# Testing & Linkage to Care Plus (TLC+)

**Richard Jefferys**

Coordinator, Michael Palm Basic Science, Vaccines & Prevention Project

Treatment Action Group

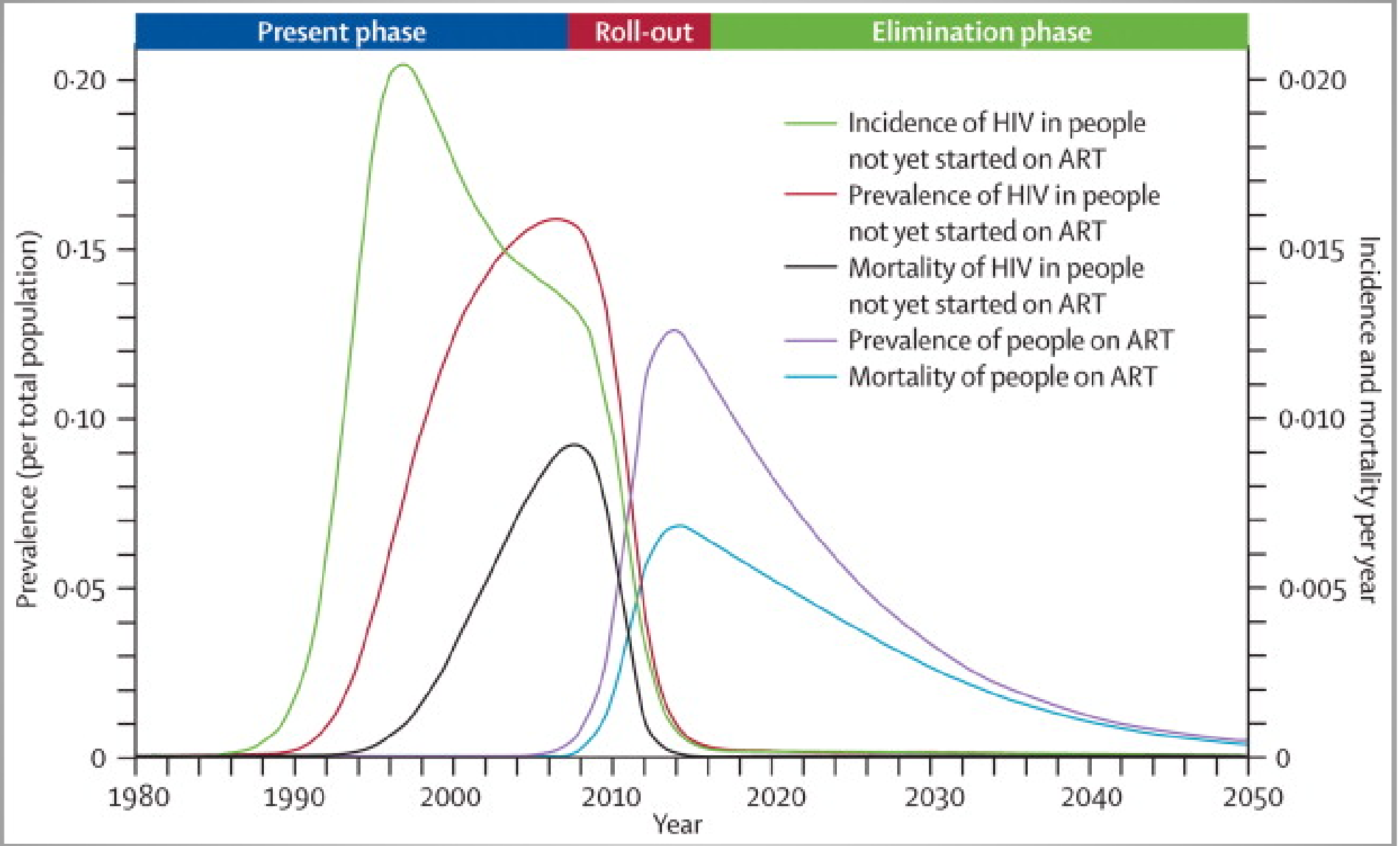


TAG Treatment Action Group

# Testing & Linkage to Care Plus (TLC+)

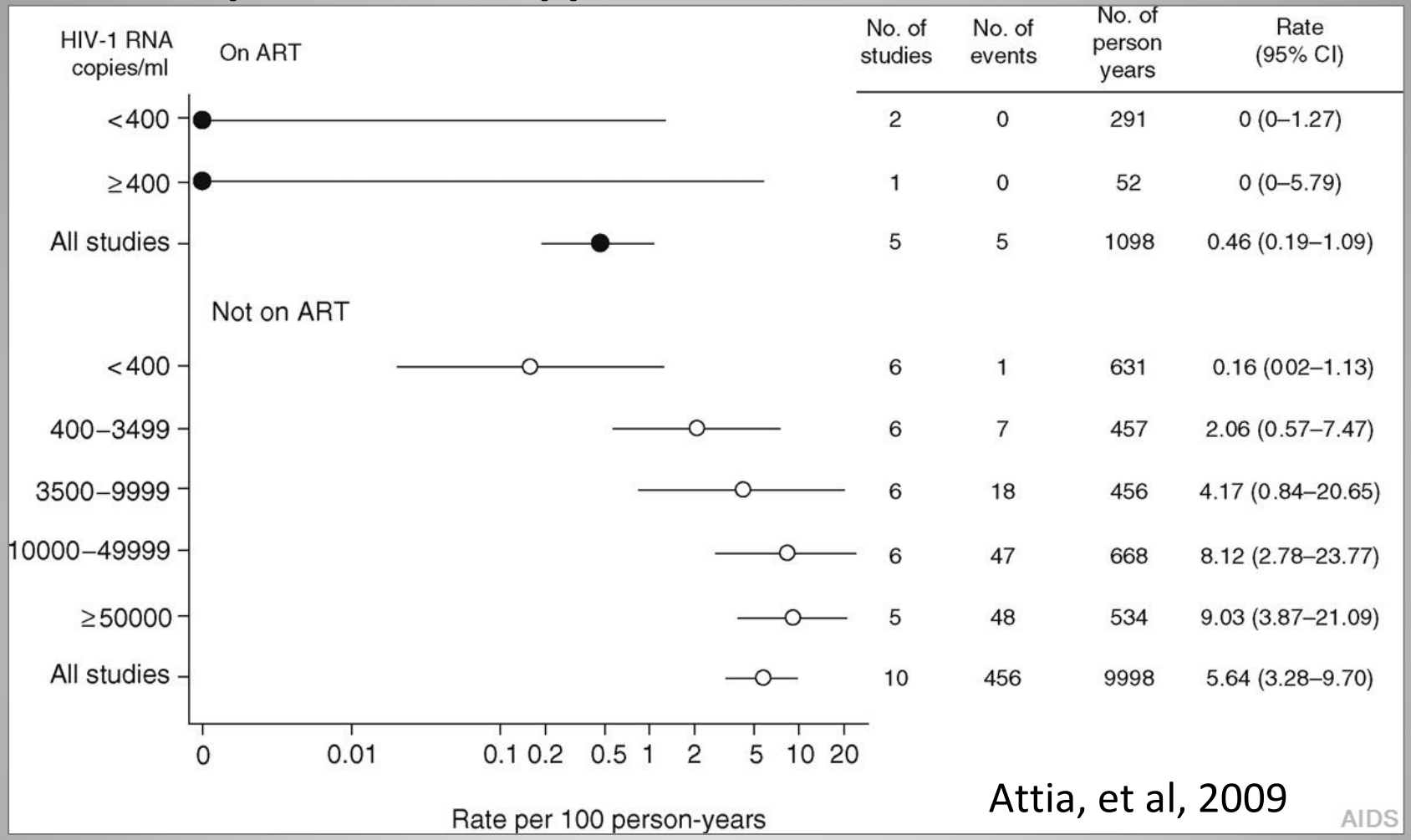
- Concept arose from a "test & treat" mathematical model published in The Lancet by Reuben Granich and colleagues in 2009
- Model suggested that widespread testing and immediate antiretroviral therapy (ART) could essentially eliminate South African epidemic by 2050
- Model has been criticized for very optimistic assumptions and ethical implications of treating individuals at a disease stage where individual benefit remains uncertain

# Figure 5




Source: The Lancet 2009; 373:48-57 (DOI:10.1016/S0140-6736(08)61697-9)

# Impact of HIV Suppression on Transmission Risk




Attia, et al, 2009

Fig. 2. Forest plot of summary HIV transmission rates, per 100 person-years, according to use of antiretroviral therapy and plasma viral load. ART, antiretroviral therapy; CI, confidence interval; the meta-analysis of couples where the HIV-infected partner received ART included two studies with viral load data [10,11] and three studies without viral load data [18,23,24]; the meta-analysis of couples with the HIV-infected partner not receiving ART included seven studies with viral load data in at least one category [9,10,11-14,17] and three studies without viral load data [21,23,24]. Note that not all studies with viral load data contributed to all viral load strata.

# Testing & Linkage to Care Plus (TLC+)

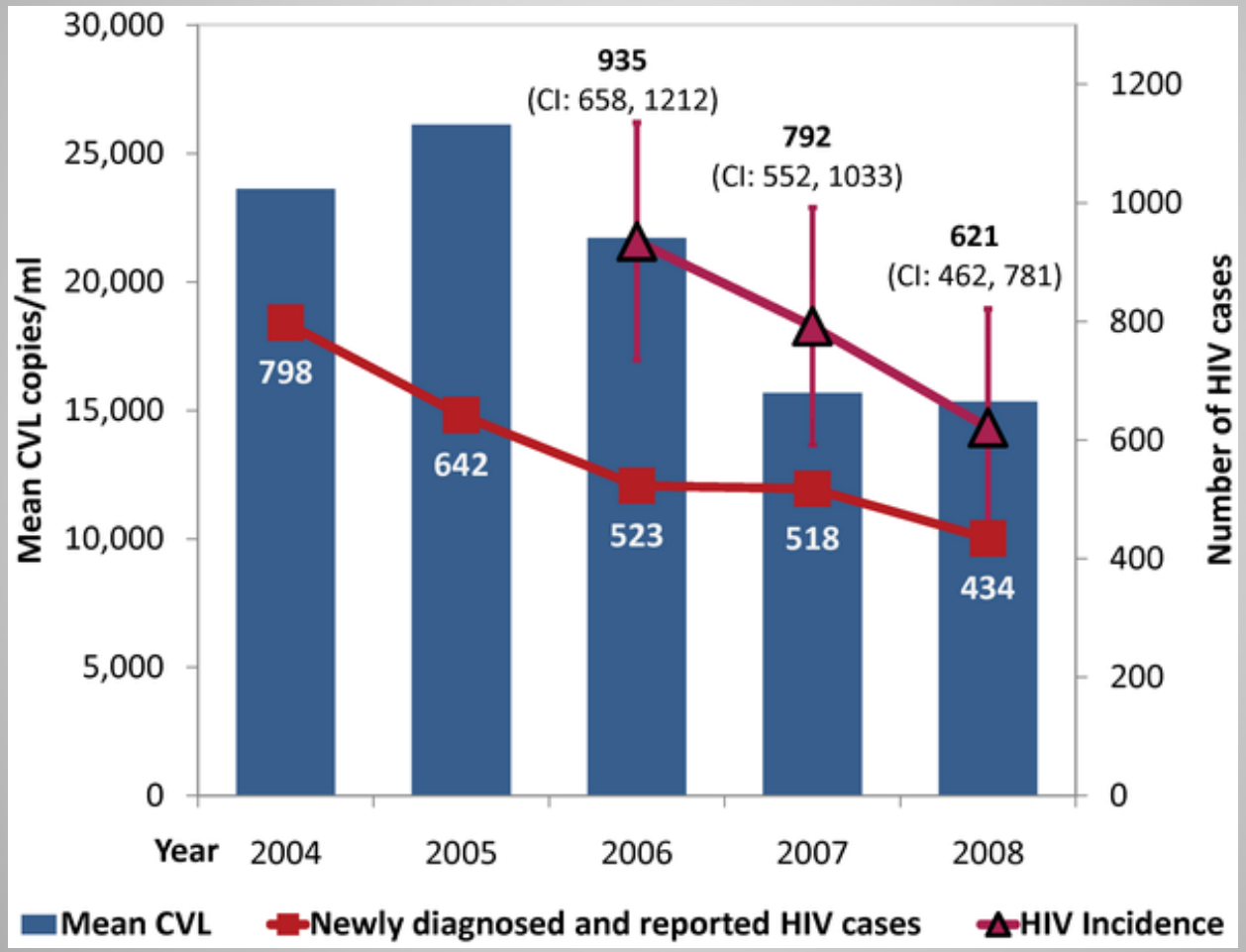
- For US setting, focus switched to improving basic parameters of the care system
  - Increase HIV testing rates
  - Improve referrals to care, and retention in care
  - Ensure appropriate use of ART and improve maintenance of viral suppression on ART
- Current estimates: ~80% aware of status, ~60-70% linked/retained in care, ~70-80% treated, ~70% viral load suppressed (Peter Kilmarx CDC)

# Late Diagnosis of HIV

- NYC: 27% of persons newly diagnosed with HIV had concurrent diagnosis of AIDS in 2005
- First CD4+ count performed within 12 months after HIV test
  - CD4+<200: 31.7%
  - CD4+ 200-350: 8.2%
  - CD4+ 351-500: 6.9%
  - CD4+ >500: 8.8%
  - Missing: 44%
- Concurrent HIV/AIDS diagnosis (1 month)
  - More than twice risk of death within 4 months HR: 2.27 (95% CI 1.94-2.65)

NYC DOHMH surveillance 2007
Hanna et al 2008, via Wafaa El-Sadr

# Community Viral Load & HIV Incidence in San Francisco




Das M, Chu PL, Santos G-M, Scheer S, Vittinghoff E, et al. (2010) Decreases in Community Viral Load Are Accompanied by Reductions in New HIV Infections in San Francisco. PLoS ONE 5(6): e11068. doi:10.1371/journal.pone.0011068



TAG Treatment Action Group

# Testing & Linkage to Care Plus (TLC+)

- Concept now being studied by the HIV Prevention Trials Network (HPTN 065) in the Bronx, NY and Washington DC
- Protocol and information: http://www.hptn.org/research_studies/hptn065.asp
- PI Wafaa El Sadr presentation: http://media.champnetwork.org/2010/04-Apr/El-Sadr.CHAMP.04-26-2010.pdf

# TLC+ Implementation Concerns

- Testing: Accessibility, reliability, cost, consent issues, confidentiality issues, counseling, stigma
- Linkage: Accessibility (what options are available?), cost
- Care & treatment: Accessibility, insurance, cost, quality, continuity, toxicity, resistance, pill fatigue

# TLC+ Implementation Concerns

- Ameliorating vs. exacerbating healthcare disparities: what is the quality of care an HIV+ individual is linked to, and what factors are associated with that quality?
- Can TLC+ be linked to other efforts to improve the quality of HIV care?
- Educational needs of providers: beyond testing & clinical management issues, there are still instances where provider attitudes to people with HIV are hostile, judgmental and uninformed

# TLC+ Implementation Concerns

- The complicating effects of a fractured system: individual organizations/systems may have priorities that conflict with the goals of TLC+ (client # targets, grant deliverables)
- De-prioritization of prevention for those that test HIV-
- Potentially de-valuing already underfunded treatment education efforts by shifting to more public health-spurred adherence interventions

# TLC+ Implementation Concerns

- Misunderstandings and deliberate misrepresentation of the goals of TLC+ in the media e.g.
  - “forced” testing & treatment conspiracy theories
  - suspicions about the role of big pharma
  - the “big brother” implications of surveillance data

# TLC+ Implementation Concerns

- Emphasizing public health benefit but neglecting to educate about individual benefit:
  - How much education focuses on the improved understanding of the role of inflammation in causing illness in people with HIV?
  - How widespread is awareness of the inflammation-reducing benefit of maintaining suppressed viral load?
  - Do we need to revise our current terminology in order to present a more consistent description of the potential health impact of HIV infection (e.g. nix confusing “non-AIDS” vs. “AIDS” language?)
  - Will earlier treatment lessen or exacerbate diseases of aging (or have no effect either way)?

# TLC+ Implementation Concerns

- The drugs aren't perfect. Many known toxicities plus concerns about unknown long term impacts (e.g. aging)
- Best time to start still not proven (START trial will compare >500 CD4 to <350 CD4: http://clinicaltrials.gov/ct2/show/NCT00867048)
- Resistance

# TLC+ Implementation Concerns

- Ethical concerns re: people with HIV being viewed as vectors
  - “The danger is that some policy leaders driving these ideas are more interested in 'treatment as prevention', meaning getting people with HIV on antiretroviral treatment, than they are in providing the best possible healthcare for them” – Sean Strub
- But…difficult to maintain HIV suppression with bad healthcare

# TLC+ Opportunities

- An opportunity to improve aspects of the healthcare system that serve people with HIV poorly in addition to the potential for reducing incidence
- Concerns best addressed by working to improve concept
- Local community input will be critical and must be heard
- Potential to integrate with National HIV/AIDS Strategy, healthcare reform

# TLC+ Discussion

?

# Disclosure

I'm a member of the HPTN 065 external community advisory group. My position at TAG is entirely funded by the Michael Palm Foundation, but a proportion of the organization's overall budget includes unrestricted corporate donations, including donations from several pharmaceutical companies. A full list of TAG's donors is available online the 2009 annual report: http://69.7.74.112/assets/0/16/42/120/5834d94e-e8c5-4d99-b7dc-2ba8fde227c6.pdf

# Contact Info

Richard Jefferys

richard.jefferys@treatmentactiongroup.org