

Tools for Building Research Infrastructure at Health Centers

Jonathan N. Tobin, PhD

Clinical Directors Network (CDN)

The Rockefeller University

Center for Clinical & Translational Science (CCTS)

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www.Rockefeller.edu/ccts/communityengagement

Presented at NACHC – CHI

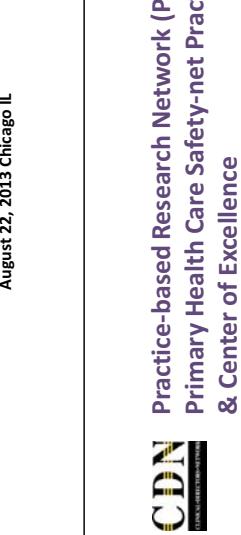
August 22, 2013 Chicago IL

CDN: Past, Present & Future

- An informal network of clinical leaders who practice as primary care clinicians in low-income and minority communities
- A research and educational organization
- **A means to translate clinical research into clinical practice**

Primary Activities

- Practice-based Research
 - Clinical Leadership & Sustained Clinician Engagement
 - Early & Significant Community Engagement
 - Education and Training
 - Quality Improvement
 - Professional Development
 - PBRN Research Infrastructure



US Department of Health & Human Services



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www.CDNNetwork.org



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AHRQ Grant #1 HS 021667
NIH-NICATS Grant #R11 RR006043
CTSA Administrative Supplement Award (2011) to
The Rockefeller University Center for Clinical and Translational Science (CCTS)
and by **HRSA** (CHARN)
www.CDNNetwork.org



N² LEARNING COLLABORATIVE

A collaboration among:

- Access Community Health Network (ACCESS)
- Alliance of Chicago (ALLIANCE)
- Association of Asian Pacific Community Health Organization (AAPCHO)
- Center for Community Health Education Research and Service (CCHERS)
- Clinical Directors Network (CDN)
- Community Health Applied Research Network (CHARN)
- Fenway Institute (FENWAY)
- New York City Research and Improvement Group (NYCRING)
- Oregon Community Health Information Network (OCHIN)
- PBRN
- CDN
- NYCRING
- ACCESS
- DO COLLABORATIVE
- CHARN



N² LEARNING COLLABORATIVE TRACKS

1. PBRN Research Management Innovations (for PBRN Senior Staff)
2. PBRN Methods (for PBRN Senior Staff & Academic Collaborators)
3. Introduction to Research (for CHC Nodes Staff & New PBRN Staff)
4. PBRN Study Results (for CHC Nodes, CHC Partners, PBRN Senior Leadership & Staff, Academic Partners)



533 online viewers to date
Visit: www.CDNnetwork.org



CDN N²-PBRN Learning Collaborative Track: PBRN Study Results

Stakeholder Feedback on Community Engaged Research in the CTSA Program

Featured PBRN: Center for Community Health Education, Research and Service (CCHERS)
Friday, August 9, 2013, 2:00-3:00pm EDT

Young African American Men and HIV: An Interactive Response to a Community Health Issue
Featured PBRN: Access Community Health Network, Chicago, IL
Thursday, June 27, 2013, 12:00-1:00pm EDT

The Bronx Ongoing Pediatric Screening (BOPS) Initiative: Lessons Learned from a Large Scale Initiative to Enhance Screening in Urban Primary Care
Featured PBRN: New York City Research and Improvement Group (NYCRING)

From Bench to Bedroom: Testing and Translating Behavioral Interventions from Research into Practice
Featured PBRN: National Association of Community Health Centers (NACHC) (Incubator PBRN) and Clinical Directors Network Inc., (CDN), NY, NY

Funded by: AHRQ; Grant No. 1 P30-HS-021667

CDN N²-PBRN LEARNING COLLABORATIVE TRACK: PBRN INTRODUCTION TO RESEARCH

- Social Determinants of Health: Important Considerations for Medically Underserved Community Health Center Patients
Featured PBRN: Association of Asian Pacific Community Health Organizations (AAPCHO)
- An Update on Community-Based HIV Prevention Research and Applications
Featured PBRN: The Fenway Institute, Boston MA
- Integrating Patient Reported Outcomes into Clinical Care: HIV as a Case Study
Featured PBRN: The Fenway Institute, Boston MA
- Introduction to Collaborative Community-based Research
Featured PBRN: National Association of Community Health Centers (NACHC) and Lutheran Family Health Center (Incubator PBRNs) and Clinical Directors Network Inc. (CDN), NY, NY

Funded by: AHRQ; Grant No. 1 P30-HS-021667

CDN N²-PBRN Learning Collaborative Track: Research Methods

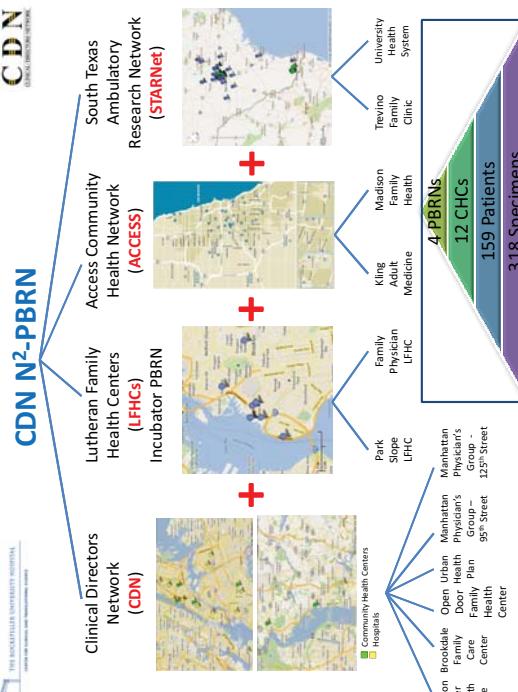
Patient-Centered Medical Home: Using the EMR to Facilitate PCMH Transformation

Featured PBRN: Alliance of Chicago Community Health Services
Thursday, Sept 12, 2013, 1:00-2:00pm EDT

Preparing for Meaningful Use Stage 2
Featured PBRN: Alliance of Chicago Community Health Services
Tuesday, July 30, 2013, 2:00-3:00pm EDT

The Research Potential of an EHR-Based Network: Lessons from the OCHIN PBRN
Featured PBRN: Oregon Community Health Information Network (OCHIN)

Funded by: AHRQ; Grant No. 1 P30-HS-021667



N² Partners: "Incubator PBRN"

DC Research Collaborative
Lutheran Family Health Center (LFHC)
Brooklyn, NY
Research Training for Clinical Leaders

National Association of Community Health Centers (NACHC)
Clinical and Translational Science Institute at Children's National
George Washington University (GWU)
Clinical Directors Network (CDN)
Alexandria Neighborhood Health Services
Mission Life Center
Mary's Center for Maternal and Child Care
Unity Health Care

Epidemiology and Statistics
Study Design and Implementation
Grant Writing and IRB
Team Intervention Projects:

- Hepatitis C/HIV Screening
- Childhood and Teen Obesity
- Teen Pregnancy and Contraception
- Diabetes Type II



CTSI
Clinical and Translational Sciences Institute
National Institute of Child Health and Human Development
National Institutes of Health
150 Easton Road, Bethesda, MD 20892



Research Training for Clinicians Course Goals

- **Study Design and Implementation**
 - To enable practicing clinicians to develop their research interests and skills, through didactics on the scientific and statistical aspects of study design, as well as through hands-on experience in preparing and implementing a research project
- **Epidemiology and Biostatistics**
 - To develop and provide oral and written research dissemination/presentation skills at local, regional and national forums
- **IRB/Human Subjects Protection**
 - IRB Application
 - Informed Consent
- **Grant Writing**
 - To provide technical assistance in grant-writing and identifying potential funding sources, including training exercises and assistance in developing budgets, staffing plans, work-schedules, and timelines
- **60 CME/CNE/CDE Credits for Participation**

Goals:

- To enable practicing clinicians to develop their research interests and skills, through didactics on the scientific and statistical aspects of study design (quantitative and qualitative) as well as through hands-on experience in preparing and implementing a research project
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- To develop and provide oral and written research dissemination/presentation skills (scientific, clinical and lay) at local, regional and national forums

Co-Directors: Nonkulile Dladla, MD, MS

Lutheran Family Healthcare


Jonathan N. Tobin, PhD

CDN/The Rockefeller University

Center for Clinical & Translational Science

Facilitator: Maria Dzio, PhD, Clinical Directors Network, Inc. (CDN)

RESEARCH TRAINING FOR CLINICAL LEADERS 2012-2013

Lutheran Medical Center
CDN
Clinical Directors Network, Inc.

www.cdn.org | 800.541.5000 | 100-000-0000 | NY 100-000

Study Design and Implementation

- Developing study questions and interventions
- Calculating sample size
- Identifying dependent and independent variables, and covariates
 - Patient-centered, clinical, laboratory, public health
 - Recruiting and retaining patients
 - Health disparities and cultural competence
 - Intervention and Fidelity Monitoring
 - Engaging Stakeholders
 - Interactive Experiences
 - Participated in qualitative research/focus groups
 - Participated in the informed consent process

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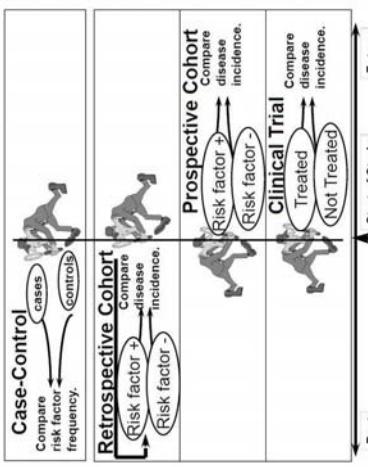
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Epidemiology and Biostatistics

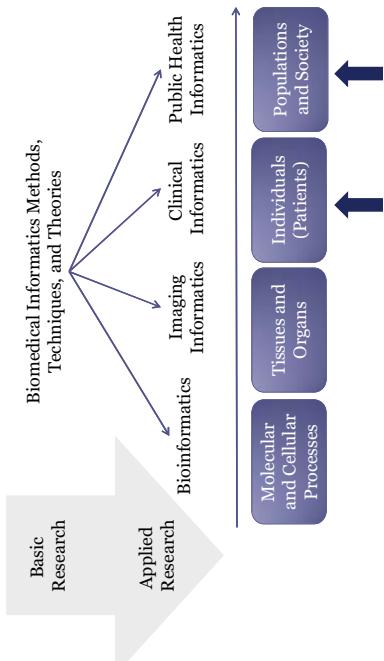
- Prevalence and Incidence
- Odds Ratio (OR), Relative Risk or Risk Ratio (RR)
- Significance Testing, p-values, Confidence Intervals
- Validity and Reliability
- Bias and Confounding
- Types of Analysis
- Power, Sample Size, and Effect Size
- Sensitivity and Specificity
- Using Statistical Software (CDC EpiInfo)

A Review of Types of Study Designs

- Prevalence/Surveys
- Cross-sectional
- Retrospective
- Case Control
- Prospective Cohort
- Historical Cohort
- Randomized Controlled Trial (RCT)
 - Site level (Cluster RCT) vs. patient level
 - Comparative Effectiveness Research (CER)
 - Patient Centered Outcomes Research (PCOR)
- Qualitative/Focus Group
- Mixed Methods (Qualitative/Quantitative)



Biomedical Informatics



Primary Text: Recommended Texts

SB Hulley, SR Cummings et al, *Designing Clinical Research:*

An Epidemiologic Approach (NY: Lippincott Williams & Wilkins; 2nd Ed. 2001)

Additional/Supplemental Texts & Resources:

- Leon Gordis *Epidemiology* (Philadelphia PA: Saunders Elsevier, 2009 4th Ed)
- N Krieger *Epidemiology for the People* (New York NY: Oxford, 2010)
- RS Greenberg, SR Daniels, WD Flanders, JW Eley, JR Boring III *Medical Epidemiology* (4th Ed) (New York NY: Lange/McGraw Hill, 2005)
- RM Merrill *Introduction to Epidemiology* (Boston MA: Jones and Bartlett, 2010, 5th Ed)
- Univ of Pittsburgh - Epidemiology Super Course www.pitt.edu/~superi
- Univ of North Carolina – Epidemiology eText www.eidempiolog.net
- CDN Clinical Research Track
- **Rockefeller Webcasts** www.CDNetwork.org/Rockefeller

Human Subjects Protection & IRBs

- Writing an Informed Consent Form
- Conducting Informed Consent Interview (role play)
- Preparing an IRB Application

Grant Writing

- Literature searches using PubMed
- Patient Centered Outcomes Research Institute (PCORI)
- Biosketch development
- Drafting Specific Aims, Hypotheses, Analysis Plans
- Identifying Funders – Using Foundation Center Resources
- Grant development and submission



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Building a Stronger Science of Community/Engaged Research

http://muse.lsu.edu/journals/progress_in_community_health/partnership_research.edition_and_actions/edr_6_3.html

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NATIONAL CENTER FOR HEALTH STATISTICS (NCHS)

www.cdc.gov/DataStatistics

www.cdc.gov/nchs/ftp_data.htm

www.cdc.gov/nchs/dhcs_surveys.htm

- **NATIONAL HOSPITAL DISCHARGE SURVEY (NHDS)**
- **NATIONAL AMBULATORY MEDICAL CARE SURVEY (NAMCS)**
- **NATIONAL HEALTH EXAMINATION & NUTRITION SURVEY (NHANES)**
- **NATIONAL HEALTH INTERVIEW SURVEY (NHIS)**
- **BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM (BRFSS)**
- **YOUTH BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM (YBRFSS)**

www.cdc.gov/brfss

www.CDNetwOrk.org



<http://datawarehouse.hrsa.gov>



Key Program Areas

The HRSA Geospatial Data Warehouse and its associated applications provide HRSA with access to a broad range of information about HRSA programs, related health resources, and demographic data from an array of sources. It also provides a central point of access for planning and analysis purposes.

The HRSA Geospatial Data Warehouse captures grants, scholarship and loan programs, designation of underserved areas, and service demonstration grants, and integrates them with data acquired from external sources. For a comprehensive list, refer to the data source listing under [User Resources](#).

As the central source of information used for reporting on HRSA activities, a map tool is available for users who would like to place their data in a geographic context (e.g. mapping the location of community health centers).

The HRSA Geospatial Data Warehouse currently includes 5 years of grants data (fiscal years 1999 through 2003). The map and allows users to map the most recent year of grants data, fiscal year 2003. The [HRSA Grant and Program List](#) describes fiscal year 2003 grant activity, by Program Area, Cluster, and Program Name (for grants awarded in 2002).

The HRSA Geospatial Data Warehouse will continue to evolve with HRSA's growing and changing data reporting and analysis needs. The data are updated quarterly and new sources of information are added on a regular basis so check back often to see "What's New."

www.hrsa.gov/data.htm



Data and Statistics

Key Program Areas

- HrA/GS Statistics, from which come all Primary Health Care
- HRAVITS Services
- CARE Act Clinical & Services Data Map
- CARE Act Research Perspectives
- Career Development Projects
- Estimated Allocation by State/Tax Title I, II, III & IV Data/Rimbursement Program Data
- Title IV Financial/Capital Compromission Data (356-G)
- Title IV Contingency Data/Bulletin (404-406)
- HRAVITS Data Links

Resources

- Aboriginal Health
- Administration Chard
- Bureau of Primary Health Care/Supported Health Centers
- Child Health
- Health Professionals
- Special Programs
- Bureau Health Policy
- Information Center
- Primary Health Care
- Medically Underserved Areas/Medically Underserved Populations
- Bureau of Primary Health Care/Supported Health Centers
- Drug Pricing Database
- Uniform Data System (UDS)

Maternal and Child Health

- Centers for Education
- Experiments
- Child Health USA, 2002
- Women's Health USA, 2003
- NCHB Title V Information System
- NCHB Policies Database
- National Survey of Children with Special Health Care Needs

Funding

- Gants
- Contracts

Health Professions

Health Data

<http://quickfacts.census.gov/qfd/states/00000lk.html>



USA QuickLinks

Documents designed by PDFGrid™ are in Adobe's Portable Document Format. In order to view these files, you will need the Adobe Acrobat Reader which is available for free from the [Adobes website](#).

People QuickLinks

Census 2000 Population, Demographic, and Housing Information:

Completes forms questions collected on both the short form and the long form:

- Catalogue, India and U.S. (PDF)
- Comparative, Short and Long Form Data
- Estimated Short Form Sample of Households that received the long form
- Estimated Characteristics (IPUMS) (includes disability data)
- Economic Characteristics (PDF)
- Housing Characteristics (PDF)

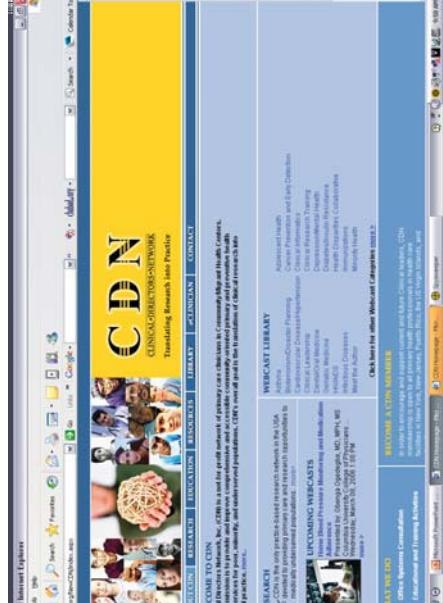
1990 Census Population, Demographic, and Housing Information:

Completes forms questions collected on both the short form and the long form:

- Comparative, Short and Long Form Data
- Estimated Based on the entire short sample of households that received the long form
- Social Characteristics (reduces disability data)
- Labor Force and Employment Characteristics
- Estimate of the characteristics

Historical Population, Income, and Housing Data: 1900 to 1990

- 2001 Population Estimates
- Population Projections to 2025
- Income and Poverty: model-based estimates



CDN - [Clinical Grid Network](#)

CDN Home Page

WELCOME TO CDN

CDN is here to help you with all your clinical grid needs. Our mission is to facilitate the exchange of electronic medical records and other clinical data between the private, public, and research sectors. CDN is now in its second year of operation and has been well received by the medical community.

RESEARCH

CDN is a leading provider of clinical grid technology for medical research. We have recently expanded our services to include the exchange of clinical data between the private, public, and research sectors. CDN is now in its second year of operation and has been well received by the medical community.

UPCOMING WEBCASTS

CDN Accredited through AGD

www.CDNetwOrk.org/

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CDN Webcast Series

- Health Care Acquired Infection Prevention for Ambulatory Surgical Centers
 - Train-the-Trainer Workshop in Infection Prevention for Ambulatory Surgical Centers

[www.CDNnetwork.org/HAI](http://CDNetwork.org/HAI)

 - The Rockefeller University Center for Clinical and Translational Science (CCTS) Series

[www.CDNnetwork.org/Rockefeller](http://CDNetwork.org/Rockefeller)

 - Howard University College of Medicine AIDS Education and Training Center-National Multicultural Center Cultural Competence Series

[www.CDNnetwork.org/AETCNCMC](http://CDNetwork.org/AETCNCMC)

 - RCHN Community Health Foundation

[www.CDNnetwork.org/RCHN](http://CDNetwork.org/RCHN)



CDN Resource Libraries & Toolkits

- Improving Colorectal Cancer Screening Rates among NYC Russian Speaking Communities
 - Sponsored by: NYC Dept. of Health and Mental Hygiene
 - www.CDNnetwork.org/RussianCRC
 - Online Guidelines & Clinical Decision Support Tools
 - Sponsored by: NYC Dept. of Health and Mental Hygiene
 - eClinician.org
 - Research Training Catalog for Federally Qualified Health Centers (FQHCs)
 - Sponsored by: NACHC, GWH, Children's CTSI
 - www.CDNnetwork.org/NACHC



www.CDNetwork.org



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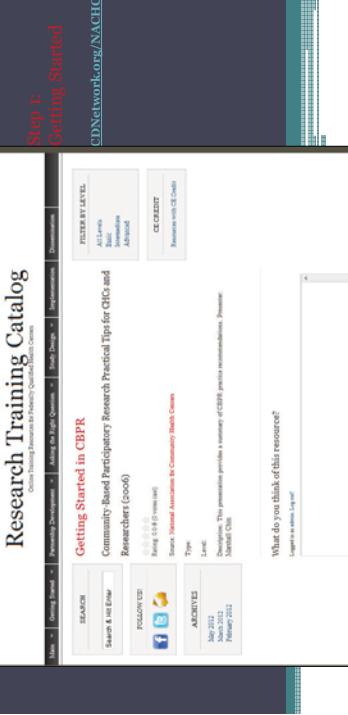
SCHOOL OF NURSING

Research Training Catalog



Research Training Catalog
Online Training Resources for Faculty Quality-Enhancement

Getting Started in CBPR
Community-Based Participatory Research Practical Tips for CFCs and Researchers (second)



CDN 
THE GEORGE
WASHINGTON
UNIVERSITY
C O L L E G E
O F D I M E N S I O N S
Open House Program for Women, Queer & Trans Students



CLINICAL DIRECTORS' WORKLOAD



www.CDNetwork.org

www.eClinician.org