USA-Caribbean Alliance for Health Disparities Research (USCAHDDR) Program

Steering Committee Meeting
February 21, 2013
National Institute on Minority Health and Health Disparities
Cooperative Agreement - No. 1U24MD006959-01

Louis W. Sullivan, M.D., Principal Investigator
Opening Remarks: Louis W. Sullivan, M.D., Principal Investigator

- Welcome
- Introduction: Team Members
- Agenda Review
- Program Overview
Agenda

8:30 – 9:00  Welcome - Member Introductions
Overview: Cooperative Agreement
Louis W. Sullivan, M.D., Principal Investigator

9:00 – 10:30  Year Two Progress Reports
Program Update: Marlene MacLeish, Ed. D.
Research Overview: Anselm Hennis, MBBS, Ph.D.
Evidence Core: Report: Trevor S. Ferguson, MBBS, DM.
Aurelian Bidulescu, M.D., Ph.D.

10:30 – 10:45  Break

10:45 – 11:45  Year Two Progress Reports
Analysis Core Report: Ian Hambleton, Ph. D.
Aurelian Bidulescu, M.D., Ph.D.

11:45 – 12:45  Working Lunch – Discussion

12:45 – 1:15  E-platform discussion

1:15 – 1:45  Draft Year 3 Implementation Plan

1:45 – 2:30  Discussion

2:30 – 4:00  Future Plans – Wrap Up
Program Overview: Louis W. Sullivan, M.D., Principal Investigator

- **Research Plan Overview**
  - Framed by the IOM 2009 report, “U.S. commitment to global health: recommendations for the public and private sector.”
  - Research goal is to:
    - conduct research on the role of social determinants - such as ancestry, language, indigenous health practices, lifestyles and socioeconomic status - in determining health status and health outcomes among Caribbean and US populations
  - Three Aims
    - Identify “knowledge” gaps (Evidence Prog.)
    - Do health status analysis: Caribbean-US populations (Analysis Prog.)
    - Build UWI –SA research capacity (E-Platform Prog.)

- **USCAHDR Organizing Principles:**
  - Early partnership building emphasis
  - Phased development over five years funding span
**Phase I: YRS 1&2**

1. Establish Admin. Core with weekly meetings
2. Appoint Program Director
3. Establish Working Relationship with NIMHD
4. Execute subcontracts
5. UWI: Appoint Research Staff
6. Convene Steering Com. Draft Yr 1 Implementation Plan
7. Conduct UWI Site Visit
8. Identify Caribbean data sets
9. Identify US data sets
10. Write Report-CSC Approval

**Phase II: YRS 2 & 3**

1. Research – Caribbean (UWI)
   - Evidence Core
   - Analysis Core
   - E-Platform
   - Protocols complete
   - Literature search underway
2. Research – US-Caribbean
   - US dataset access – manuscript proposals
   - UWI-US working sessions
   - Comparative analyses of US-Caribbean data
3. IT infrastructure development
   - UWI infrastructure underway
   - SA infrastructure underway
   - E-platform planning - Year 3
4. Academic output – 2012
   - RCMI Poster – Puerto Rico
   - NIMHD Summit - Wash. DC
      - Poster
      - Oral Presentation
      - Grants Sessions

**Phase III: YRS 3&4&5**

1. Publish papers
2. Field test E-platform
3. Complete USCAHDR-PAHO E-platform
4. Establish Expansion Feasibility Committee
5. Set up public forums – hold public meetings
6. Write Reports
Year Two

- Overview
  - Year One:
    - Shortened year
    - Focus on partnership building (UWI site visit)
  - Year Two
    - Strong Research Focus
      - Evidence - Analysis programs
        - Challenge: Journal access
        - Opportunity: US-based Consulting Epidemiologist
      - IT infrastructure development
        - Infrastructure Building:
          - SA -Web, EBSCO procurement
          - UWI: IT capacity building
        - E-platform planning
    - Scholarship:
    - Administration
      - Sustained communication: NIMHD, UWI, SA
      - Grant management
Site Visit: UWI-Mona, Jamaica
Building Effective Partnerships to Improve Global Health: The USA-Caribbean Alliance for Health Disparities Research Program

Louis W. Sullivan, M.D., Principal Investigator, Marlene Y. MacLeish, Ed. D., Project Director
The Sullivan Alliance to Transform the Health Professions

Leveraging Partnerships to Drive Global Health Disparities Research

Demographics: UW Participant Countries

Program Strategy

Specific Aims

Expected Outcomes

Regional Issues Driving UW Agenda

Cultural Competence: Early Site Visit

Build Winning Teams

UW Recruitment: Research Teams Located in the UW Campuses

Success

Year One Challenges

Innovation

UWCAHRD Program Goals

Framing Successful Global Governmental-Private Partnerships

The University of the West Indies (UWI)

History: The Sullivan Alliance to Transform the Health Professions (SA)

Regional Enrolment Trend: 2010

Shared Vision: Project Roadmap

USCARHDR Program Goals

UWCAHRD Teams

Celebrate Success

UWCAHRD (USA-Caribbean Alliance for Health Disparities Research)
NIMHD Summit Session: Narrowing the Health Inequity Gap: An Ongoing Challenge in the Americas
Dec. 17, 2012

Building Effective Partnerships to Improve Global Health: Perspectives from the USA-Caribbean Alliance for Health Disparities Research Program

Louis W. Sullivan, M.D., Principal Investigator
Marlene Y. MacLeish, Ed. D., Project Director
The Sullivan Alliance to Transform the Health Professions
US-Caribbean Health Disparities Research
Program Overview
1. Tri-partite Programmatic approach
2. Evidence and Analysis outputs feeding into the E-platform
Pre-review Process:
Protocol Development
Search Strategy Development
Database Search
Study Screening
Scoping Review
Evidence Core Domains:

1. Diabetes
2. Hypertension
3. CVD (Coronary heart disease; stroke)
4. Depression
5. Chronic Lung Disease
6. Cancer
Scoping review process: diabetes
Challenges:

1. Limited access to the Literature
2. Limited library science expertise (wrt Search strategies)

Adaptations:
1. Amended the program schedule
2. Collaboration with Dr Bidulescu
3. Anticipated benefit from new access to EBSCO
1. Caribbean Health indicators

<table>
<thead>
<tr>
<th>Task Name</th>
<th>December 2012</th>
<th>January 2013</th>
<th>February 2013</th>
<th>March 2013</th>
<th>April 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 2. Manuscript 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>prepare proposal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>approval for proposal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>prepare full SAP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>data management (cleaning)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>prepare analysis dataset</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>first analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>second analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>first manuscript draft</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>review</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>second manuscript draft</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. SABE dataset: Disparity in the elderly
3. JHLS datasets: CVD risk factor disparities in Jamaica

<table>
<thead>
<tr>
<th>Task Name</th>
<th>November 2012</th>
<th>December 2012</th>
<th>January 2013</th>
<th>February 2013</th>
<th>March 2013</th>
<th>April 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 2. Manuscript 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>prepare proposal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>approval for proposal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>prepare full SAP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>data management (cleaning)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>prepare analysis dataset</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>first analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>second analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>first manuscript draft</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>review</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>second manuscript draft</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
USCAHDR – IT infrastructure development

- UW1 IT infrastructure improvements have started
- SA IT website development
- Ongoing preparatory discussions planning for Year 3
The UWI Group

- Nigel Harris  
  **UWI Vice Chancellor**

- **Mona**
  - Rainford Wilks  
    Team Leader
  - Trevor Ferguson  
    Evidence Core Leader; Analysis Core
  - Damian Francis  
    Evidence Core, Analysis Core
  - Nadia Bennett  
    Evidence Core, Analysis Core
  - Novie Younger  
    Analysis Core
  - Brigitte Collins  
    IT infrastructure development

- **Cave Hill**
  - Anselm Hennis  
    Team Leader
  - Ian Hambleton  
    Analysis Core Leader, Evidence Core
  - Chris Hassell  
    Evidence Core, Analysis Core
  - Lynda Williams  
    Evidence Core, Analysis Core
Evidence Program - Background

- Large body of research has accumulated showing that health is consistently worse for individuals with fewer resources
- Significant racial disparities Blacks as compared to Whites
- Studies in the USA, United Kingdom and other developed countries
- Limited available data on health disparities within Caribbean origin populations
- No reviews on Caribbean Health Disparities have been published
Aim: To conduct scoping reviews of the available evidence with a focus on the chronic non-communicable diseases

Objectives

1. To synthesize the published evidence on the effect of health disparities on chronic non-communicable diseases among Caribbean origin populations

2. To identify which NCD health disparities are relevant to Caribbean populations, and to identify which indicators contribute to these disparities

3. To identify gaps in the literature on health disparities in NCDs

Scoping review: a study which systematically maps the literature available on a topic, identifying the key concepts, theories, source of evidence, and gaps in the research
Evidence Program – Outcome and Disparity Measures

- **Six Health Domains**
  - CVD (heart disease, stroke)
  - Hypertension
  - Diabetes mellitus
  - Chronic lung disease
  - Cancer
  - Depression

- **Areas of Health Disparity**
  - Age
  - Sex (male / female)
  - Ethnicity / race
  - Geographical location (*urban vs. rural, country of residence*)
  - Socioeconomic status (*occupation, education, income, household amenities etc.*)
  - Disability status (*physical or mental permanent inability to carry out routine function*)
  - Sexual orientation
Evidence Program – Methods

- **Protocol – full study protocol developed**
  - Aims → Objectives → Methods → Timelines

- **Search Strategy**
  - Comprehensive search strategy developed in collaboration with a library scientist with the Cochrane Collaboration
  - Databases searched
    - Ovid MEDLINE (1946 to May 2012)
    - Cochrane Library (to May 2012)
    - TRIP database
    - Web of Knowledge: Science Citation Index, Social Sciences Citation Index (SSCI), Arts & Humanities Citation Index (A&HCI), Conference Proceedings Citation Index- Science (CPCI-S), Conference Proceedings Citation Index- Social Science & Humanities (CPCI-SSH)
    - PsycINFO
Inclusion Criteria

Population
- Participants aged 18 years and older.
- English-speaking Caribbean country or study including Afro-Caribbean population living elsewhere

Outcome
- Chronic non-communicable disease
  - Cardiovascular diseases: Stroke, Hypertension, Myocardial Infarction, Heart Failure, Peripheral vascular disease
  - Diabetes mellitus
  - Chronic lung diseases: COPD, Asthma
  - Cancer
  - Depression or depressive symptoms
- Lifestyle Factors: Overweight, Obesity, Smoking, Alcohol, Diet, Physical activity,
- Use of health services
Chronic Non Communicable Disease Flow Chart

Records identified through database searching (n = 3521)

Records after duplicates removed (n = 3435)

Records screened (n = 3506*)

Records excluded (n = 3145)

Studies included in synthesis (n = 361)

Diabetes (n = 42)
Hypertension (n = 10**)
COPD (n = 8)
Depression (n = 14)

* Includes 71 additional articles retrieved for the COPD search; 113 records being screened.

Flow Chart – Diabetes Review

Records Identified and screened (n =149) → Excluded at screening (n =69)

Full-text review and charting (n =80) → Articles unavailable (e.g. Full-text/Theses) (n =11)

Excluded at charting stage (n =27) → Numbers included for synthesis (n =42)

Preliminary synthesis (n = 23) → Remaining studies to be analyzed (n =19)
Diabetes Review
Characteristics of Included Studies - Design

- Randomized Control Trial: 1
- Cohort: 6
- Case-Control: 2
- Cross-sectional: 14
Diabetes Review
Characteristics of Included Studies - Country

- Barbados: 3
- Cameroon: 1
- Haiti: 1
- Jamaica: 7
- Nigeria: 1
- Netherlands: 1
- St. Lucia: 1
- Trinidad and Tobago: 8
- United Kingdom: 14
- United States: 2
## Diabetes Review: Gap Map

### Non-randomised evidence - Diabetes

<table>
<thead>
<tr>
<th></th>
<th>Age</th>
<th>Socioeconomic status (SES)</th>
<th>Sex</th>
<th>Geographical location</th>
<th>Ethnicity</th>
<th>Disability status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incidence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prevalence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morbidity*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mortality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Care Utilization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e.g. Quality of Life)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Morbidity of Diabetes Complications (e.g. Retinopathy)*

### Randomised evidence - Diabetes

<table>
<thead>
<tr>
<th></th>
<th>Age</th>
<th>Socioeconomic status (SES)</th>
<th>Sex</th>
<th>Geographical location</th>
<th>Ethnicity</th>
<th>Disability status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incidence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prevalence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morbidity*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mortality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Care Utilization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e.g. Quality of Life)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Morbidity of Diabetes Complications (e.g. Retinopathy)*

### Number of articles

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1-2</td>
<td>3-5</td>
<td>6+</td>
</tr>
</tbody>
</table>


Selected Findings - Diabetes and Ethnicity

- Caribbean Blacks had a higher prevalence of DM compared to African Blacks (Cooper 1997, Markus 2007, Mbanya 1999)

- Higher prevalence of DM among Caribbean Blacks compared to Whites (Leske 1999, Agyemang 2011)

- Incidence of DM was higher among Indo-Trinidadian men compared to Afro-Trinidadian men (Miller, 1996)
Chronic Lung Disease Review – Flow Chart

Records Identified and screened (n =71)

Excluded at screening (n =63)

Full-text review and charting (n =8)

Excluded at charting stage (n = 2)

Articles unavailable (e.g. Full-text/Theses) (n =0)

Numbers included for synthesis (n =6)

Flow Chart – COPD Review
Characteristics of Included Studies - Design

- Randomized Control Trial: 0
- Cohort: 1
- Case-Control: 1
- Cross-sectional: 3
- Other: 1
Characteristics of Included Studies - Country

- Barbados: 1 study
- Guyana*: 1 study
- Jamaica: 2 studies
- Trinidad and Tobago: 3 studies

* Study done in Jamaica and Guyana
### Non randomised evidence - COPD

<table>
<thead>
<tr>
<th></th>
<th>Age</th>
<th>Socioeconomic status (SES)</th>
<th>Sex</th>
<th>Geographical location</th>
<th>Ethnicity</th>
<th>Disability status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incidence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prevalence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morbidity*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mortality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Care Utilization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (e.g., Quality of Life)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Morbidity of COPD complications

### Randomised evidence - COPD

<table>
<thead>
<tr>
<th></th>
<th>Age</th>
<th>Socioeconomic status (SES)</th>
<th>Sex</th>
<th>Geographical location</th>
<th>Ethnicity</th>
<th>Disability status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incidence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prevalence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morbidity*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mortality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Care Utilization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (e.g., Quality of Life)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Morbidity of COPD complications

#### Number of articles

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1-2</th>
<th>3-5</th>
<th>6+</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- 0
- 1-2
- 3-5
- 6+
Selected Findings – COPD and Ethnicity

- Afro-Caribbeans had slower age-related decline in lung function. Compared to UK Whites [Miller, 1974]
- Afro-Caribbean smokers also had less decline in lung function (FEV%) than East Indians [Miller, 1974]
- No differences in the prevalence or severity of COPD between Indo-Trinidadians and Afro-Trinidadians [Seemungal 2008, Seemungal 2007, Pinto-Pereira 2007]
Selected Findings COPD and Sex

- In general men had higher prevalence of COPD compared to women
Depression – Flow Chart

Records Identified and screened (n = 353)

- Excluded at screening (n = 325)
- Full-text review and charting (n = 23)
  - Excluded at charting stage (n = 9)
  - Pending (e.g. Full-text/Theses) (n = 5)
- Numbers included for synthesis (n = 14)
Depression Review – Study Design

- Randomized Controlled Trials: 0
- Cohort Study: 1
- Case-Control Study: 0
- Cross-Sectional Studies: 11
- Other: 2
## Non randomised evidence - Depression

<table>
<thead>
<tr>
<th></th>
<th>Age</th>
<th>Socioeconomic status (SES)</th>
<th>Sex</th>
<th>Geographical location</th>
<th>Ethnicity</th>
<th>Disability status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incidence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prevalence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morbidity*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mortality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Care Utilization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (e.g Quality of Life)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Randomised evidence - Depression

<table>
<thead>
<tr>
<th></th>
<th>Age</th>
<th>Socioeconomic status (SES)</th>
<th>Sex</th>
<th>Geographical location</th>
<th>Ethnicity</th>
<th>Disability status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incidence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prevalence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morbidity*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mortality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Care Utilization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (e.g Quality of Life)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Number of articles

- 0
- 1-2
- 3-5
- 6+
Selected Findings – Depression and Ethnicity

- Depression prevalence:
  - African Americans > Caribbean born black living in the US for more than 10 years > Caribbean born blacks living in the US for less than 10 years [Lincoln 2007]
  - US born Caribbean blacks had higher prevalence of depressive symptoms and were more likely than AA to rate their health as fair or poor [Griffith 2011]
Interim conclusions

- Limited data on health disparities in NCD among Caribbean origin populations
- Studies have evaluated ethnicity and gender differences but few studies have evaluated SES and other disparity measures. No studies on disparities related to sexual orientation
- Still large gaps in the literature
- Clear need for further studies in health disparities in Caribbean populations in order to:
  - Clarify mechanisms of social determinants of health in populations with relative homogenous race/ethnic groups especially as it regards SES
  - Guide interventions to reduce disparities
Year Three Plan

- Complete additional scoping reviews
  - CVD, Cancer, Asthma
- Consider focused systematic reviews based on findings of scoping reviews
- Consider developing proposal for primary study to fill gaps identified in scoping reviews
The majority of previous studies have found an increased prevalence of HTN and/or higher mean of blood pressure among Afro-Caribbean living in UK when compared with Caucasians living in UK (Lane D. et al., J Human Hypertension, 2002)

- All age groups, both genders

- An average of 5 – 10 mm Hg for systolic blood pressure

- Prevalence of 31% (men) and 34% (women) in Afro-Caribbean versus Caucasians (19% in men and 13% in women)

  - Thus, lower rates in AC compared with AA (in the US; ~ 42-43%)
Among more than 1,000 first generation middle-aged Afro-Caribbean migrants to UK the difference in BP in women when compared with Caucasians living in UK enough to account for ethnic differences in stroke mortality

- Chaturvedi et al., Hypertension 1993

- Systolic BP higher in A-C (6 mm Hg in men and 17 mm Hg in women); similar in those from W Africa and Caribbean; daytime - nighttime fall in BP higher in Europeans
Sick genes, sick individuals or sick populations with HTN?

- Cruickshank et al., International J of Epidemiology, 2001

Discussed evidence for and against genetic "causes" of high BP in 4 African origin populations: two from Cameroon (urban and rural), one from Jamaica and one Caribbean migrants to Britain (80% Jamaica)

- Age-adjusted HTN rates were 7, 16, 21 and 34% with small shifts in risk factors; BMI rose similarly

- Intergenerational SES influences appeared much more likely cause of HTN than ethnic/genetic variation, which does occur, poorly related to phenotype

- Shift research emphasis in causality/etiology away from genes back to whole organism physiology and through clinical epidemiology to the social conditions prevailing through history and to those current in society
To compare responses of blood pressure to the CCB verapamil and the BB metoprolol in black compared with white diabetics with HTN a RCT conducted in UK:

- Cruickshank et al., 1988

West Indian/African descent born in West Indies metoprolol's fall in BP 4 mm Hg systolic and 4.3 mm Hg diastolic; all European white participants metoprolol's fall in BP 13.4 mm Hg and 10.6 mm Hg, respectively.

BB alone are not effective in treating HTN in black diabetics; verapamil is effective but less so than in white patients.
US Cohorts with African American participants

- REGARDS
- Jackson Heart Study
- MESA
- CARDIA
- CHS / ARIC.
- Dallas Heart Study
- Health ABC
- Women Health Initiative (WHI)
- NHANES (I, II, III and IV)
The REasons for Geographic and Racial Differences in Stroke (REGARDS)

- REGARDS project, sponsored by the NIH, is a national study focusing the factors that increase a person's risk of having a stroke
- REGARDS is an observational study of risk factors for stroke in adults 45 years or older -- 30,239 participants were recruited between January 2003 and October 2007
- They completed a telephone interview followed by an in-home physical exam; measurements included traditional risk factors such as blood pressure and cholesterol levels, and an echocardiogram of the heart
- At six month intervals, participants are contacted by phone to ask about stroke symptoms, hospitalizations and general health status
- The study is ongoing and will follow participants for many years
Manuscript Study Proposal (formal request to access the datasets) within REGARDS (Aims)

- There is a higher age-adjusted prevalence of HTN / stroke / CHD / DM among black individuals enrolled in the REGARDS as compared with those enrolled in the Caribbean surveys.

- There are differences in population attributable risk (fractions) for HTN, stroke, CHD and DM between African Americans enrolled in REGARDS and black participants in the Caribbean; higher in the Caribbean region.

- Several indexes will be used: the index of disparity, the slope index of inequality, the relative index of inequality, etc.

- There are differences in age-adjusted prevalence by SES categories (occupation, income, education) between REGARDS and Caribbean populations.

- Other research hypotheses.
The JHS is a large, community-based, observational study whose participants were recruited from urban and rural areas of the three counties that make up the Jackson metropolitan statistical area (MSA).

The final cohort of 5,301 participants includes 6.59% of all African American Jackson MSA residents aged 35-84 (N-76,426, US Census 2000).

Major components of each exam include medical history, physical examination, blood/urine analytes and interview questions on areas such as: physical activity; stress, coping and spirituality; racism and discrimination; socioeconomic position; and access to health care.
Jackson Heart Study 2

- At 12-month intervals after the baseline clinic visit (Exam 1), participants are contacted by telephone to: update information; confirm vital statistics; document interim medical events, hospitalizations, and functional status; and obtain additional socio-cultural information.

- Questions about medical events, symptoms of cardiovascular disease and functional status are repeated annually.

- At six month intervals, participants are contacted by phone to ask about stroke symptoms, hospitalizations and general health status.

- Ongoing cohort surveillance includes abstraction of medical records and death certificates for relevant International Classification of Diseases (ICD) codes and adjudication of nonfatal events and deaths.
Manuscript Study Proposal (formal request to access the datasets) within the Jackson Heart Study

- There is a higher age-adjusted prevalence of HTN / stroke / CHD / DM among black individuals enrolled in the JHS as compared with those enrolled in the Caribbean surveys.
- There are differences in population attributable risk (fractions) for HTN, stroke, CHD and DM between African Americans in Jackson, MS and black participants in the Caribbean; higher in the Caribbean region.
- Several indexes will be used: the index of disparity, the slope index of inequality, the relative index of inequality, etc.
- There are differences in age-adjusted prevalence by SES categories (occupation, income, education) between JHS and Caribbean populations.
- Other research hypotheses.
US-Caribbean Health Disparities Research
Analysis program
**OBJECTIVE:** Evaluate social / economic disparities in health among Caribbean populations by conducting secondary analyses of available datasets.

**DELIVERABLES:** 3 to 5 articles per year addressing disparities among the health of Caribbean populations.
Year 2 Objectives

1. **Bibliography of Caribbean health data.** To document the availability of further Caribbean datasets on health disparities, producing a bibliography of these sources.

2. **Analyses of Caribbean health datasets.** To produce ONE ecological article using country-level health indicators.

3. **Analyses of TMRI datasets.** To produce TWO articles for peer-reviewed publication using IPD datasets at TMRI.
Objective 1: Caribbean health datasets

Caribbean Data Resources (See Handout 1)

- **Seven TMRI datasets (N~20,000)**
  - **Location:** Jamaica (n=5), Barbados (n=2)
  - **Time:** 1999 to 2008
  - **Study design:** Survey (n=5), Cohort (n=2), Registry (n=1)

- **Three** datasets on country-level indicators

- **71** external datasets identified so far (N~242,000)
- **49** datasets retrieved (N~213,000)

... and counting
Objective 2: Caribbean health indicators

Progress

<table>
<thead>
<tr>
<th>Task Name</th>
<th>December 2012</th>
<th>January 2013</th>
<th>February 2013</th>
<th>March 2013</th>
<th>April 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 2. Manuscript 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>prepare proposal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>approval for proposal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>prepare full SAP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>data management (cleaning)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>prepare analysis dataset</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>first analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>second analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>first manuscript draft</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>review</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>second manuscript draft</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Objective 2: Caribbean health indicators

Data Resources

1. **Data: GBD 2010**
   Global mortality and loss of health due to diseases, injuries and risk factors.

2. **WHO Mortality database (2008)**
   Cause-specific mortality for WHO Member States

   50+ datasets reporting country-level indicators. E.g. GDP, health expenditure, HDI.
Disparity measures (See Handout 2)

1. Pairwise comparisons
2. Index of Disparity
3. Unweighted regression based measures
4. Slope index of inequality
5. Relative index of inequality
6. Population attributable risk
7. Between group variance
8. Squared coefficient of variation
9. Atkinson’s measure
10. Gini coefficient
11. Relative concentration index
12. Theil index
13. Mean log deviation
14. Variation of log health
Disparity measures today

**Index of Disparity**
Average deviation from a reference group

\[ IDisp = \left( \frac{\sum_{i=1}^{n-1} |(r_i - r_{rp})|}{n} \right) / r_{rp} \]

**Prevalence Ratio**
Pairwise comparisons.

\[ PR = \frac{\text{max}(\text{rate})}{\text{min}(\text{rate})} \]
Objective 2: Caribbean health indicators

PART ONE

• Global LE → sex disparity
• Regional LE → sex disparity
• Country-level LE → sex and country disparities

PART TWO

• All-cause mortality → regional disparity
• Cause-specific mortality → country disparity
• Predictors of mortality
Objective 2: Caribbean health indicators

Global LE

“Global LE has increased across the life span”
Objective 2: Caribbean health indicators

Global LE: sex difference

"LE disparities have also increased"
Objective 2: Caribbean health indicators

Regional LE:

“LE in the Americas”
“Caribbean outlier”
**Objective 2: Caribbean health indicators**

**Regional LE: sex difference**

<table>
<thead>
<tr>
<th>Region</th>
<th>LE Sex Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caribbean</td>
<td>6.1</td>
</tr>
<tr>
<td>South Asia</td>
<td>3.4</td>
</tr>
<tr>
<td>East Asia</td>
<td>2.9</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>1.6</td>
</tr>
<tr>
<td>Central Europe</td>
<td>1.4</td>
</tr>
<tr>
<td>South East Asia</td>
<td>1.3</td>
</tr>
<tr>
<td>Central LA</td>
<td>1.3</td>
</tr>
<tr>
<td>High Income Asia Pacific</td>
<td>1.1</td>
</tr>
<tr>
<td>Central Asia</td>
<td>0.8</td>
</tr>
<tr>
<td>Tropical LA</td>
<td>0.3</td>
</tr>
<tr>
<td>E.Africa</td>
<td>-0.3</td>
</tr>
<tr>
<td>Southern LA</td>
<td>-0.6</td>
</tr>
<tr>
<td>W.Africa</td>
<td>-0.8</td>
</tr>
<tr>
<td>Western Europe</td>
<td>-0.9</td>
</tr>
<tr>
<td>Oceania</td>
<td>-1.0</td>
</tr>
<tr>
<td>C.Africa</td>
<td>-1.2</td>
</tr>
<tr>
<td>N.Africa &amp; Middle East</td>
<td>-1.4</td>
</tr>
<tr>
<td>Australasia</td>
<td>-2.2</td>
</tr>
<tr>
<td>S.Africa</td>
<td>-2.2</td>
</tr>
<tr>
<td>High Income N.America</td>
<td>-2.8</td>
</tr>
<tr>
<td>Andean LA</td>
<td>-2.9</td>
</tr>
</tbody>
</table>

"Important regional differences in LE sex disparity"
Objective 2: Caribbean health indicators

Country LE: shortfall

<table>
<thead>
<tr>
<th>Country</th>
<th>LE</th>
<th>Shortfall</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAN</td>
<td>78.5</td>
<td>82.7</td>
</tr>
<tr>
<td>CUB</td>
<td>76.1</td>
<td>79.8</td>
</tr>
<tr>
<td>USA</td>
<td>75.9</td>
<td>80.5</td>
</tr>
<tr>
<td>BRB</td>
<td>74.3</td>
<td>77.0</td>
</tr>
<tr>
<td>ATG</td>
<td>74.1</td>
<td>77.3</td>
</tr>
<tr>
<td>JAM</td>
<td>73.3</td>
<td>80.4</td>
</tr>
<tr>
<td>BHS</td>
<td>71.4</td>
<td>76.3</td>
</tr>
<tr>
<td>DOM</td>
<td>71.3</td>
<td>76.5</td>
</tr>
<tr>
<td>LCA</td>
<td>70.9</td>
<td>77.9</td>
</tr>
<tr>
<td>DMA</td>
<td>70.1</td>
<td>75.2</td>
</tr>
<tr>
<td>SUR</td>
<td>70.1</td>
<td>74.5</td>
</tr>
<tr>
<td>VCT</td>
<td>69.7</td>
<td>73.6</td>
</tr>
<tr>
<td>BLZ</td>
<td>68.9</td>
<td>73.5</td>
</tr>
<tr>
<td>GRD</td>
<td>68.6</td>
<td>75.3</td>
</tr>
<tr>
<td>TTO</td>
<td>66.2</td>
<td>69.1</td>
</tr>
<tr>
<td>GUY</td>
<td>63.1</td>
<td>46.0</td>
</tr>
<tr>
<td>HTI</td>
<td>32.5</td>
<td>43.6</td>
</tr>
</tbody>
</table>

“Sex disparity greatest in Haiti, Trinidad, Bahamas”
Objective 2: Caribbean health indicators

**LE: Disparity indices**

<table>
<thead>
<tr>
<th></th>
<th>Relative Disparity</th>
<th>Absolute Disparity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RR</td>
<td>IDISP</td>
</tr>
<tr>
<td>MEN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1970</td>
<td>1.49</td>
<td>11.38%</td>
</tr>
<tr>
<td>2010</td>
<td>2.34</td>
<td>10.59%</td>
</tr>
<tr>
<td>WOMEN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1970</td>
<td>1.50</td>
<td>10.89%</td>
</tr>
<tr>
<td>2010</td>
<td>1.84</td>
<td>8.04%</td>
</tr>
</tbody>
</table>

“Indices in general agreement. Except IDisp”
Objective 2: Caribbean health indicators

LE: Disparity indices

“General decrease between 1970 & 2000”
Objective 2: Caribbean health indicators

LE: Disparity indices. Sensitivity.

“General decrease between 1970 & 2000”
Objective 2: Caribbean health indicators

All-cause mortality: age-specific

“Young Caribbean men have mortality increase”
Objective 2: Caribbean health indicators

Cause-specific mortality:

<table>
<thead>
<tr>
<th>Country</th>
<th>Cause-specific mortality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haiti</td>
<td>1294</td>
</tr>
<tr>
<td>Guyana</td>
<td>985</td>
</tr>
<tr>
<td>Trinidad</td>
<td>848</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>789</td>
</tr>
<tr>
<td>St. Kitts</td>
<td>774</td>
</tr>
<tr>
<td>Suriname</td>
<td>772</td>
</tr>
<tr>
<td>St. Vincent</td>
<td>769</td>
</tr>
<tr>
<td>Jamaica</td>
<td>764</td>
</tr>
<tr>
<td>Dominica</td>
<td>742</td>
</tr>
<tr>
<td>Grenada</td>
<td>710</td>
</tr>
<tr>
<td>Belize</td>
<td>708</td>
</tr>
<tr>
<td>Antigua</td>
<td>680</td>
</tr>
<tr>
<td>St. Lucia</td>
<td>650</td>
</tr>
<tr>
<td>Barbados</td>
<td>605</td>
</tr>
<tr>
<td>Bahamas</td>
<td>602</td>
</tr>
<tr>
<td>Cuba</td>
<td>564</td>
</tr>
<tr>
<td>USA</td>
<td>505</td>
</tr>
<tr>
<td>Canada</td>
<td>401</td>
</tr>
</tbody>
</table>

All-cause:

- Haiti: 545
- Guyana: 194
- Jamaica: 159
- Dominican Republic: 147
- Suriname: 126
- Belize: 119
- St. Vincent: 115
- Trinidad: 104
- Bahamas: 91
- Grenada: 86
- Barbados: 86
- Antigua: 86
- St. Lucia: 81
- Dominica: 78
- St. Kitts: 61
- Cuba: 47
- USA: 34
- Canada: 23

43.5% All-cause

77.8% Communicable
Objective 2: Caribbean health indicators

Cause-specific mortality:

<table>
<thead>
<tr>
<th>NCDs</th>
<th>Haiti</th>
<th>Guyana</th>
<th>Trinidad</th>
<th>St.Kitts</th>
<th>Dominica</th>
<th>St.Vincent</th>
<th>Grenada</th>
<th>Dominican Republic</th>
<th>Suriname</th>
<th>Antigua</th>
<th>Jamaica</th>
<th>St.Lucia</th>
<th>Belize</th>
<th>Barbados</th>
<th>Cuba</th>
<th>Bahamas</th>
<th>USA</th>
<th>Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>697</td>
<td>677</td>
<td>673</td>
<td>640</td>
<td>632</td>
<td>596</td>
<td>573</td>
<td>572</td>
<td>548</td>
<td>518</td>
<td>517</td>
<td>497</td>
<td>488</td>
<td>468</td>
<td>457</td>
<td>418</td>
<td>346</td>
<td>21.1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cancer</th>
<th>Grenada</th>
<th>Dominica</th>
<th>St.Kitts</th>
<th>Cuba</th>
<th>Barbados</th>
<th>Antigua</th>
<th>Canada</th>
<th>Jamaica</th>
<th>USA</th>
<th>St.Lucia</th>
<th>St.Vincent</th>
<th>Trinidad</th>
<th>Bahamas</th>
<th>Dominican Republic</th>
<th>Haiti</th>
<th>Belize</th>
<th>Suriname</th>
<th>Guyana</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>155</td>
<td>155</td>
<td>144</td>
<td>142</td>
<td>136</td>
<td>131</td>
<td>126</td>
<td>125</td>
<td>124</td>
<td>118</td>
<td>117</td>
<td>114</td>
<td>109</td>
<td>104</td>
<td>103</td>
<td>101</td>
<td>92</td>
<td>82</td>
</tr>
</tbody>
</table>

21.1% 53.1%
Objective 2: Caribbean health indicators

Cause-specific mortality:

**Diabetes**
- Trinidad: 118
- Guyana: 87
- St.Kitts: 80
- St.Lucia: 79
- Belize: 74
- Antigua: 66
- Haiti: 63
- Dominica: 62
- Grenada: 61
- St.Vincent: 56
- Barbados: 56
- Suriname: 43
- Dominican Republic: 42
- Bahamas: 37
- Jamaica: 32
- USA: 15
- Cuba: 14
- Canada: 13

**CVD**
- Guyana: 373
- Haiti: 353
- Suriname: 309
- Dominican Republic: 306
- Trinidad: 301
- St.Vincent: 299
- St.Kitts: 281
- Dominica: 270
- Grenada: 245
- Antigua: 243
- Jamaica: 236
- Cuba: 221
- St.Lucia: 215
- Bahamas: 215
- Belize: 195
- Barbados: 180
- USA: 156
- Canada: 119

53.1% 32.8%
Objective 2: Caribbean health indicators
Objective 2: Caribbean health indicators
Objective 2: Caribbean health indicators

World: $R^2 = 48\%$
Caribbean: $R^2 = 55\%$
Objective 2: Caribbean health indicators

World: $R^2 = 50$
Caribbean: $R^2 = 32$
Objective 3: Disparity in the elderly

**BMC Public Health**

Research article

*Sex and the city: Differences in disease- and disability-free life years, and active community participation of elderly men and women in 7 cities in Latin America and the Caribbean*

Angela MC Rose†1, Anselm J Hennis†1,2 and Ian R Hambleton*†1
Objective 3: Disparity in the elderly

Progress

<table>
<thead>
<tr>
<th>Task Name</th>
<th>December 2012</th>
<th>January 2013</th>
<th>February 2013</th>
<th>March 2013</th>
<th>April 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 2. Manuscript 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>prepare proposal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>approval for proposal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>prepare full SAP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>data management (cleaning)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>prepare analysis dataset</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>first analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>second analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>first manuscript draft</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>review</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>second manuscript draft</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Objective 3: Disparity in the elderly

**SEX DISPARITY**

<table>
<thead>
<tr>
<th>25&lt;BMI&lt;30</th>
<th>LAC</th>
<th>Barbados</th>
<th>Cuba</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevalence (women)</td>
<td>26.7</td>
<td>30.2</td>
<td>28.4</td>
</tr>
<tr>
<td>Prevalence (men)</td>
<td>30.5</td>
<td>29.1</td>
<td>23.7</td>
</tr>
<tr>
<td>IDisp</td>
<td>7.1</td>
<td>1.9</td>
<td>9.9</td>
</tr>
</tbody>
</table>

- About ¼ of elderly between 25 and 30 kg/m²
- Low disparity levels…
- Summarizing this visually for several measures of morbidity
Objective 3: Disparity in the elderly

WOMEN

MEN

INDEX OF DISPARITY
Objective 3: Disparity in the elderly

**INDEX OF DISPARITY**

<table>
<thead>
<tr>
<th></th>
<th>BMI&gt;25</th>
<th>BMI&gt;30</th>
<th>HTN</th>
<th>DIAB</th>
<th>AMI</th>
<th>STROKE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ELEMENTARY &amp; MIDDLE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SECONDARY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>HIGHER</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Objective 3: Disparity in the elderly

NON-PROFESSIONAL

SEMI-PROFESSIONAL

PROFESSIONAL

INDEX OF DISPARITY
Objective 3: Diabetes Disparity in Jamaica

Progress

<table>
<thead>
<tr>
<th>Task Name</th>
<th>November 2012</th>
<th>December 2012</th>
<th>January 2013</th>
<th>February 2013</th>
<th>March 2013</th>
<th>April 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 2. Manuscript 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>prepare proposal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>approval for proposal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>prepare full SAP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>data management (cleaning)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>prepare analysis dataset</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>first analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>second analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>first manuscript draft</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>review</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>second manuscript draft</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Diabetes Prevalence Ratios by SES

JHLS-I (2001)
- Men. Lower SES $\rightarrow$ Lower Diabetes PR
- Women. Lower SES $\rightarrow$ Higher Diabetes PR

JHLS-II (2008)
- Men. Lower SES $\rightarrow$ Higher Diabetes PR (?)
- Women. Lower SES $\rightarrow$ Higher Diabetes PR

Similar picture for obesity
Year 2: Year-end outputs

Remainder of year 2

1. Draft Caribbean LE / mortality article

2. Finalize analysis of SABE disparities + draft article

3. Finalize analysis of JHLS I / II disparities + draft article
Year 3: objectives

1. **Analyses of TMRI datasets.** To produce TWO further articles for peer-reviewed publication using TMRI datasets.

2. **Analysis of other Caribbean datasets.** TWO analyses using external Caribbean datasets.


4. **Bibliography of Caribbean health data.** To document the availability of further Caribbean datasets on healthcare disparities, producing a bibliography of these sources.
Sullivan Alliance

- Web Site Development
  - Database capabilities enhanced
  - Web consultant (Mr. Patrick Mills) appointed
- Journal Access for UWI Team fully negotiated
  - EBSCO Journal access established
  - EBSCO access to last for life of SA-NIMHD Cooperative Agreement
  - EBSCO training session scheduled for Feb. 22, 2013
Possible ITC collaborative tools

As part of Disparities grant
1. Collaborate on documents: document repository
2. Video-conferencing / virtual meetings
3. Data collaboration 1: web-enabled data repository

Also piloted at the TMRI
4. Data collaboration 2: web-enabled data-basing
1. Document Repository

Features
- Secure document management (alfresco.com)
- Operates in browser
- Simple interface (see next slide)
- **Maintains document version control**

Technical
- Open-source / optionally cloud-based
- Free for small-scale use (unlimited users / 10GB storage)
- Could be “localized” –
  - implemented on TMRI/UWI data-servers
1. Document Repository
2. Videoconferencing / virtual meetings

Features
- Multi-point video-conferencing
- Whiteboard
- Application / desktop sharing

Technical
- Bandwidth minimum requirements – checking on this
- Need adequate sight + sound hardware
- Open-source
- To be piloted with help from MITS
3. Data Repository

Microdata Management Toolkit

Features
• Curation of completed datasets
• Best practice data curation standards (eg. DDI)
• “Open-data” or controlled access

Technical
• Free-for-use software platform
• Maintained by IHNS.
• Already implemented at UWI (Derek Gordon DataBank)
• A new collaboration between USCAHDR and DataBank.
4. Data-basing

Features
- 2 systems implemented at CDRC
  - OpenClinica for RCTs / RedCap for Surveys etc
- Both allow secure EDC or paper-based data entry
- Both allow double entry / audit trails
- Easy to design and use data entry screens

Technical
- OC meets CFR21 Part I I regulatory compliance
- RedCap better reporting facilities
- Server-based
- Browser-based (JAVA): data entry from any PC
Press the little flag icon beside an input to enter discrepancy notes, please note that you can only save the notes if CRF data entry has already started.

---

**Title: Health Cost Questionnaire (2)**

11.3 Other Healthcare services (H10-H11)

- **H10** Other healthcare services since and including event:
  - Yes
  - No
  - Don't know
  - Refused

If YES: number of times attended each healthcare service

- **H10a** Number times OPD: 3 (times)

- **H10b** Number times YOU visited QEH Rehab: 5 (times)

- **H10c** Number times QEH Rehab staff made home visits: 0 (times)

- **H10d** Number times YOU visited polyclinic(s): 6 (times)
## Phase 2: Draft Implementation Plan – Year Three

### 1. Finalize Research – UWI
- Evidence Core
- Analysis Core
- E-Platform
- Protocols complete
- Literature search underway

### 2. Start US-Caribbean Datasets Analysis
- US Access Proposals
- UWI-US Session
- Begin comparison of US-Caribbean data

### 3. Begin Design E-Platform
- UWI infrastructure underway
- SA infrastructure underway
- Planned development - Year 3

### 4. Dissemination – 2012
  **RCMI**
  - Poster – Puerto Rico
  **NIMH Summit - Wash. DC**
  - Poster
  - Oral Presentation
  - Grants Sessions
Phase 2: Draft Implementation Plan (Year 3) - E-Platform Focus

- **E-Platform**

  - Formalise partnership with: ECHORN, Research Centers in Minority Institutions Translational Research Network

  - Identify content for:

  - Test design to deliver this content – Year Three
Closing Remarks

- Louis W. Sullivan, M.D., Principal Investigator
- E. Nigel Harris, M. Phil., M.D.