

# How do we keep millions living with HIV/AIDS in Africa on the ARVs they need?

As treatment targets increase, so do supply chain challenges. David Jamieson reports



Less than 10 years ago many doubted that we could save the lives of millions of Africans living with HIV/AIDS. The challenges seemed insurmountable. Could the world afford it? How do we reach the patients? Can we retain the patients on treatment? Among these many challenges was the question of how to keep drugs and diagnostics in full supply in supply chains characterised by frequent stockouts, overstocks, expiry, and wastage.

It was in this context that President George W Bush announced in his 2003 State of the Union address the establishment of the President's Emergency Plan for AIDS Relief (PEPFAR), the largest international health initiative ever by one nation to address a single disease. In 2005, PEPFAR – through USAID – established the Supply Chain Management System (SCMS) to provide a reliable, cost-effective and secure supply of products for HIV/AIDS programmes. The SCMS contract was awarded to a consortium led by the Partnership for Supply Chain Management (PFSCM), including the company I work for, Crown Agents.

Initial targets were to eliminate stockouts in PEPFAR programmes, radically reduce the price of antiretroviral drugs (ARVs), avoid swamping local partners with huge product deliveries, and ensure drugs were of the same quality as those in the USA.

With the support of USAID, PFSCM designed the programme to incorporate commercial best practice, including negotiating long-term supply contracts based on detailed demand forecasts, stocks held close to point of use, and robust processes to identify poor quality products and protect product in our control.

To reduce the cost of ARVs it was essential to increase the use of generic ARVs. The US Government introduced an innovative system for tentative approval of generic ARVs by the US Food and Drug Administration, allowing PEPFAR to buy generic ARVs while protecting patents in the US. Over 150 ARVs have been tentatively approved, enabling SCMS to increase usage of generic ARVs to over 90%. Pooling global demand, SCMS has negotiated progressive decreases in price to between US\$80 and \$150 per patient per year, down from around \$1500 when PEPFAR was launched. SCMS provides over 75% of the ARVs funded by PEPFAR.

To support global pooled procurement and reduce

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turnaround times for ARVs, SCMS team member RTT established regional distribution centres (RDCs) in Ghana, Kenya, and South Africa to hold strategic stock for regularly scheduled shipments to neighbouring countries and expedite emergency orders to prevent stockouts. Independent commercial enterprises, the RDCs also attract private-sector clients. Predictable supply to RDCs has also enabled SCMS to increase use of sea freight, saving the US Government over US\$70 million in freight charges. SCMS's quality assurance programme has ensured that all ARVs meet strict standards, with strong physical security protecting commodities during storage and transit.

Procurement of non-pharmaceutical items is managed by a Crown Agents team in Washington DC. The huge demand for laboratory equipment and supplies, male circumcision kits, warehouse equipment, and much more was unforeseen during project design. Currently over 50% are now purchased from local suppliers, boosting developing economies and ensuring timely delivery.

Six years on, what some thought impossible has been accomplished. SCMS delivers around US\$25 million each month, while PEPFAR supports over 4 million people on treatment. Supply chain expectations have changed radically with other disease areas seeking similar results to HIV/AIDS. For those of us in HIV/AIDS the question now is, 'If we can do this for 4 million patients, why not 15 million?' Yet new challenges arise for the HIV/AIDS supply chain. Will there be enough active pharmaceutical ingredients for 15 million or more patients? Can we reform the fragmented paediatric supply chain for a four-fold increase in young patients? What new infrastructure is needed if commodity volumes double yet again? And how do we afford the new and better drugs and diagnostics under development?

I am confident that with continued commitment and innovation we will meet these challenges, and I'm excited to be part of bringing life-saving treatment to millions.

