clinics was US$602 (KSh 48,667), which included both direct and indirect costs (see Figure 3).

Direct Costs for PrEP: Direct costs for PrEP include costs for the first visit, four scheduled revisits, and six unscheduled revisits per year at the SWOP clinic. Using unit costs calculated by type of visit, the estimated annual direct cost of oral PrEP provision per SW was US$544 (KSh 45,531).

Demand Creation for PrEP Services: Creating demand for oral PrEP through health education, the mass media, or outreach and mobilization are important elements in scaling up the intervention. The unit cost is relatively high because oral PrEP is a new intervention and there is a need for public education and awareness creation. The demand creation cost per SW was approximately US$19 (KSh 1,621).

Monitoring and Evaluation (M&E): The annual cost of providing M&E per SW was approximately US$39 (KSh 1,502). An estimate of M&E includes proportions of provider time allocated to M&E of the prevention project officer, data manager, nurse/mobilizer, data clerk, and receptionist.

CONCLUSIONS

The findings offer the first evidence-based cost estimates for PrEP provision for SWs in Kenya. The two analytic approaches identified similar costs per clientyear of PrEP. In comparison, another model, created by Andrew Hastings and based on assumptions rather than actual cost data, found similar costs per client in its higher range estimates. The most important results of this analysis were the estimated average unit cost of providing oral PrEP to one sex worker for one year and the major cost drivers for oral PrEP services.

The study team found that unit costs were driven by both indirect and direct costs. The major indirect cost drivers included the cost of training providers (nurses and clinicians) on oral PrEP provision and management of systems for monitoring and evaluation. Another major cost driver was the direct cost of providing PrEP to the client. These results will be incorporated into cost-effectiveness analyses and used by the government of Kenya to help make strategic decisions about combination HIV prevention programs. Additional cost studies of government and nongovernmental service providers will be needed to understand the impact of introducing PrEP on the overall HIV/AIDS budget in Kenya.