

Working Group Discussion Summaries
Doris Duke Charitable Foundation (DDCF)
Operations Research for AIDS Care and Treatment in Africa (ORACTA)
Grantee Meeting
March 18-19, 2008

On March 18-19, 2008 the Doris Duke Charitable Foundation convened a meeting for our Operations Research on AIDS Care and Treatment in Africa (ORACTA) grantees. The ORACTA program was designed to address key knowledge gaps in how to deliver antiretroviral therapy in resource-constrained contexts and brings together leading researchers from the United States and Africa. The purpose of the March meeting was to provide an opportunity for ORACTA grantees to meet, discuss their research, and network as well as an opportunity for the foundation to review the ORACTA program. During the meeting, grantees presented updates on their research and participated in one of three two-hour working group sessions to facilitate discussion on (1) cost effectiveness and economic evaluation of AIDS care and treatment; (2) integrating treatment approaches for multiple diseases; and (3) defining and measuring adherence to treatment.

The following are brief summaries¹ of the three working group sessions, compiled and edited by DDCF staff. Attached you will find the agenda, a list of meeting attendees, and more detailed notes which reflect the discussion from each working group.

Working Group 1: Cost effectiveness and the Economic Evaluation of AIDS Care and Treatment Programs

Facilitated by:

- Kenneth Freedberg, MD, MSc, Director of the Program in Epidemiology and Outcomes Research at the Harvard Medical School Division of AIDS
- David Coetzee, MD, Senior Lecturer and Director, Infectious Diseases Epidemiology Group, University of Capetown, South Africa

Session summary: Careful comparative cost effectiveness studies can help answer the question of what is the best way to spend the marginal dollar. Both contextual issues and clear definitions are critical in determining cost effectiveness. Governments/policy makers with severe budgetary constraints might focus on 'inexpensive' interventions that are ultimately not cost effective. Answering the question: "Is it cost effective?" involves defining: (a) the intervention being measured, (b) what is meant by the term 'effective,; and (c) how the real and implicit costs will be measured.

Cost effectiveness can be particularly helpful in analyzing programs that appear to be economical, such as shifting treatment tasks from clinical staff to community workers. If results are poor, then an approach may seem economical, but may not prove to be cost effective. In addition, the goals of the program must be considered. For example, outreach or community-based rural health service delivery projects may be viewed as cost effective if the goal of the program is equity, but the identical analysis could conclude that the same project is not cost effective if the goal of the project is treating the maximal number of people.

The working group discussion focused on these five areas where cost-effectiveness concerns are keenly relevant: the structure of HIV care from centralized to decentralized service delivery; laboratory needs and decision-making; rationing decisions related to medication provision; prevention and screening; and integration of services and programming.

¹ These brief summaries, drafted by DDCF staff, have been shared with the working group facilitators before distribution.

Working Group 2: Integrating Treatment Approaches for Multiple Diseases

Facilitated by:

- Christopher Whalen, MD, MS, Director Professor Division of Epidemiology, Case Western Reserve University
- Gerald Friedland, MD, Professor and Director, AIDS Care Program, Yale University

Session Summary: The goal of this session was to discuss the integration of HIV care with care and treatment for other diseases. Participants first listed the co-morbid conditions faced by patients with HIV/AIDS which include not only infectious diseases but non-communicable diseases like mental illness, cancer, and cardiovascular diseases. Some of these diseases are managed in developing countries under national programs (e.g., TB, Malaria, STDs, and HIV). The group discussed some of the challenges of integrating health care, especially where there are national programs in place for individual diseases.

The TB and HIV programs were used as a paradigm to discuss the specific and general issues arising when trying to integrate care across programs. Participants discussed the history of TB control and HIV control programs and some apparently successful models of integration already in place (Lesotho, Uganda, and Mozambique). Emphasis was placed on the need to focus on infection control policies in health care to prevent nosocomial spread of TB in the HIV care setting. Integrated programs could enhance case finding for HIV among TB patients and TB among HIV patients. There was also a need among TB programs to be able to refer HIV-infected patients to appropriate long-term care centers after they completed their TB treatment.

Since there are different pressures and demands across and within countries, a single one size fits all solution to providing integrated care is unlikely. Nonetheless, the working group participants suggested that it would be useful to articulate some basic principles of integrated care that could be used as either outcome or process measures of care.

Work Group 3. Defining and Measuring Adherence

Facilitated by:

- Wafaa El-Sadr, MD, MPH, Director of the International Center for AIDS Care and Treatment Programs (ICAP)
- Helga Holst, MD, Superintendent, McCord Hospital, South Africa

Session Summary: Adherence to treatment is at the heart of successful HIV programs, but the field is plagued by inconsistent definitions, resulting in confusion. Work in this area should start from agreed upon definitions of terms. In order to ensure clarity in the discussion, the group followed an outline which separated the various elements often subsumed under "adherence". The topics discussed during this workgroup session were: (a) Lost to Follow-up (LFU), (b) Retention, (c) Adherence to treatment, and (d) Interventions.

The group discussed the critical need for clear definitions of lost to follow-up and retention in order to better understand the root causes of adherence problems and design effective interventions. They also noted that lost to follow-up and retention are outcomes that can be studied with operations research that is tied to clinical outcomes. Potential solutions that were suggested for monitoring adherence included creating software that clearly highlights or flags individual patients who may be having or be at risk for adherence problems, or implementing longer assessment periods that might show patterns of missed doses better.

The discussion concluded with several recommendations for next steps including 1) developing common terms and definitions (both for programs and studies), 2) creating minimum reporting requirements, 3) implementing targeted interventions, and 4) establishing a dynamic feedback loop so that improvements can be made to programs as data is collected.

**Doris Duke Charitable Foundation
Operations Research for AIDS Care and Treatment in Africa (ORACTA)
Grantee Meeting**

**March 18-19, 2008
Hyatt Regency, Jersey City, New Jersey**

Meeting Agenda				
Time	Presenter	Title of ORACTA Project	Country	Page
<u>Tuesday, March 18, 2008</u>				
10:30 - 11:30 am	Involving Peers and Communities in HIV Care <i>(Note, this session will be held in conjunction with the International Conference on HIV Treatment and Adherence)</i>			
Room: Hudson Ballroom	Session Chair: Michael Rich			
10:30 - 10:45	Kara Woos-Kaloustian, MD	Extending HIV Care Beyond the Rural Health Center	Kenya	
10:45 - 11:00	John Idoko, MD	Directly Observed, Community-Based Treatment in Nigeria	Nigeria	
11:00 - 11:15	Patricia Bright, RN, MSPH, PhD	Do Peer Counselors Promote Adherence to ARVs?	Uganda	
11:15 - 11:30	Maria K.L. Eng, DrPH	Peer Educators Impact of HIV Medication Adherence	Nigeria	
<i>The ORACTA grantee meeting will commence again in the Riverside Ballroom after the International Conference on HIV Treatment and Adherence ends at 5:30 pm.</i>				
6:00 - 7:00 pm	Assessing Models of Care 1: Comparative Approaches			
Room: Liberty	Session Chair: Gerald Friedland			
6:00 - 6:15	David Coetzee, MD	Models of Care for Antiretroviral Service Delivery	South Africa	
6:15 - 6:30	Denis Nash, PhD, MPH	Identifying Optimal HIV Care Approaches in Africa	Multiple	
6:30 - 6:45	Mark Micek, MD, MPH	HAART Delivery Models: A Quasi-Experimental Study	Mozambique	
6:45 - 7:00	Richard Marlink, MD	Establishing the Cost-Effectiveness of Different Models of Antiretroviral Treatment Programs across Clinical Sites in Southern Africa in Urban and Rural Settings	South Africa	
7:30 - 9:00 pm	Dinner Speaker: Paul English Founder, Kayak.com		"Software Usability for Resource Poor Environments"	
Room: Harborside	Dinner			
<u>Wednesday, March 19, 2008</u>				
7:30 - 8:30 am	Continental Breakfast			
Room: In front of Liberty				
8:30 - 9:30 am	The Complexities of Adherence			
Room: Harborside	Session Chair: David Bangsberg			
8:30 - 8:45	Charles Mang'ombe, DipCMS	ART Adherence among People in Rural Zambian Clinics	Zambia	
8:45 - 9:00	Lawrence Long, BBusSci	Retention and Attrition of Patients On Antiretroviral Therapy for HIV/AIDS in South Africa	South Africa	
9:00 - 9:15	Francois van Loggerenberg, MA	An Enhanced Adherence Support Programme for HAART	South Africa	
9:15 - 9:30	Gregory P. Bisson, MD, MSCE	Objective adherence assessment can replace CD4 count monitoring for determination of virologic failure among HIV-infected patients on highly active antiretroviral therapy	Botswana	
9:30 - 9:45 am	Coffee Break			

Time	Presenter	Title of ORACTA Project	Country	Page
9:45 - 10:15 am Room: Harborside	Addressing Behavior and Treatment Session Chair: Gretchen Birbeck			
9:45 - 10:00	Eliza A. Bukusi, MD	Impact of ART on Sexual Behavior in Kisumu, Kenya	Kenya	
10:00 - 10:15	Mkaya Mwamburi, MD	Understanding HAART Refusal and Piloting Targeted DOT to Improve HAART Adherence in a ARV Treatment Expansion Program in Kenya: Operational Evaluation and Cost Analyses	Kenya	
10:20 - 11:10 am Room: Harborside	Assessing Models of Care 2: Alternative Approaches Session Chair: David Coetzee			
10:20 - 10:35	Gary Maartens, MBChB, MMed	Cost-Effectiveness of Public-Private Partnerships	South Africa	
10:35 - 10:55	Heidi Schwarzwald, MD, MPH	Caregivers' Perception of Quality of Care for HIV Infected Children after Decentralization from a Referral Specialty Clinic in Kampala, Uganda	Uganda	
10:55 - 11:10	Robin Wood, MD	Pharmacy Based Monitoring of ART Programs	South Africa	
12:00 - 2:00 pm Room: Liberty I	Lunch and working groups discussions			
Room: Liberty II	Defining and Measuring Adherence Workgroup moderators: Wafaa El-Sadr, MD, MPH, Helga Holst, MD			
Room: Liberty III	Cost-effectiveness and the economic evaluation of programs Workgroup moderators: Kenneth Freedberg, MD, MSc, David Coetzee, MD			
	Integrating treatment approaches for multiple diseases Workgroup moderators: Christopher Whalen, MD, MS, Gerald Friedland, MD			
2:15 - 2:45 am Room: Harborside	Drug Resistance, Toxicity, and Effectiveness Session Chair: Jeffrey Stringer			
2:15 - 2:30	Benjamin H. Chi, MD	Post-90 day mortality among adults using stavudine- and zidovudine-based antiretroviral therapy in Lusaka, Zambia	Zambia	
2:30 - 2:45	Katherine Semrau, MPH	Virologic Response to Non-nucleoside Reverse Transcriptase Inhibitor-based Therapy among HIV-infected Women in Zambia who Received Single-Dose Nevirapine	Zambia	
2:45 - 3:00 pm	Coffee Break			
3:00 - 3:45 pm Room: Liberty	HIV/AIDS and TB: Strategies and Directions from South Africa Session Chair: Robin Wood			
3:00 - 3:15	Kenneth Freedberg MD MSc	Impact and Value of Improving TB Control in Africa	South Africa	
3:15 - 3:30	Neil A. Martinson, MBBCh, MPH, MFGP	Prevention of TB Mortality & HIV Related Hospitalization	South Africa	
3:30 - 3:45	Gerald Friedland, MD	Combating MDR and XDR TB and HIV in Rural South Africa	South Africa	
5:00 - 8:00 pm Room: Harborside	Reception & Dinner	Dinner Speaker: Helen L. Smits, MD, MACP Former Vice Chair, Institute of Medicine Evaluation of PEPFAR Implementation		
		"Knowing What Works: Operations Research and PEPFAR"		