Outcomes and Epidemiology
Unit of the
Clinical Discovery Core
Vanderbilt-Meharry CFAR
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Comprehensive Care Center
Data Overview

• 1994: CCC opened
• 2005:
  – > 5,000 patients seen
  – > 2,000 active patients
  – > 300 new patients/year

• Data:
  – 1994-1996: abstracted from chart → EMR
  – 1997-present: Electronic Medical Record
    • Healthmatics®
      – Clinical information, medications, procedures
      – Laboratory data (electronic interface > 95%)
Comprehensive Care Center Database

• 100% of CCC patients are in Healthmatics® database
• 85% are enrolled in CHORUS
• 75% are enrolled in specimen repository
  • 1,467 patients—consent + specimens
  • 37,300 specimens—2-4 (plasma, cells) @ each visit
• Demographics
  – 25% female
  – 35% African-American
  – 5% Hispanic
  – 55% TennCare, 12% Medicare, 20% commercial, 5% Ryan White
Focus During Past 18-24 Months

- Complete/solidify data missing from Healthmatics database (labs, meds)
- Confirm endpoints (OI, death)
- Generate SAS research database with updated, deidentified data
- All done in conjunction with specific (but large) studies
1. CD4% and Disease Progression

- % CD4 < 17 as predictor of disease progression
  - Can be used to determine when to start ART
- Lead investigator:
  - Todd Hulgan, M.D.-Asst Prof of Med
- Observational data 1998-2003
- Status:
  - Presented at N.A. Observational Database meeting, November 2004
2. Genetics of NNRTI Toxicity

- Tested hypothesis that NNRTI toxicity related to SNPs in CYP or transporter genes
- Lead investigator:
  - Marylyn Ritchie, Ph.D.-Asst Prof Med
    - Center for Human Genetics Research
    - Supported by CFAR grant
- DNA from specimen repository; clinical and demographic data
- Status
  - Abstract at 2005 CROI
  - Manuscript in preparation
3. Race and NNRTI Discontinuation

- Tested hypothesis that NNRTI D/C for toxicity may differ by race
- Lead investigator: Shaheena Asad
  - MPH student-Meharry
  - Todd Hulgan as senior investigator
- Validation of TennCare data on NNRTI drug discontinuation
- Status:
  - Completed MPH thesis April 2005
  - Manuscript in preparation
4. HIV+ Pregnant Women Database

- Assessed impact of pregnancy on HIV disease progression
- Investigators:
  - Mercy Udoji (VMS)
  - Jennifer Tai (VMS)—Medical Scholars Program 2005-2006
- Subset of CCC patients with more extensive data related to OB outcomes
- Status:
  - Data now in electronic format
  - Solidifying missing data—HAART use
  - Abstract submitted to IDSA Annual Meeting
5. Substance Abuse Treatment Cost-Effectiveness

• Will substance abuse Rx improve outcome of HIV Rx?

• Lead investigator:
  – David Weinstein, M.D.-Psychiatry
    • New to HIV research, addiction research

• Establishing ties with medical economist, community treatment centers

• Status:
  – Under development; discussions with NIDA
  – Generating preliminary data
6. CXR in TB/HIV Patients

- Is CXR adequate to diagnose TB in HIV patients?
- Investigators:
  - Patrice Joseph, M.D.-Haiti; MSCI program
  - Chris Mwenya, M.D.-Zambia; Meharry resident starting July 2005
  - Tracy Pepper (VMS)
  - Elizabeth Eby (VMS)
- Nashville TB Clinic data
  - 1992—2003 (>800 pts)
- Status:
  - Data have been abstracted from charts
  - Database created; analysis
  - Abstract submitted to IDSA Annual Meeting
7. Fluoroquinolone Resistance in M.tb
HIV as possible risk factor

• Lead investigator
  – Tim Sterling: K-24 June 2005; R-01 pending
  – Pinky Gaba, M.D.-Vandy ID fellow: NRSA
• State TB isolates, TennCare database
• Status:
  – Approved by State, Vanderbilt IRB
  – Dr. Gaba to start July 2005
8. Collaborations with Johns Hopkins

- Richard Moore, M.D., M.H.S.
- Effectively doubles sample size
  - Data
  - Specimen repository
- Will start with 1-2 projects, then expand as appropriate
9. Data support for special cohorts

- Spyros Kalams, M.D.
  - Slow progressors
- Todd Hulgan, M.D.
  - Oxidative stress
- D’Aquila/Haas/Kalams
  - New patients starting therapy
How can CFAR help YOUR research?

• TELL US!!!
  – Now
  – or very soon
    • www.mc.vanderbilt.edu/cfar