ABSTRACT FOR 2007 PEPFAR HIV IMPLEMENTERS MEETING

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D-6 Methods of monitoring and promoting adherence and retention in treatment programs

TITLE: Monitoring ART Clinical Outcomes and Adherence in South African AIDSRelief Treatment Sites

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CONTEXT: The AIDSRelief Program in South Africa funded through the Catholic Relief Services Consortium by the President's Emergency Plan is providing antiretroviral treatment (ART) services in needy communities in 8 of the 9 provinces. One of the treatment sites is a hospital and several are primary health care clinics. Most treatment sites are long-established home-based care programs which have expanded services to include ART under the most basic conditions—limited laboratory and pharmacy facilities; few qualified health workers; and few staff with computer skills.

APPROACH: Before commencing, health workers underwent government-accredited training. South African clinical experts trained local doctors as on-site mentors to less-experienced doctors. Pharmacy services are outsourced, drugs pre-packaged individually and delivered by courier to the sites. Blood specimens are delivered by courier to a central laboratory. Patients are supported through pre-treatment adherence training, home-based care and support groups. Viral load tests at 6-8 weeks are used as an objective measure of adherence.

OUTCOMES AND CHALLENGES: Patient data is recorded on a paper-based system and collected and analyzed annually. As of April 2006, 14,403 patients were enrolled on the program at 25 treatment sites, 68% female, reflecting the demographic reality of (predominantly) rural communities. As the program matured, infant enrollment increased (n=494). Patients less than age 15 have also increased (n=1081).

A total of 8226 patients had ART by April 2006. At initiation of treatment the median CD4 count was 117 cells/mm³ (IQR 46-189) and the median viral load was 4.71 log ₁₀ HIV RNA copies/ml of plasma.

CD4 response rates were satisfactory with the median CD4 count being 247 at 6 months. Viral suppression rates were excellent with 91% and 62% of patients <400 copies/ml and <50 copies/ml respectively at 6-8 weeks and 89% and 81% <400 copies/ml and <50 copies at 6 months respectively.

The challenge for 2007 is to prepare treatment sites to use simple electronic systems for monitoring outcomes on a continuous basis.

KEY RECOMMENDATIONS: Quality treatment is possible in poorly resourced settings if adequate training and on-site clinical mentoring is provided. The addition of viral load measurement at 6 weeks serves as an objective early marker of adherence to treatment and can contribute to the success of the ART program.