

Measuring and Reporting Health Disparities: A case study in developing a state level health disparities report

Reginald Tucker-Seeley, MA, ScM, ScD

Edward L. Schneider Assistant Professor of Gerontology, University of
Southern California;

Former member, Rhode Island Commission for Health Advocacy and Equity
(2013-2017)

12/03/2018

Overview

- Background about me and my research
- Rhode Island Commission for Health Advocacy and Equity
 - Course in measuring and reporting health disparities
- Framework for measuring and reporting health disparities
- RI Health Disparities report

Education Background

1995: BSBA (Accounting); University of Tulsa

2002: MA (Counseling and Family Therapy); Saint Louis University

2004: ScM (Health and Social Behavior); Harvard T.H. Chan School of Public Health (HSPH)

2008/9: ScD (Health and Social Policy); HSPH

2008-2010: Postdoctoral Fellowship in Cancer Prevention and Control; HSPH/Dana-Farber Cancer Institute (DFCI)

Professional Experience

- 2010-2013: Research Associate (DFCI/HSPH)
- 2013-2017: Assistant Professor of Social and Behavioral Sciences (DFCI/HSPH)
- 2017-Present: Edward L. Schneider Assistant Professor of Gerontology (USC)
- 2017-2018: RWJF Health Policy Fellow (Placement: Senator Dianne Feinstein)

Tucker-Seeley Research Lab

- What we do
 - Our work is motivated by a few key questions:
 - 1) How do we conceptualize and operationalize financial well-being (FWB) in research across the cancer [chronic disease] continuum from prevention to end-of-life care?
 - 2) What are the specific components of FWB associated with outcomes across the cancer [chronic disease] continuum?
 - 3) How does the economic well-being of neighborhoods influence the health/health behavior of residents?

Lab website: www.tuckerseeley.org

Introduction

- Rhode Island Commission for Health Advocacy and Equity
 - Legislatively mandated (RI Gen L § 23-64.1-6 (2013))
 - Advisory committee to RI Department of Health
 - Inter-sectoral membership
 - 3 subcommittees: Policy, Data, and Community Engagement

RI Commission for Health Advocacy and Equity

- Mission
 - To advocate for the integration of all relevant activities of the state to achieve health equity;
 - To provide direct advice to the director of health, and indirect advice to the department's senior administrators and planners through the director, regarding issues of racial, ethnic, cultural, or socio-economic health disparities;
 - To develop and facilitate coordination of the expertise and experience of the state's health and human services systems, housing, transportation, education, environment, community development, and labor systems in developing a comprehensive health equity plan addressing the social determinants of health;

RI Commission for Health Advocacy and Equity

- Mission (cont'd)
 - To set goals for health equity and prepare a plan for Rhode Island to achieve health equity in alignment with any other statewide planning activities; and
 - To educate state agencies in Rhode Island on disparities, including social factors that play a role in creating or maintaining disparities.

RI Commission for Health Advocacy and Equity

- Co-chair of the data subcommittee
 - Charged with developing the draft of the state's health disparity report
- Challenges:
 - How to write a state health disparity report
 - Volunteers
 - Too many tasks assigned in the mission for the Commission (focused only on the health disparities report)
 - Reporting structure

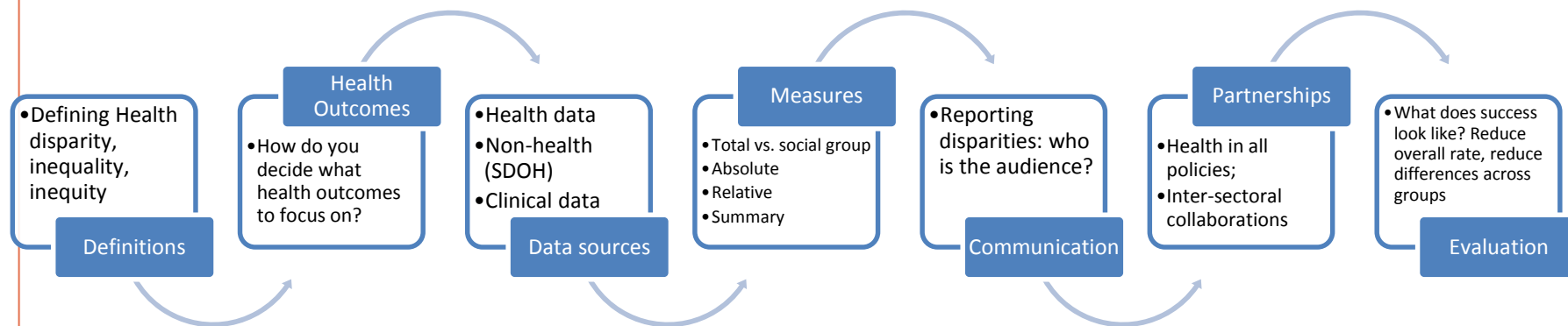
Introduction

- Developed a course at the Harvard T.H. Chan School of Public Health called, “Measuring and Reporting Health Disparities”
 - In the course, we used the process of creating a state level health disparities/health inequity report to contextualize the issues/challenges in the defining, measuring, monitoring, and reporting of health disparities and health inequity

Introduction

- Course Objectives:
 - Critically evaluate the various definitions of health disparities, health inequalities, and health inequity.
 - Describe and critically evaluate measures of disparity.
 - Explain the challenges in the implementation of different definitions and measures of disparity.
 - Describe the barriers and enablers to inter-sectoral collaboration in health equity efforts.
 - Critically evaluate efforts to monitor and report health disparities.

Tucker-Seeley Model of Measuring and Reporting Health Disparities



Tucker-Seeley Model of Measuring and Reporting Health Disparities

- Definitions
 - Defining Health disparity, inequality, inequity
- Health outcomes
 - How do you decide what health outcomes to focus on?
- Data Sources
 - What data do you use and what are the sources? Are health and health care the only outcomes of interest? Social determinants of health?

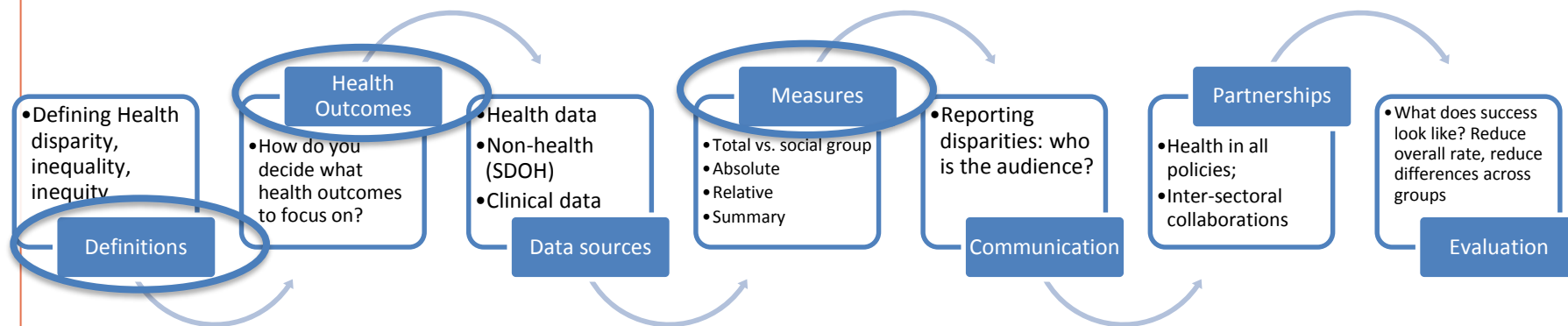
Tucker-Seeley Model of Measuring and Reporting Health Disparities

- Measures of disparity
 - What measures of health disparity do you use? How/who decides?
- Communication
 - Who is the audience?
- Partnerships
 - Intersectoral collaborations? Health-in-all policies
- Evaluation
 - What does success look like? Reduce overall rate, reduce differences across groups, both?

My experience on the commission

- Defining health disparities
 - Thinking about defining health disparities while also considering how to measure disparities;
 - How to get group consensus
- Selecting health outcomes and data sources
- Selecting measures of disparity

Tucker-Seeley model of measuring and reporting health disparities



Case Study

- Part A: Defining the Issue: What are health disparities, health inequalities, and health inequity?
- Part B: Selecting health outcomes and data sources
- Part C: Measuring and reporting on disparities, inequality, and inequity

Part A: Group Exercise

- In the course, I ask students to assume that the class is a state level “Commission on Health Equity” and to define these terms. We break into small groups:
 - Define health disparities
 - Define health inequalities
 - Define health inequity

Health disparity

- NIH: “Health disparities are differences in the incidence, prevalence, mortality, and burden of diseases and other adverse health conditions that exist among specific population groups in the United States”
 - NIH: “Healthcare disparities refer to differences in access to or availability of facilities and services. Health status disparities refer to the variation in rates of disease occurrence and disabilities between socioeconomic and/or geographically defined population groups”
- CDC: “A type of difference in health that is closely linked with social or economic disadvantage.”
 - Health disparities negatively affect groups of people who have systematically experienced greater social or economic obstacles to health. These obstacles stem from characteristics historically linked to discrimination or exclusion such as race or ethnicity, religion, socioeconomic status, gender, mental health, sexual orientation, or geographic location. Other characteristics include cognitive, sensory, or physical disability”

Part B: Selecting Health Outcomes

- Selecting health outcomes and data sources
 - Process for determining health outcomes of interest
 - Differentiating between a high rate of disease and a disparity

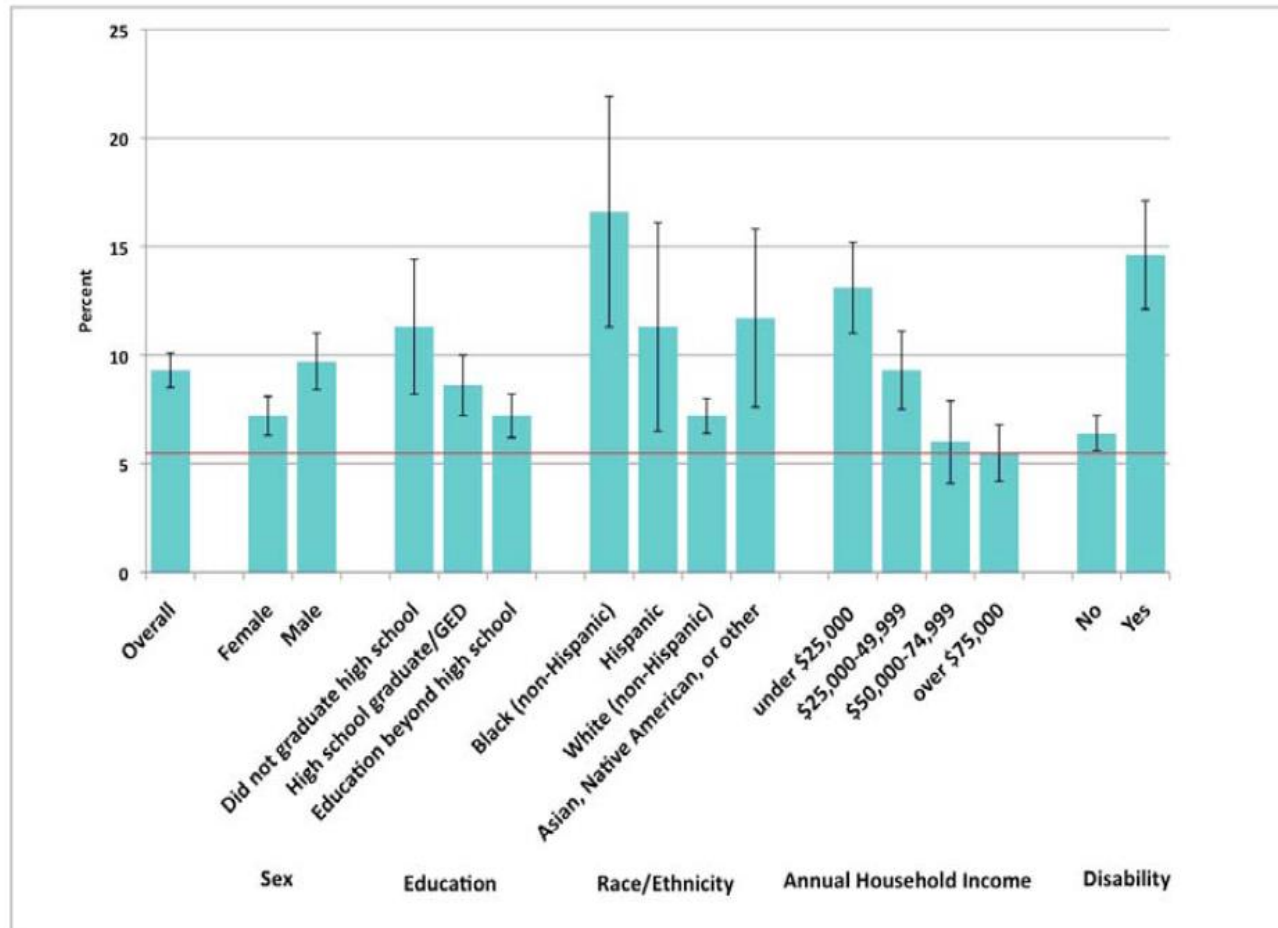
Quote from the case: “As she walked to her car after the meeting concluded, Dr. Avery [chairperson of the Commission] wondered how the committee would select the health outcomes to include. Would it be based on differences in the common causes of death in RI, or on where the largest differences exist across racial/ethnic or other socio-demographic characteristics? And what socio-demographic characteristics would the committee prioritize?”

Part C: Measuring and Reporting on Disparities, Inequality, and Inequity

- Examples of measures of disparity
 - Rate difference;
 - Rate ratio;
 - Index of disparity

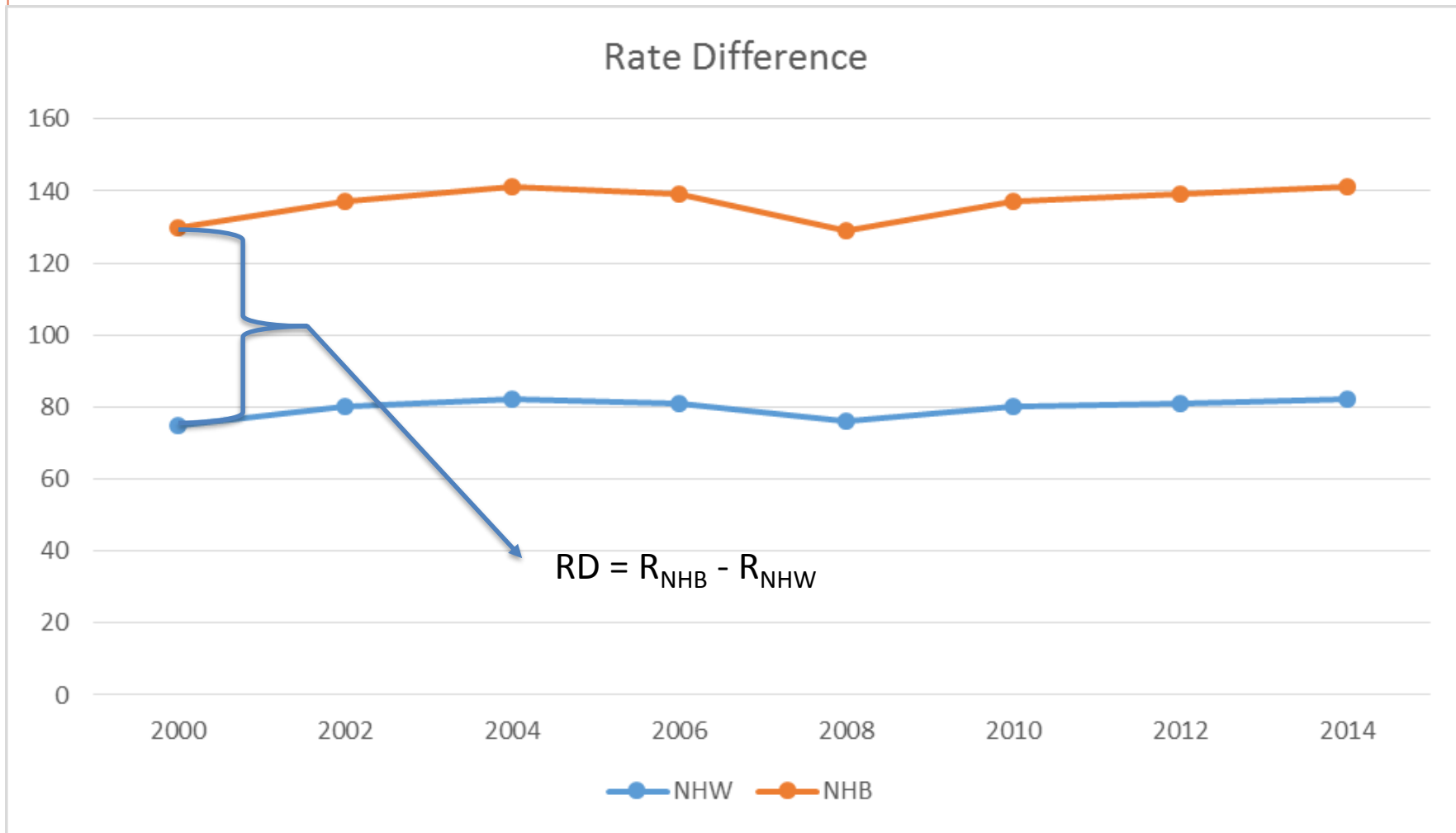
Graph presentation

Figure 9. Adult Diabetes

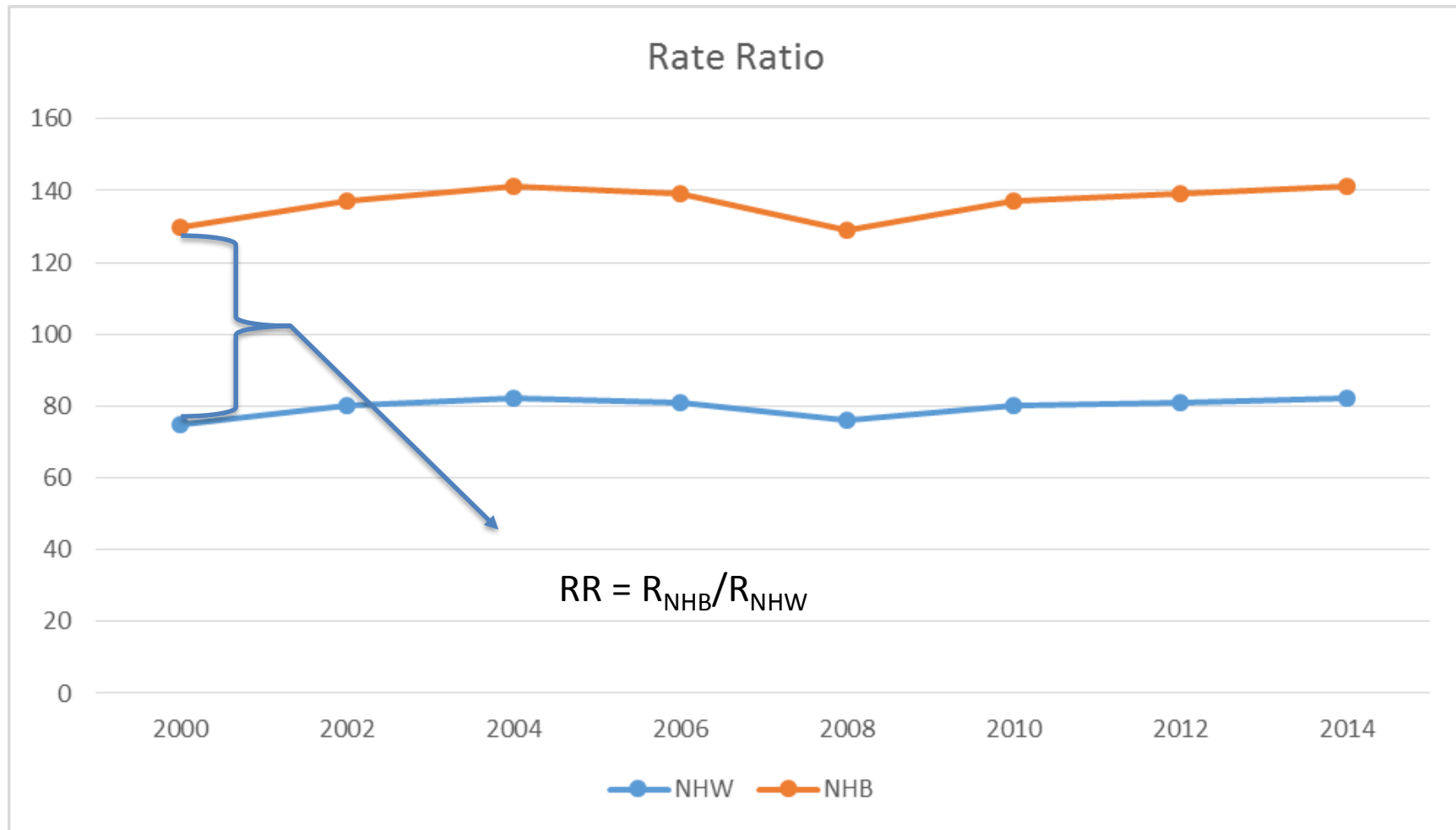


Source: 2013 Behavioral Risk Factor Surveillance System

Rate Difference

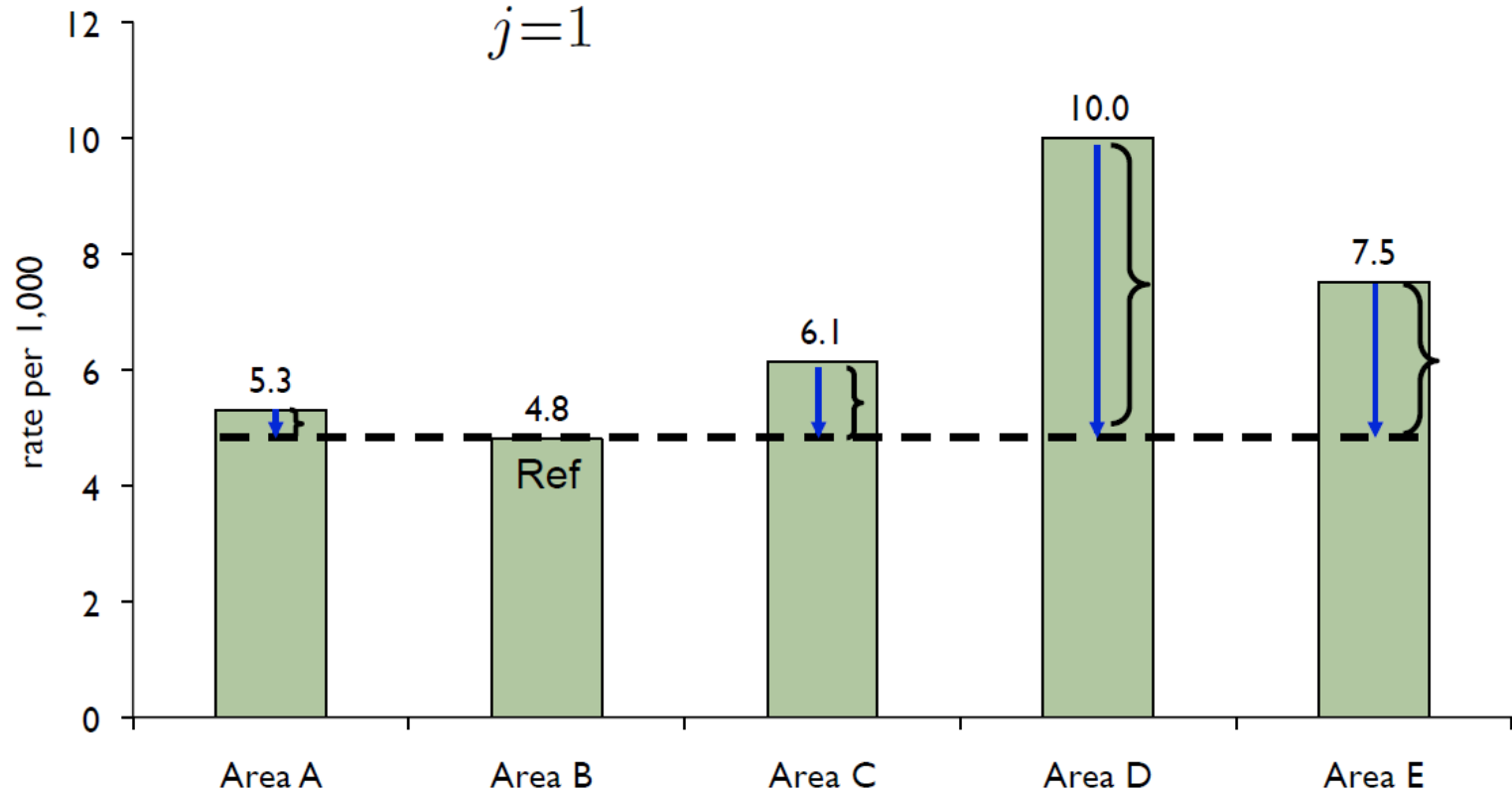


Rate Ratio



Index of Disparity

$$ID = \sum_{j=1}^J (|y_j - y_{ref}|/n) / y_{ref}$$

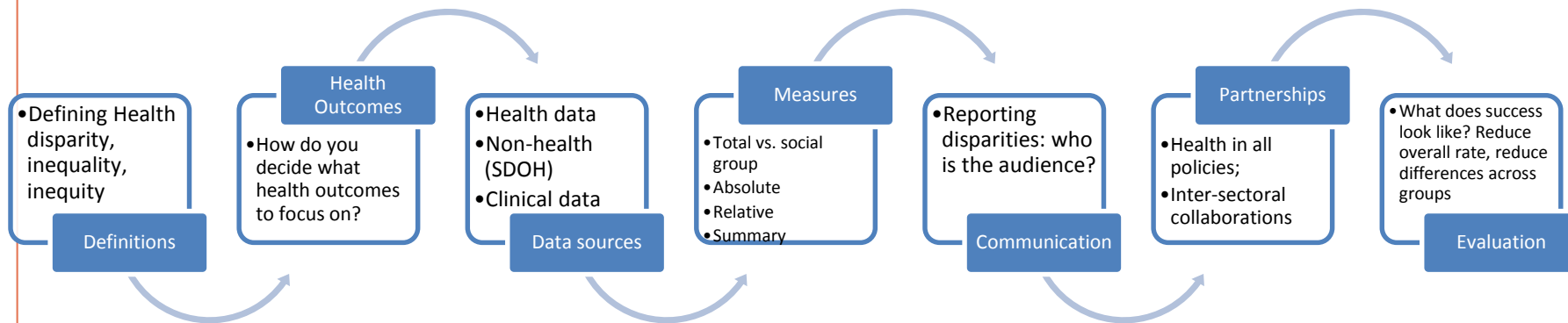


Questions to ask prior to selecting measures

- What is the goal?
 - Compare a few groups?
 - Summary measure across many groups?
 - Compare all groups to the “best” group or the “average” (*what is the reference group?*)?
- Summary measures
 - Who is included/excluded?
 - “Is this important?” (*to whom might this be important?*)
 - “What does it mean?” (*once we have a summary measure what does it describe; how do we interpret it? Can we easily report it in a way that most will understand?*)
 - “What should we do about it?” (Friedman, et al, 2005)

Politics

- Is pursuing the reduction of differences in health across social groups a political process?
 - If so, does this political process influence any of the steps below:



Case study conclusion

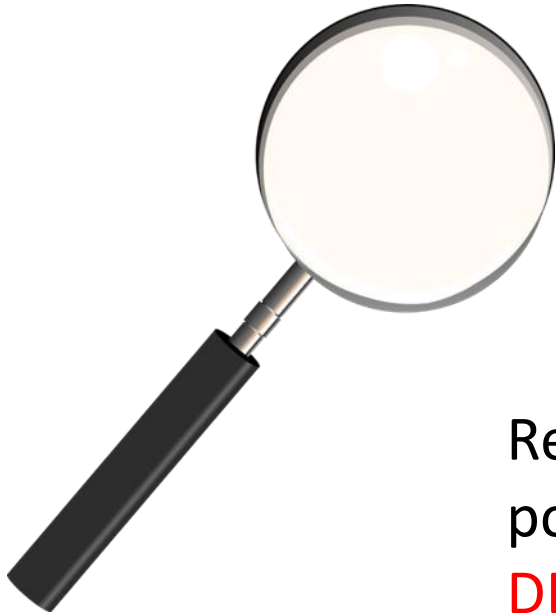
Executive Director, Betty Artis of the YWCA:

“.....will we be able to translate all of this information to policy makers, and members of our respective communities? I have to admit I am struggling to keep up and I’m not sure if I’ll be able to communicate a measure called the “index of disparity”after the report goes out. And, since there is no measure that can give us a simple threshold for action, could we just report absolute differences between groups and let the legislators decide where to act?”

Policy and Measurement Implications

- When is a “difference” actionable?
 - Should efforts focus on the “difference” OR improving the outcome for the worse off group?
- When can/is the “difference” be ignored?

Health equity in practice



Requires consistently asking of policies/programs [**THROUGHOUT DEVELOPMENT**] *‘Does this policy/program’ differentially impact some populations/communities (especially those that have a history of worse health outcomes)?’*

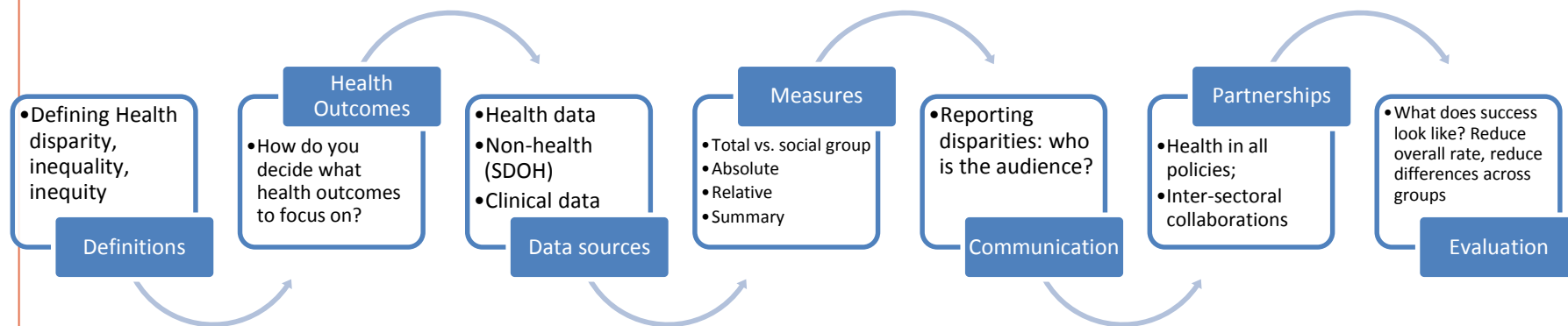
Table of Contents

Abstract	6
Executive Summary	7
Introduction	12
What would a healthier Rhode Island look like?	13
What is a community?	13
What is health equity?	13
What are health disparities?	14
What are the social determinants of health?	15
Rhode Island’s socio-demographics	16
Health in Rhode Island	20
Monitoring and evaluating health equity	20
Maternal and child health	21
Asthma	25
Obesity	30
Diabetes	35
Heart disease	36
Oral health	40
Summary	43
Recommendations for Advancing Health Equity in Rhode Island	44
Incorporate a Health in All Policies approach	45
Improve systems for collecting health disparities data	45
Strengthen Rhode Island’s capacity to address health inequities	46
Expand partnerships	46
Coordinate efforts for action	46

RI Final Report

- <http://www.health.ri.gov/publications/reports/2015CommissionOnHealthAdvocacyAndEquityLegislativeReport.pdf>

Tucker-Seeley model of measuring and reporting health disparities



What does “equality” mean?

- “There is not even a common language when the term ‘equality’ is used. Negro and white [*insert groups in which you are working*] have a fundamentally different definition. Negroes have proceeded from a premise that equality means what it says, and have taken white America at its word when they talked of it as an objective. But most whites in America in 1967, including many persons of goodwill, proceed from a premise that equality is a loose expression for improvement.”
(*Martin Luther King, Jr, 1967*)

QUESTIONS/COMMENTS

Thank You