Px Wire: A Quarterly Update on HIV Prevention Research



AVAC's Take

2014 got off to a great start with US President Barack Obama's nomination of Debbi Birx, head of the US CDC Global AIDS Program, to be the new US Global AIDS Coordinator. If confirmed by the US Senate, Birx will be at the helm of the PEPFAR program. A staunch champion of innovative, ambitious programs and robust civil society engagement, Birx has the ability to make the goals in the PEPFAR *Blueprint: Creating an AIDS-Free Generation* a reality. It won't be easy, and it will require careful attention to many of the issues outlined in the centerfold of this issue. We look forward to working with Dr. Birx, an AVAC Board Member, on this essential work. – *AVAC*

VMMC Progress: Exciting news, lagging data

At the end of 2013, HIV prevention efforts in sub-Saharan Africa very likely passed a critical milestone—more than 5 million adult voluntary medical male circumcision (VMMC) procedures conducted since 2007. This is a quarter of the 20 million procedures that epidemiologists and modelers say are needed to maximize the impact of the strategy on HIV incidence in sub-Saharan Africa. A substantial percentage of these procedures were conducted in the past 12 months as the pace of scale-up has soared in virtually every country that's been identified as a priority for this intervention. While there is still much ground to cover, this progress is welcome. Unfortunately, there may not be a full public announcement of this milestone for some months, or perhaps not until the end of 2014.

Such an announcement would come from the World Health Organization (WHO), which tracks

the numbers of procedures performed worldwide. It typically releases a global tally about 12 months after the year in question. For example, on World AIDS Day 2013, WHO released figures through the end of 2012. PEPFAR, which currently funds the majority of VMMC procedures worldwide, also collects and releases data, but its sources and schedule differ from WHO (see table). The PEPFAR data are more current but less comprehensive, which is why it's possible to estimate that the global total has passed five million. PEPFAR-funded implementers alone conducted a cumulative total of 4.7 million procedures by the end of 2013—meeting the target that Obama set in his 2011 World AIDS Day address. The Bill & Melinda Gates Foundation also funds VMMC programs in some key countries (and collects data from its grantees as well). Factoring in BMGF-supported programs as well as those funded by national governments—particularly South Africa—the progress has been tremendous and, according to modelers, is already preventing thousands of new HIV infections.

Tracking and celebrating this progress can help raise the profile of a powerful prevention strategy that still needs high visibility support from heads of state, influential policy makers and advocates. It's time to improve the tracking systems and ensure more regular reporting of global and country-level totals. All countries implementing VMMC are tracking numbers at a national level. National VMMC Task Forces or Ministries of Health should submit numbers to the WHO biannually or perhaps even quarterly, and the WHO should strive to provide biannual updates on national and global totals based on this information. Such improved reporting will ensure that momentum is both recognized and accelerated.

Organization	What gets counted Information source		Reporting calendar	Most recent available data	Current estimated total	
PEPFAR	PEPFAR-supported procedures	PEPFAR-funded implementers	US Government fiscal year, which runs from October to September. (In 2013, PEPFAR made an exception and released a calendar-year total based on an estimate of Q4 procedures.)	Procedures conducted through Q3 2013, with estimate for Q4	4.7 million procedures cumulative through 2013	
WH0	All VMMC conducted in the country	National programs, including support from all donors	Calendar year	2012	3.1 cumulative through 2012	

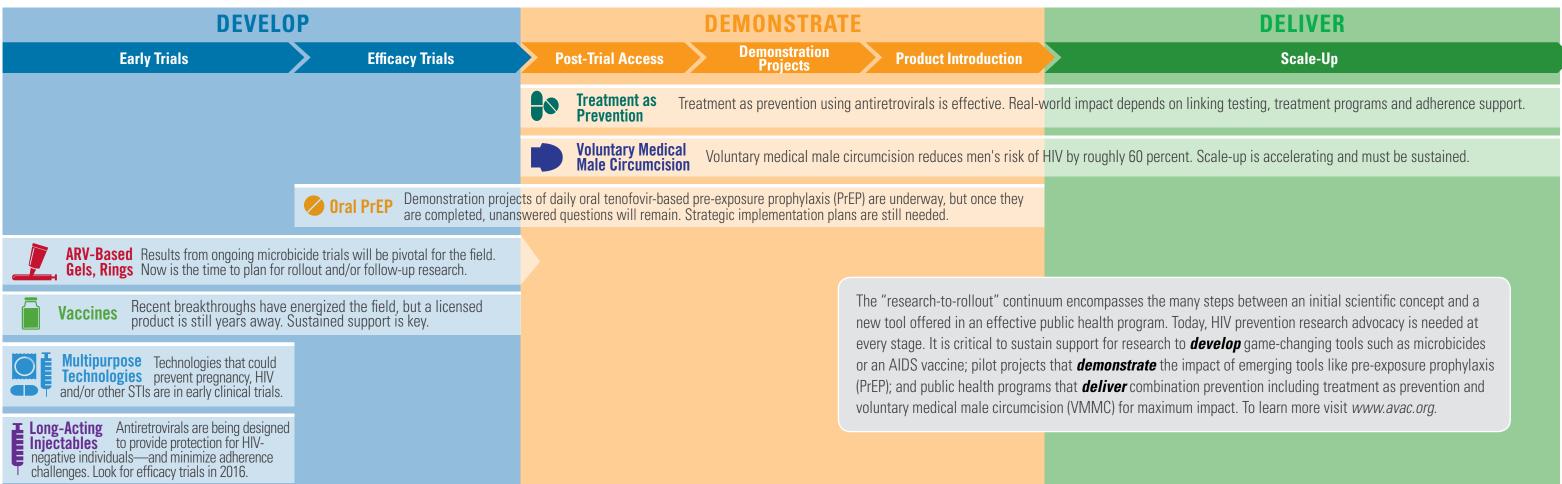


A Three-Part Agenda for Ending AIDS

To learn more see:
AVAC REPORT 2013
Research & Reality
www.avac.org/report2013



The HIV Prevention Research-to-Rollout Continuum 2014



2014 Timeline: HIV Prevention Milestones and Advocacy Goals

	Quarter 1 (January-March)			Quarter 2 (April–June)		Quarter 3 (July–September)		Quarter 4 (October–December)					
Events	US PEPFAR Country Operating Plans prepared	Debbi Birx nominated as US Global AIDS Coordinator to lead PEPFAR program	PrEP demo projects launch in Brazil and South Africa; planning continues in Kenya and Nigeria	Decision on the ECHO trial evaluating contraceptives and HIV risk	First full round of concept notes submitted to the GFATM under new funding model	HIV Vaccine Awareness Day	Ring Study and the ASPIRE Trial continue evaluating dapivirine ring	International AIDS Conference, Melbourne, Australia, July 20-25	PEPFAR releases annual progress update	FACTS 001 tenofovir gel trial finishes data collection	HIVR4P inaugural Conference, Cape Town, South Africa, October 28-31	WHO/UNAIDS announce new global VMMC total	Results from evaluation studies of nonsurgical devices for VMMC
Advocacy Goals	Civil society input; ambitious pace of scale-up for combination prevention	Strong leadership to ensure continued funding; responsible transition to country ownership	Cohesive analysis of what current projects will and will not tell us— by end of 2014	Full funding for a four-arm trial is secured; protocol finalized with active civil society input	Countries request and receive support for strategic combination prevention packages	Announcement that P5 vaccine trials are on schedule, with protein boost available for Thailand and South Africa	Responsive adjustments as needed based on adherence data; plans for product introduction are in place	Global commitment to fully fund a sustained effort to end the epidemic	Pace of US-funded ART scale-up and VMMC achieves coverage goals that maximize impact on incidence and mortality	Clear introduction plans for tenofovir gel in place	Increased collaboration across HIV prevention research areas	A new deadline for reaching the target of 20 million procedures; more frequent global progress updates	Countries make evidence-based decisions about introduction

Continued from front

The Latest in Cure Research: Disappointment in Boston

In December, at the Sixth International HIV Persistence Workshop in Miami, Dr. Timothy Henrich of Brigham and Women's Hospital in Boston provided updates on two HIV-positive men who had received stem cell transplants as part of treatment for lymphoma that was unresponsive to all other treatments. Stem cells give rise to new cells in the body, and it was hoped that these transplants would lead to a pool of HIV-uninfected blood and immune cells—as well as treating the cancer. Both men continued antiretroviral therapy (ART) for years after receiving the transplant (one man for two years, the other man for five years). In 2013, each decided to undertake a closely monitored treatment interruption to evaluate whether the cells created by the transplant combined with ART had helped clear the mens' blood of HIV.

Initially, it appeared that this had happened: both men stopped taking ART and showed no signs of viral rebound at seven and 15 weeks off of ART. But at the December meeting, Dr. Henrich reported that HIV had reappeared in both men's blood, and both had restarted ART and were now completely virally suppressed. It had been hoped that the transplantplus-ART approach would replicate the apparent cure seen in Timothy Brown, also known as the "Berlin Patient". Brown received a transplant from a donor with a genetic mutation known as the CCR5 delta 32 mutation that made his cells immune to HIV infection—and after stopping ART he has remained virus-free for several years. The stem cells transplanted into the so-called Boston Patients did not have this mutation.

Both men from Boston had a transplant-related condition known as Graft versus Host Disease (GVHD), in which cells produced by the new bone marrow begin to attack the bodies' cells and tissues. At high levels GVHD can be fatal and is not a desired outcome for any transplant. However, since it occurred at a low level in the two men from Boston, researchers decided to investigate whether it could be used as part of a cure strategy. They had hoped

less severe GVHD would help clear the body of HIV by killing off HIV-infected cells from the established infection, while ART prevented any new cells from becoming infected. GVHD cellular activity would not selectively target HIV-infected cells but might eliminate them as part of the condition. The news from Boston suggests that an HIV-specific immune response may be needed to control viral rebound in the absence of ART.

While this news is disappointing the search for a cure remains critical. In December US President Obama announced that \$100 million of National Institutes of Health funding would be redirected to cure research.

Recently Released



AVAC Report 2013: Research & Reality – An analysis of the state of HIV prevention research and the advocacy needed to catalyze action on a range of issues; www.avac.org/report2013

PrEP Watch – The relaunched clearinghouse for information related to pre-exposure prophylaxis (PrEP) research, access and advocacy in the US and across the globe; *www.prepwatch.org*

Filling the Gaps in the US HIV Treatment Cascade – Report from TAG and amfAR to improve service delivery and identify research priorities;

www.treatmentactiongroup.org/hiv/filling-gaps

About AVAC



Founded in 1995, AVAC is a non-profit organization that uses education, policy analysis, advocacy and a network of global collaborations to accelerate the ethical development and global delivery of HIV biomedical prevention options as part of a comprehensive response to the pandemic.

To receive regular updates via email sign up at www.avac.org/mailinglists.

423 West 127th St., 4th Floor • New York, NY 10027 USA Telephone + 1 212 796 6423 • www.avac.org