

PROGRAMME REVIEW

HIV/AIDS Care and Treatment

Highlights of the year

- Achieving and exceeding nearly all targets for the PEPFAR year ended 30 September 2006.
- Increase in allocation of funds by PEPFAR to Aurum from \$5.3 million to \$12.5 million for FY2007.
- Involvement in public sector ART clinics including the Chris Hani Baragwanath Hospital Adult HIV Clinic in Soweto, the Tshepong Hospital in Klerksdorp and the Madwaleni Hospital in the Eastern Cape.
- Successful hosting of a two-day HIV care conference for Aurum collaborators and service providers.
- Participation in the Toronto XVI International AIDS Conference with seven poster presentations.
- Private-public partnership established for delivery of ART at the Johannesburg Correctional Services Facility.

Overview of the programme

The HIV Care and Treatment programme has been in operation since October 2002, with the first antiretroviral treatment (ART) having been prescribed on 13 November 2002. This programme is a collaborative project, with partners New S. Buys Pharmacy, Toga Laboratories, Kimera Solutions and the London School of Hygiene and Tropical Medicine.

The HIV Care and Treatment programme comprises two large implementation projects, one in an industrial setting and the other in a community setting. The various activities conducted by the Aurum team are:

- HIV training
- HIV guideline production
- HIV clinical support services
- Site monitoring
- Data management
- Programme evaluation

The industrial project provides the systems, training, monitoring and evaluation for nine different companies based in over 70 health care sites in South Africa, Swaziland and Namibia. The sites range from large hospital clinics to smaller occupational health clinics. In addition, Aurum provides an HIV management service to the Anglo Medical Scheme which is largely a general practitioner-based programme.

For the community project, Aurum has received a grant from the President's

Emergency Plan for Aids Relief (PEPFAR) of at least \$5.3 million per year for five years. The aim of this project is to provide voluntary counselling and testing (VCT), and HIV care and treatment to individuals in communities. Services are mainly provided by a general practitioner (GP) network that is contracted to Aurum. PEPFAR funding is also used to provide support to a number of State facilities and non-governmental organisations that provide these same services.

Additionally, the programme includes a sizeable research component which continually evaluates the implementation of ART in the workplace and community. Currently, several masters and PhD students are conducting ancillary studies to the ART programme to increase understanding of the adverse effects of, adherence to and drug interactions with ART.

The objectives of the HIV Care and Treatment programme are to:

- Expand access to HIV-infected individuals requiring ART, both at the companies we serve and also in the general community – firstly to employees of companies and then to surrounding communities.
- Ensure a high-quality, integrated ART programme using a standardised model of delivery: The programme is based on guidelines for VCT; adult ART; paediatric ART; wellness, which includes counselling





and monitoring of CD4 counts; and the prevention of mother-to-child transmission; all of these being based on international and national standards. In applying this delivery model, HIV clinical consultants provide expert advice on difficult cases and monitor sites.

- Build local capacity. The HIV Care and Treatment team conducts training for all levels of medical staff. Training is provided in clinical care by our professional nurses and doctors, and in counselling by our psychologist and social worker.
- Provide a framework for research to inform health care providers about the implementation of ART in South Africa and the developing world. Information on patients on the programme is collected in a standardised way throughout and is captured on a central database which facilitates the investigation of patient records.
- Evaluate the programme in terms of feasibility, immunological, virological and clinical outcomes.

Progress

Workplace programme

By the end of December 2006, the workplace programme had registered 12,552 patients on the HIV care programme and had started 5,956 patients on ART. Mean CD4 counts increased from 153 cells/ μ l at the time of starting ART, to 249 and 275 after six and 12 months on treatment respectively. After 18 months on treatment, mean CD4 cell counts had increased by an average of 169 cells/ μ l from their baseline values. Virological suppression to less than 400 copies/ml was found in 72% of patients at six months and was sustained in 69%, 70% and 68% at 12, 18 and 24 months respectively. Retention on the programme after four years is 68%.

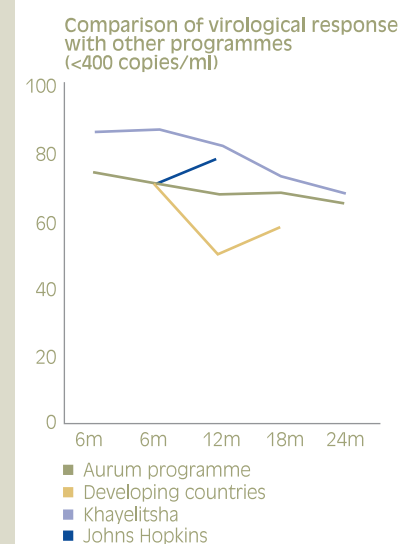
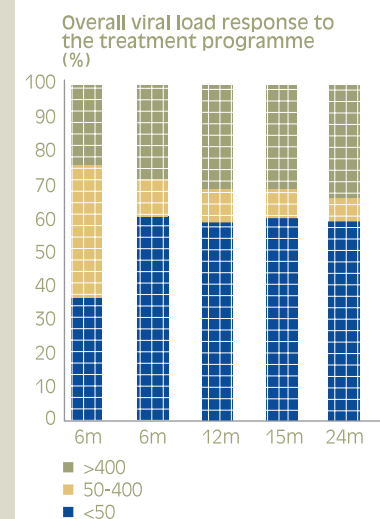
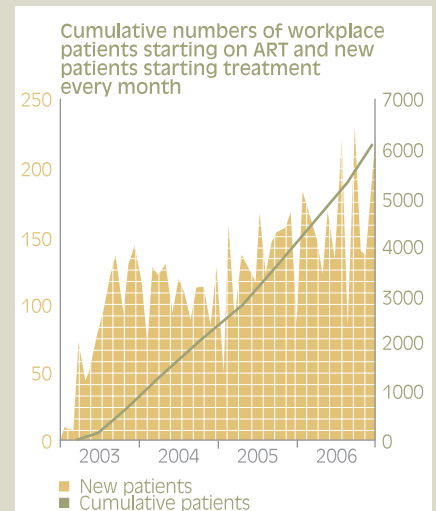
The results of the workplace programme are comparable to results obtained in the developed world and to those of pilot programmes in the developing world.

PEPFAR programme

2006 was a momentous year for the Aurum PEPFAR programme, during which there were successes and significant growth.

In the past year this project reported growth in a number of areas:

- The number of sites established for HIV services increased from 24 sites enrolled for HIV treatment and 9 for VCT, to 56 and 35 sites in each service respectively.
- Patients enrolled on HIV care increased from 1,015 in 2005 to 16,076 by September 2006, and to 18,561 by the end of the year.
- Patients started on life-saving antiretroviral medication increased from 648 in 2005 to 10,524 by September 2006, and to 11,612 by December 2006.
- The number of persons who know their HIV status increased by 23,516; they have been through HIV testing and received counselling on their HIV status.
- An additional 598 healthcare workers, 129 of whom are medical doctors, were trained and equipped to provide HIV services.
- Three more training courses were developed: counselling of couples for VCT; disclosure of HIV status and dealing with stigma; and peer education on ART.



- Staff employed by Aurum to provide technical expertise at a number of organisations included five medical officers and six administrative staff.
- New partnerships were developed with other NGOs, government and multinational companies that share a common vision of providing treatment to all those who need it.

Aurum is particularly proud of these aspects of the programme:

Partnership with the Adult HIV clinic at the Chris Hani Baragwanath Hospital:

Although we have not yet achieved all our goals regarding this project, a pharmacy system has been put in place and data for approximately 80% of patients is now captured onto standardised forms. Counsellors have received refresher training and staff have been employed. We look forward to a long-term partnership in establishing this clinic as a centre of excellence.

Establishment of a general practitioner (GP) network:

The use of this resource will enable HIV services in South Africa to reach all those who require them. Our GP programme is highly structured and GPs sign a contractual agreement requiring them to attend training, follow guidelines and report patient information. Early results indicate that in this model, 80% viral suppression and 89% retention can be achieved. We have also shown that GPs are able to follow guidelines and collect data to national standards. We hope that in future this model will be used to expand HIV treatment services.

The partnership with Metro Evangelical Services Impilo

provides HIV care, shelter, education and training to the homeless population of Hillbrow and surrounds. The marked reduction in deaths at this centre has been attributed to ART.

Partnership with the Department of Correctional Services:

The provision of HIV services to prisoners has been highlighted in recent months in South Africa, but expanding access is not without its challenges. The Department of Correctional Services is committed to providing these services but currently has a shortage of trained staff and suitable systems to make headway. Aurum has begun the training of staff members in a joint project at the Johannesburg Prison and is in the process of obtaining accreditation for the site in the national ART programme. The ultimate aim of the partnership is to provide all HIV and TB care for prisoners within the facility, reducing the need for referral to neighbouring hospitals and releasing correctional service officers for correctional duties.

Madwaleni Hospital, Eastern Cape:

Aurum has provided a doctor, a nurse and a driver, as well as accommodation for the doctor, transport for patients and training for healthcare workers at the Madwaleni hospital. This partnership has proven highly successful with more than 425 patients having received ART at the site during 2006.

Tshepong Hospital, North West Province:

At Tshepong Hospital, support for the ART programme consists of a doctor (available for two days a week), a professional nurse (who rotates every four weeks) and a pharmacist. This support is provided in partnership with the Reproductive Health Research Unit (RHRU).

Training programme

Aurum has developed a number of training courses which are offered either at our Johannesburg office or at treatment sites. New courses were developed during the year and established courses were revised to incorporate new developments and more interactive training methods. The following courses were provided in 2006:

- Physicians' ART course
- Physician refresher course
- Nurse ART course
- Nurse refresher course
- Running support groups

- Basic counselling skills and VCT
- ART adherence counselling
- Couple counselling (NEW!)
- Counselling children and PMTCT
- Stigma and disclosure (NEW!)
- Peer education on ART (NEW!)

In addition, a two-day conference was held in July 2006 for all managers, doctors, nurses and counsellors who are involved in the programme. Topics covered at the conference included new advances in HIV treatment, HIV resistance, hepatitis, second-line treatment, voluntary counselling and testing, adherence counselling, adherence research, integration of TB treatment and ART, side-effects, living with treatment, breaking down stigma, taking treatment into communities, and ART for children.

The research programme

The following research studies are currently under way:

- **Study of side-effects of ART;** the first part of which investigates the early side-effects of efavirenz-containing regimens and compares these to efavirenz drug levels and genetic components; and the second investigating hepatic injury as a result of ART.
- **TB and ART study** which covers the clinical aspects of TB in patients on ART and the incidence and risk of TB in patients on ART.
- **Adherence study,** the aim of which is to explore and describe the predictors for non-adherence to ART and describe the main reasons for missing clinic visits and/or dropping out of the ART programme in the first six months of treatment
- **Study of resistance and treatment failure** has three parts: firstly, the surveillance of resistance in which stored specimens obtained from patients who have begun the second-

line regimen are tested for resistance to anti-retrovirals to determine the effectiveness of this regimen; secondly, the study of treatment failure and resistance to determine the evolution of resistance in patients who have experienced treatment failure; and thirdly, the evaluation of outcomes of patients on second-line treatment.

- **New regimens study** compares treatment outcomes in patients taking tenofovir as part of their first-line regimen to those of patients on either a zidovudine- or a stavudine-containing regimen.

Future plans and opportunities

The realisation of the PEPFAR targets and the increased PEPFAR grant will increase our ability to assist in more public sector and community sites by extending the provision of ART services to those who need it. We are investigating the possibility of developing public-private partnerships between large companies, such as De Beers and Anglo Platinum, and the Department of Health in poorly resourced areas where the operations of these companies are situated. Further efforts to work together with the Department of Health are envisaged for 2007.

As research projects are completed, interesting and valuable information regarding antiretroviral implementation is becoming available. A number of publications are in preparation and are expected to be published over the next year. Renewed focus on research within this programme is planned.

New programme developments

Clinical support: We have recently appointed our own specialist clinical director and HIV clinician. These new appointments are expected to improve on-site clinical support for doctors on our programme and enhance clinical monitoring at the sites.

Data pen project: We are currently investigating the introduction of new technology that enables data to be captured using a digital pen. This technology has been piloted at one site with encouraging results. A larger pilot is planned in 2007.

TB & HIV integration: This will be a major focus of our programme in the coming year. Additional courses on TB have been developed and we have placed increased emphasis on TB in our general ART training. We plan to investigate TB screening within our programme and will be working with Chris Hani Baragwanath Hospital to improve their TB services and expedite the integration of HIV and TB services.

Psychosocial research: We are investigating the feasibility of undertaking further psychosocial research within the programme. A proposal on the evaluation of VCT in Rustenburg is being developed as part of the IAVI project. Further proposals in 2007 are for a student project on traditional medicines and for a study examining mental health issues and ART.

Expertise in paediatric HIV work: Two of our clinicians, Dr Lindiwe Pemba and Dr Shisana Mikateko, have been training at the Wits Paediatric HIV Unit in order to increase expertise within the programme on paediatric AIDS treatment.



Life-saving anti-retrovirals



Care programme staff at MES Impilo



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