HPTN: Achievements and Way Forward

WAFAA EL-SADR, MD, MPH

JUNE 25, 2012 HPTN PLENARY
Estimated Number of PLWH
Global Number of People Living with HIV, by year
Global Scale-Up of HIV Treatment


Millions

2.5 million people infected every year
7,000
New infections every day
1,000 in children
HPTN Mission

To discover and develop interventions that can be used to prevent sexual and/or parenteral transmission of HIV in populations at risk around the world
Legacy of Work from HPTN - I
(1999-2006)

- HPTN 037, a network intervention for IDUs in Bangkok and Philadelphia
- HPTN 058, buprenorphine/naloxone to reduce IDU & HIV incidence in Asia
- HPTN 043 (NIMH Project ACCEPT), knowledge of HIV status and HIV incidence
- HPTN 039, acyclovir treatment of HSV-2 to prevent HIV infection (women & MSM)
- HPTN 052, HIV treatment as prevention
Continuing to Respond to the HIV Epidemic– HPTN II

HPTN 062: Acute Infection
HPTN 063: Positive Prevention
HPTN 068: Conditional cash transfer adolescent girls
HPTN 052: Treatment for Prevention:
Responding to an Evolving U.S. Epidemic: An HIV Prevention Research Agenda

Developed by:

The Domestic Prevention Working Group of the HIV Prevention Network (HPTN)

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Kenneth Mayer, MD

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Invigorating the Research Agenda for HIV Prevention in the US

HPTN 061 (BROTHERS): Black MSM
HPTN 064 (ISIS): Women at Risk
HPTN 065 (TLC-Plus): Test, link to care plus treat in the Bronx, NY and Washington, DC
Pre Exposure Prophylaxis (PrEP)

- HPTN 066: PK for intermittent PrEP
- HPTN 067: PK and behavioral study of intermittent PrEP in MSM and women
- HPTN 069: Maraviroc for PrEP in MSM and women
- HPTN 073: Uptake of PrEP by Black MSM
HPTN 071 (PopART)

- Effect of combination prevention interventions anchored in universal ART on community HIV incidence
  - Home and clinic-based testing
  - Linkage
  - ART
  - PMTCT
  - VMMC
Studies at Sites in Africa

HPTN 052
Gaborone, Botswana
Kisumu, Kenya
Blantyre, Malawi
Lilongwe, Malawi
Johannesburg, South Africa
Harare, Zimbabwe

HPTN 062
Lilongwe, Malawi

HPTN 063
Lusaka, Zambia

HPTN 067
Cape Town, South Africa

HPTN 068
Bushbuckridge/Agincourt, South Africa

HPTN 073
South Africa and Zambia
Studies at Sites in Asia

HPTN 052
YRG Care, Chennai, India
6 NARI CRS and Recruiting Clinics, Pune, India
Chiang Mai AIDS Prevention CRS and its Recruiting Clinics
Chiang Mai, Thailand

HPTN 058
Heng County CRS,
Hengzhou Town, China
Guangxi CRS, Nanning, China
Xinjiang CRS, Xingjiang, China

HPTN 063
Chiang Mai AIDS
Chiang Mai, Thailand
Studies at Sites in South America

HPTN 052
All Brazil sites

HPTN 063
Manguinhos
Studies at Sites in U.S.

HPTN 061
- Fenway - Boston
- Ponce - Atlanta
- Hope - Decatur
- Harlem - NYC
- NYBC - NYC
- UCLA - LA
- SF CRS - San Francisco

HPTN 064
- Ponce - Atlanta
- JHU CRS - Baltimore
- UNC CRS - Chapel Hill
- Hope - Decatur
- NJMS CRS - Newark
- Bronx-Lebanon CRS - NYC
- Harlem CRS - NYC
- Wake Cty. HHS - Raleigh
- GWU CRS - Washington DC

HPTN 066
- JHU CRS, Baltimore
- UNC CRS, Chapel Hill
Breadth of the HPTN Portfolio

<table>
<thead>
<tr>
<th>Variable</th>
<th>Details</th>
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<tbody>
<tr>
<td>HIV Status</td>
<td>HIV negative, Acute Infection, Established HIV infection</td>
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<tr>
<td>Populations</td>
<td>Adolescents, MSM, women, IDU, pregnant women, communities</td>
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<tr>
<td>Interventions</td>
<td>Behavioral, HIV testing, PrEP, ART, VMMC, substitution/antagonist therapy, cash transfer</td>
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<tr>
<td>Integrated strategies</td>
<td>US, Zambia &amp; South Africa</td>
</tr>
<tr>
<td>Types of Studies</td>
<td>Observational, individual randomized, site randomized, community randomized, implementation science</td>
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</tbody>
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Accomplishments 2006-2012 (HPTN II)

- 18 US/48 International Sites active in HPTN science
- 14,390 individually randomized participants enrolled
- > 400,000 community randomized participants: 192,823 in 043 and >250,000 in 065
- 225 peer reviewed publications (138 high impact)

We can't treat our way out of this epidemic
We can treat our way out of this epidemic
Looking Ahead: Research Priorities

• Evaluate and optimize integrated strategies to prevent HIV infection

• Evaluate and optimize pre-exposure prophylaxis

• Effectively engage at risk, vulnerable, hard-to-reach populations
Integrated Strategies

- Antiretroviral treatment as prevention
- Counseling and testing approaches
- Enhanced linkage to care strategies
- Male circumcision
- Prevention of mother to child transmission
- Integrated substance use and HIV prevention
Executive Committee

- Community
  - Janet Frohlich
  - Melissa Turner

- Adolescents
  - Audrey Pettifor
  - Frances Cowan

- MSM
  - Ken Mayer
  - Darrell Wheeler

- Substance Users
  - Steffanie Strathdee
  - Steve Shoptaw

- Women at Risk
  - Ada Adimora
  - Elizabeth Bukusi

- Biomedical Sciences
  - Mark Wainberg
  - Joe Eron

- Integrated Strategies
  - Connie Celum
  - Susan Buchbinder
HPTN Annual Meeting 2012

Prevention Now!
Meeting Highlights - I

- **Plenaries**
  - HPTN: Monday
  - Laboratory: Tuesday
  - Joint HPTN-IMPAACT: Wednesday

- **Protocol teams** – throughout the meeting

- **HPTN Scholars presentation**: Monday

- **Poster session and gathering** – Tuesday

- **Executive Committee and Committee/Working Groups**
Meeting Highlights - II

• DAIDS
  • Training Resource Drop-in Room: Monday-Wednesday
  • Session for International Grantees - Tuesday

• Community Working Group Activities: Friday-Sunday including a prevention science workshop

• Joint laboratory sessions with IMPAACT – Tuesday and Wednesday
• StoryCorps — Monday, Tuesday, Wednesday

Inspire people to record each other’s stories in sound
Week-at-a-Glance poster located at the HPTN Registration outside the Marriott Ballroom in the Foyer (lobby level).
Are your HPTN publications listed?

Check out publications poster during the poster session at the Tuesday poster and gathering session in Marriott Ballroom 1.

HPTN JOURNAL PUBLICATIONS AND NIH PUBLIC INFORMATION POLICY

Are you Compliant with NIH Public Access Policy?

The NIH Public Access Policy requires that the public has access to the published results of NIH-funded research. It necessitates submission of peer-reviewed journal manuscripts that arise from NIH-funded digital archiving Public Access Public Access (NIH) upon acceptance for publication. To help advance science and improve human health, the Policy requires that papers are accessible to the public on PubMed Central at least 12 months after publication.

What is the connection between PWC and NIH Public Access Policy?

Simone citations in 2003, PWC has served as a free digital archive of full-text biomedical and life sciences journal literature at the US National Institutes of Health (NIH). Beginning in 2003, PWC also has been designated as the repository for papers submitted in accordance with the NIH Public Access Policy. In addition to facilitate policy implementation, the following key considerations should be applied.

HIV Prevention Trials Network. Are your HPTN publications listed? Check out publications poster during the poster session at the Tuesday poster and gathering session in Marriott Ballroom 1. HPTN JOURNAL PUBLICATIONS AND NIH PUBLIC INFORMATION POLICY. Available at: http://www.hptnet.org. Last updated: [Date].
Join HPTN/IMPAACT Lab Activities

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Presenter(s)</th>
</tr>
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<tbody>
<tr>
<td>Tuesday</td>
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<tr>
<td>8:00 am - 9:30 am</td>
<td>HPTN Laboratory Plenary</td>
<td>See other site for details</td>
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<tr>
<td>1:00 pm - 2:00 pm</td>
<td>Investigation and Troubleshooting of EQA</td>
<td>SMILE Team</td>
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<tr>
<td>2:00 pm - 3:00 pm</td>
<td>Comparison Testing Demystified: Applications of Correlation</td>
<td>HPTN and SMILE</td>
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<tr>
<td>3:00 pm - 3:30 pm</td>
<td>DNA PCR PT for DBS</td>
<td>Ms. Cheryl Jennings</td>
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<tr>
<td>3:30 pm - 4:00 pm</td>
<td>LDMS version 7.0: New features</td>
<td>Ms. Mary Wojick-Cross and Ms. Heather Sprenger</td>
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<tr>
<td>4:00 pm - 4:30 pm</td>
<td>VQA and FSTRF – HIV RNA LJ Charts</td>
<td>Ms. Heather Sprenger and Ms. Cheryl Jennings</td>
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<tr>
<td>Wednesday</td>
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<tr>
<td>9:00 am - 5:00 pm</td>
<td>SMILE Troubleshooting and Drop-in Room</td>
<td>SMILE Team</td>
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<tr>
<td>9:00 am - 5:00 pm</td>
<td>LDMS Demo Room</td>
<td>Ms. Mary Wojick-Cross and FSTRF Team</td>
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<tr>
<td>2:30 pm - 3:00 pm</td>
<td>Cross-Network Lab Resources – HANC</td>
<td>Ms. Paige Etter</td>
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<tr>
<td>3:00 pm - 3:30 pm</td>
<td>DAIDS Audit Process – DCLOT</td>
<td>DAIDS Clinical Laboratory Oversight Team (DCLOT)</td>
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<tr>
<td>3:30 pm - 4:15 pm</td>
<td>IQA – QC Measures for CD4/CD8</td>
<td>Mr. John Wong</td>
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<tr>
<td>4:15 pm - 5:00 pm</td>
<td>IQA – PBMC Processing and Cryopreservation, Cross-Network SOP and Troubleshooting</td>
<td>Ms. Brooke Liebl</td>
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Presentations of Second Year HPTN Scholars Projects

**Today** 5:30-7:30 pm in Marriott Ballroom (Salon II)

*Introduction to findings will be presented during our afternoon plenary*

Dr. Yvonne Carter   Dr. Russell Brewer   Dr. Risha Irvin   Dr. LaRon Nelson   Dr. Typhanye Penniman
DAIDS Regulatory Support Center (RSC) is funded by DAIDS/NIAID/NIH/DH contract No. HHSN272201000013C.

Questions can be submitted ahead of time via email to DAIDSRSCMgrs@tech-res.com.
The DAIDS Training Drop-in Room

• Ask your questions about DAIDS electronic systems, like
  – Protocol Registration
  – AE reporting

• Pick up a copy of the updated DAIDS Protocol Registration Policy and Manual

• Access and complete e-learning courses like:
  ▪ Introduction to Clinical Research
  ▪ Introduction to the US FDA Inspection Process
  ▪ Good Clinical Lab Practice (GCLP) Refresher
  ▪ HIV Research Counseling and Testing

...and much more!
DAIDS Training Drop-in Room

Drop by the Park Suite 8226 any time:

- **Monday**, 25 June 2012, 3:00 PM – 5:00 PM
- **Tuesday**, 26 June 2012, 9:30 AM – 5:00 PM
- **Wednesday**, 27 June 2012, 2:30 PM – 5:00 PM

To learn more, pick up a flyer from the table near registration.
HPTN at AIDS 2012

• 5 Oral Presentations – 2 late-breakers
• 19 Poster Presentations
• A complete list is in your meeting packet
• HPTN 052 – 2 orals, 1 oral poster, 1 poster
• HPTN 058 – 1 poster
• HPTN 061 – 2 orals, 7 posters
• HPTN 064 – 5 posters
• HPTN 065 – 4 posters
• Central Lab – 1 oral
• 1 satellite session
Health Disparities, Hurdles and Hope: Ending the HIV Epidemic in the U.S.

- What is the current landscape of the U.S. HIV epidemic?
- How can we better reach and engage at risk populations?
- How can we employ new prevention interventions?

Join the HIV Prevention Trials Network (HPTN) for a dynamic satellite session at the XIX International AIDS Conference in Washington, DC.

When: Sunday 22 July 2012 11:15 a.m. - 1:15 p.m.
Where: Session Room 9
Co-Chairs: Wafaa El Sadr and Kenneth Mayer

The annual number of new HIV infections in the United States has remained stable since 1991. The inability to reduce the number of new HIV infections for almost 20 years is noteworthy despite remarkable advances, including the advent of rapid HIV testing, opt-out testing, potent once-daily antiretroviral therapies and availability of evidence-based interventions that have been shown to decrease risk behaviors. Unlike the generalized epidemic in regions of sub-Saharan Africa, the U.S. HIV epidemic is concentrated among certain subpopulations, particularly men who have sex with men and persons of color and within specific geographic locations. The Health Disparities, Hurdles and Hope: Ending the HIV Epidemic in the U.S. satellite session will explore the current landscape of the U.S. HIV epidemic.
Roller Coaster of HIV Prevention
GETTING TO ZERO

ZERO NEW HIV INFECTIONS
ZERO DISCRIMINATION
ZERO AIDS RELATED DEATHS

UNAIDS
JOINT UNITED NATIONS PROGRAMME ON HIV/AIDS
ACKNOWLEDGEMENTS

• David Burns, Katherine Davenny; Carl Dieffenbach, Michael Gilbreath, Diane Rausch, Sheryl Zwerski

• Mike Cohen and HPTN Executive Committee

• Leadership and Staff at Ops Center, SDMC and Network Laboratory

• Committee and working groups leadership and members

• Investigators and staff at all HPTN sites

• Sponsored by NIAID, NIDA, NIMH under Cooperative Agreement # UM1 AI068619 and all the cooperative agreements for SDMC, NL, and CTUs

• Additional support: OGAC, BMGF