Scientific Resources for the Community Health Improvement (CHI) Process

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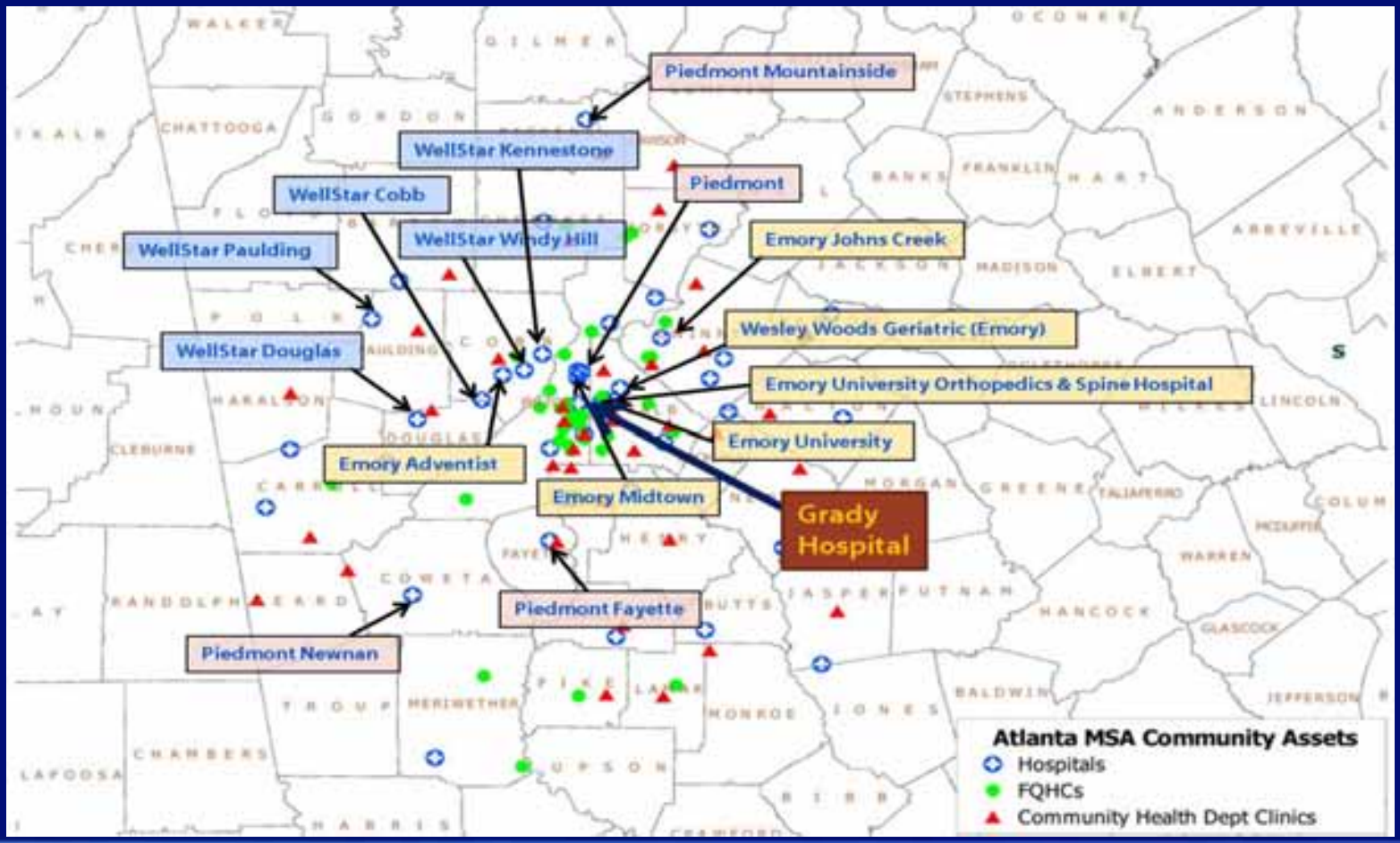
Forces at Work

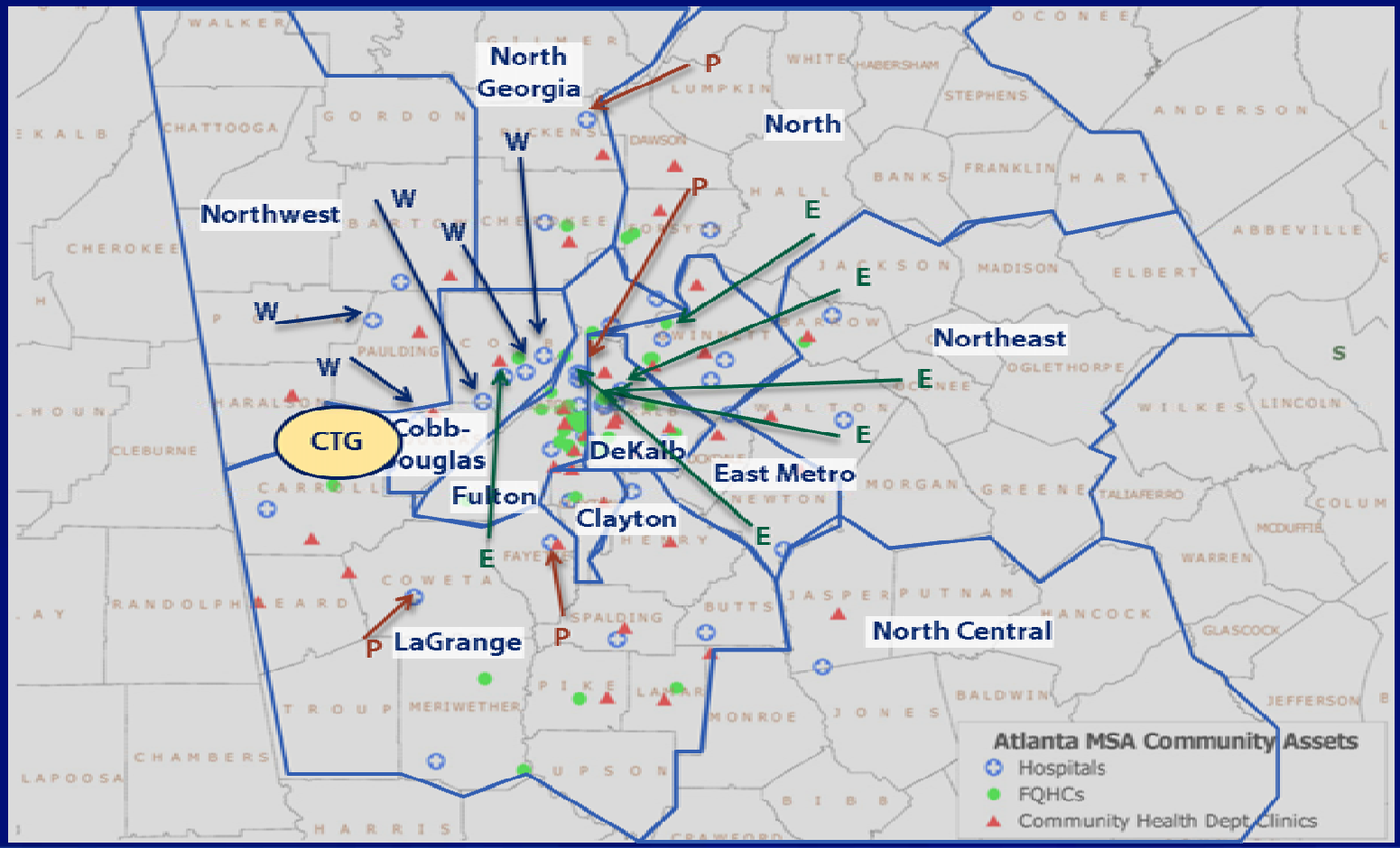
- Tax-Exempt Hospitals requirements for IRS (n>3,000)
  - Conduct community health needs assessment every 3 years
  - Involve community members and State or local public health agency
- Voluntary Public Health Accreditation through the Public Health Accreditation Board (PHAB) (n>3,200)
  - Requires a State/Community health assessment and State/ Community health improvement plan every 5 years
- Community Transformation Grants (n=24)
  - Conduct a community health needs assessment
- Partnerships to Improve Community Health (PICH) (n=30-40)
  - Community health needs assessment within last 3 years
- Federally Qualified Health Centers (FQHC) (n>1,200)

Not-for-Profit Hospitals, Atlanta, 2011



Source: Karen Minyard, GSU NNPHI

Local Health Jurisdictions, Atlanta, 2011



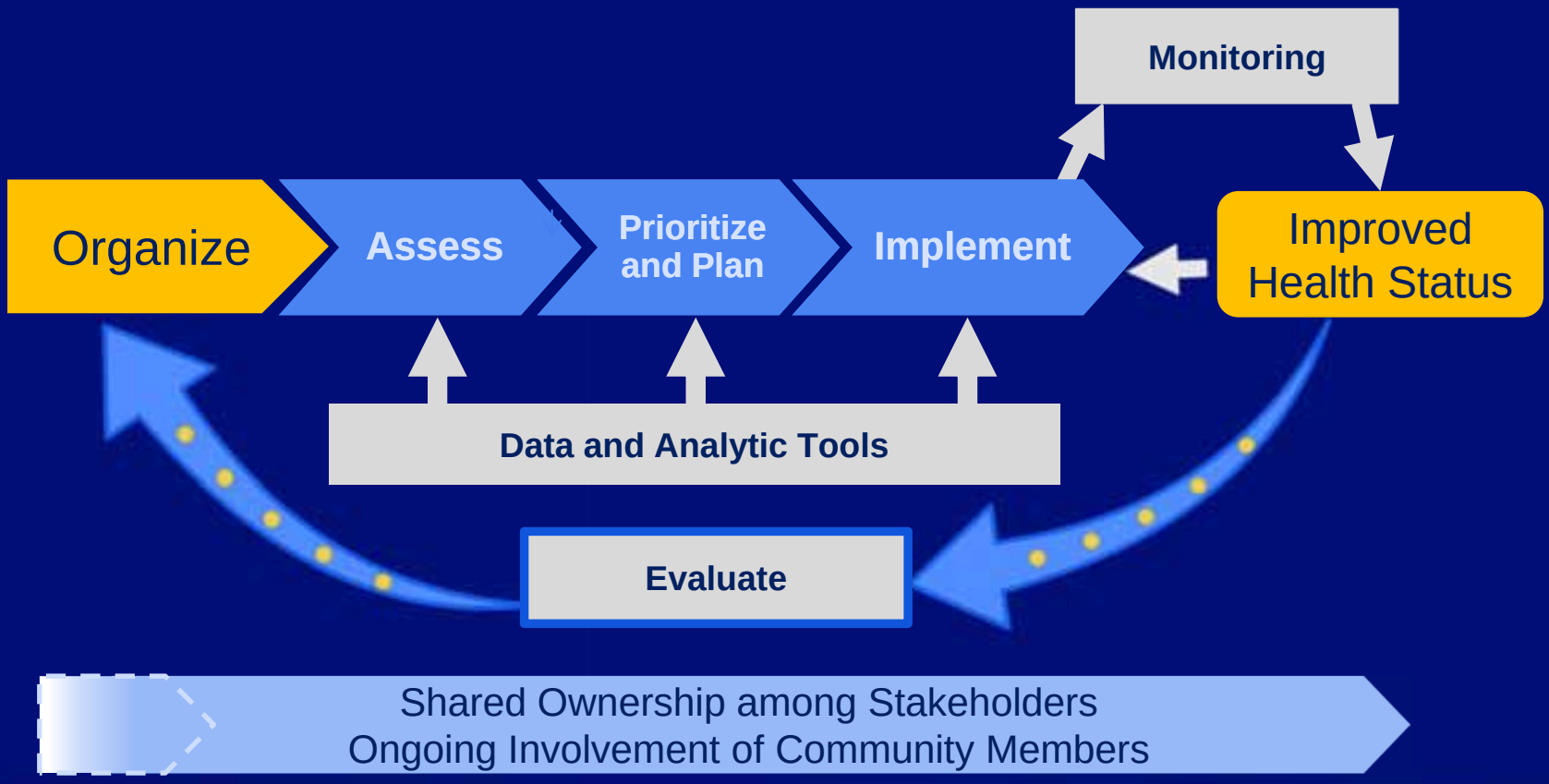
Source: Karen Minyard, GSU NNPHI

Principles to Consider for the Implementation of a Community Health Needs Assessment Process, Rosenbaum

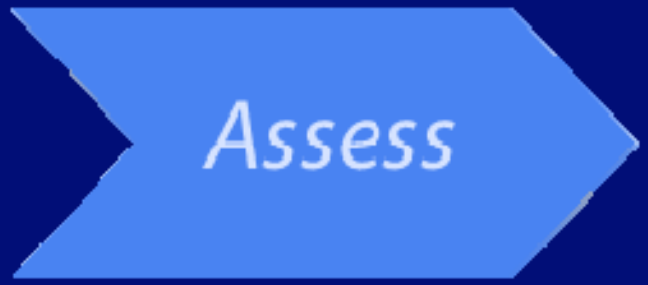
1. Maximum transparency to improve community engagement and accountability.
2. Multisector collaborations that support shared ownership of all phases of community health improvement.
3. Proactive, broad, and diverse community engagement.
4. Definition of community (broad while addressing disparities.)
5. Use of the highest quality data pooled from….diverse public and private sources.
6. Use of evidence-based interventions and innovative practices with evaluation.
7. Evaluation to inform a continuous improvement process.

Rosenbaum. nnphi.org/CMSuploads/PrinciplesToConsiderForTheImplementationOfACHNAProcess GWU_20130604.pdf

Community Health Improvement (CHI) Process



CHA/CHIP Data Driven Steps



Assessment - systematic, collaborative process

- Profile Characterizes (IOM 1997)
  - Current Health Status
  - Disparities
  - Modifiable Health Determinants
  - Community Perspectives
  - System Assets and Resources
- Data Analysis (CHA 2011)
  - Primary & Secondary Data
  - Most prevalent, severe, and important outcomes and related determinants

IOM (1997). *Improving Health in the Community: A Role for Performance Monitoring*
Catholic Health Association (2011). *Assessing & Addressing Community Health Needs Discussion*

Effective Community Health Assessments

- **4 Products**
  - **Secondary data analysis** (already collected and analyzed data)
    - Compare outcome and determinant indicators against peer communities, national averages, HP 2020 benchmarks)
    - Examine trends
    - Identify the most prevalent, severe and important subset of health outcomes and determinants
  - **Community opinions**
    - Primary data (qualitative and quantitative)
    - Collected through key interviews, town halls, listening sessions, and surveys
    - Identify community's prioritized set of outcomes and determinants
  - **Assessment of health disparities**
    - Examine secondary data by sex, race/ethnicity, SES, and geography
  - **Assets of the Health System and Community**

CHA/CHIP Data Driven Steps

Prioritize and Plan

Prioritization - transparent consensus-oriented process with objective criteria:

- Magnitude of the problem
  - % Population affected
- Seriousness of the problem
  - Mortality, morbidity, quality of life
- Community Priority
- Feasibility of a successful intervention
  - Knowledge exists
  - Intervention exists
  - Resources exist
  - Acceptable to community

N.C. Division of Public Health Office of Healthy Carolinians and Health Education and the State Center for Health Statistics (2010). *Community Health Assessment Guide Book.* PEARL (Hanlon and Pickett, 1984)

CHA/CHIP Data Driven Steps

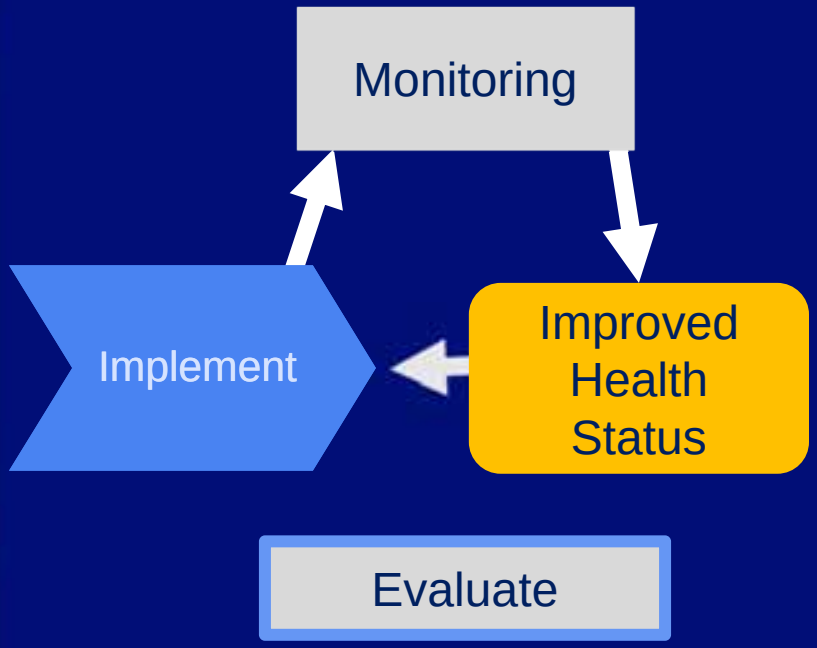
Prioritize and **Plan**

Community Health Improvement Plan:

- Describe Priority Outcomes
  - Upstream Determinants
  - Disparities
- Actions - evidence-based or “best practices”
- Outcome-based goals and SMART objectives
- Targeted Population
- Agency & Partner Roles & Responsibilities

N.C. Division of Public Health Office of Healthy Carolinians and Health Education and the State Center for Health Statistics (2010). *Community Health Assessment Guide Book.*

CHA/CHIP Data Driven Steps



- On-going monitoring
- Formal evaluation
  - Process - *measures the process of delivering an intervention.*
  - Outcome/Impact - *used to quantify intermediate (impacts) and longer-term (outcomes) effects of an intervention or program. This measures whether the intervention is having the intended impact on target population*

N.C. Division of Public Health Office of Healthy Carolinians and Health Education and the State Center for Health Statistics (2010). *Community Health Assessment Guide Book.*

Population Health Framework

Data and Analytic Tools

Data reflects holistic model of population health where health outcomes and disparities are the result of complex interactions between health determinants and individual biology and genetics.

Modifiable Determinants + Genetics + Individual Biology

Adapted from: Kindig DA, Asada, Y, Booske B. (2008). A Population Health Framework for Setting National and State Health Goals. JAMA, 299(17), 2081-2083

SCIENTIFIC RESOURCES TO SUPPORT COLLABORATIVE ASSESSMENTS AND COLLECTIVE IMPACT

CH(N)A/I Outcomes & Determinants

- Synthesized 10 seminal sources
  - 2 IOM Reports
  - 3 Published Guidance Reports
  - 2 Professional Organization Web-based Guidance
  - 3 State Health Department Web-based Guidance

- 42 Most Frequently Recommended
  - Health Outcomes
    - Mortality
    - Morbidity
  - Health Determinants
    - Health Care Access/Quality
    - Personal Behaviors
    - Social Factors
    - Physical Environment

Table 1: Community Health Assessment for Population Health Improvement: Most Frequently Recommended Health Metrics*					
Health Outcome Metrics		**Health Determinant and Correlate Metrics**			
Mortality	**Morbidity**	**Health Care (Access & Quality)**	**Health Behaviors**	**Demographics & Social Environment**	**Physical Environment**
Mortality - Leading Causes of Death (9)	Obesity (6)	Health Insurance Coverage (6)	Tobacco Use/ Smoking (8)	Age (9)	Air Quality (4)
Infant Mortality (6)	Low Birth-weight (3)	Provider Rates (PCPs, Dentists) (5)	Physical Activity (5)	Sex (6)	Water Quality (3)
Injury-related Mortality (3)	Hospital Utilization (4)	Asthma-Related Hospitalization (4)	Nutrition (4)	Race/Ethnicity (9)	Housing (5)
Motor Vehicle Mortality (3)	Cancer Rates (4)		Unsafe Sex (3)	Income (9)	
Suicide (4)	Motor Vehicle Injury (4)		Alcohol Use (4)	Poverty Level (6)	
Homicide (4)	Overall Health Status (4)		Seatbelt Use (3)	Educational Attainment (6)	
	STDs (chlamydia, gonorrhea, syphilis) (4)		Immunizations and Screenings (5)	Employment Status (6)	
	AIDS (3)			Foreign Born (3)	
	Tuberculosis (4)			Homelessness (3)	
				Language Spoken at Home (3)	
				Marital Status (3)	
				Domestic Violence and Child Abuse (3)	
				Violence and Crime (4)	
				Social Capital/Social Support (4)	

* Numbers in parenthesis indicate the number of 10 Guidance Documents that recommended that specific outcome or determinant/correlate.

CHA *MOST FREQUENTLY RECOMMENDED HEALTH OUTCOMES AND DETERMINANTS*

- **Health Outcomes & Determinants Linked to Indicator Sources**
  - **Comparable, Valid, Reliable**
  - **MSA, County, Sub-county**
- **History and Need for a Common Set of Metrics**
- **Utility of Population Health Framework**
- **Methods & Sensitivity Analysis**
- **IOM Call for Research & Consensus Process**

Available at http://stacks.cdc.gov/view/cdc/20707

Redesign and 2014 Launch of the Community Health Status Indicators (CHSI)

Center for Surveillance, Epidemiology, and Laboratory Services
Division of Epidemiology, Analysis, and Library Services

CHSI 2014 Purpose

To improve the ability of stakeholders to:

- Comprehensively assess community health status and identify disparities;
- Promote a shared understanding of the wide range of factors that drive health; and
- Mobilize multi-sector partners to collaborate with communities towards sustainable population health improvement.

CHSI 2014 Stakeholders

- Primary
  - Organizations conducting community health assessments
    - State, local, tribal and territorial health departments – for accreditation
    - Non-profit hospitals (IRS-required)
    - FQHCs, United Way, community-based organizations (CBOs)
- Secondary
  - Policy makers, government agencies, and business leaders
  - Community members and general public

CHSI Background

- Produces health profiles for each of the 3,141 counties in the U.S.
- 1998 Collaboration led by HRSA
  - Included the Public Health Foundation (PHF), ASTHO, and NACCHO
- First released in individual hard copy formats in 2000
- Steering Committee convened to evaluate, update, and further develop the CHSI in 2004
  - HRSA, CDC, the National Library of Medicine (NLM), PHF, faculty from Johns Hopkins
  - Advisory partners: NACCHO, ASTHO, National Association of Local Boards of Health (NALBOH)
- Converted to an on-line format – 2008 and updated in 2009

Redesigned CHSI

- **Targeted for launch – Summer 2014**
  - Updated & refined set of peer counties
  - Reorganized in a population health framework
  - New and updated indicators
  - Peer county comparisons for all indicators
  - Summary comparison page
  - Census tract data for hot spots and disparities, where available
  - Improved user interface
  - Improved indicator visualization
- **Proposed Annual Release Strategy**
  - Biannual updated data release
  - Biannual improved functionality release

CHSI 2014 Updates

Prior Versions	2014 Updated Version
Outdated Graphics	*Enhanced User Interface with Expanded Visualization of Peers*
Chronic Disease Focus	*Total Population Health Model*
Peer Perspective: Provision of Health Care	*Peer Perspective: Social Determinants of Health*
Only 5 Peer County Criteria Variables: • *Frontier Status* • *Population Size* • *Poverty (access to HC, insurance)* • *Age Distribution (<18 and 65+)* • *Population Density (urban/rural)*	*Many Peer County Criteria Variables* • *More Demographics* • *Broader representation of socioeconomic determinants of health*
Peer County Methodology=Decision Tree	*Peer County Methodology=Cluster Analysis*

Peers via K-Means Clustering

89 Peer Groups
Average Size : 35 Counties
(Range= 9-78)

19 Variables

- **Population (Size, growth, density, mobility)**
- **Demographics (Children, Elderly, Gender Ratio, Foreign-born)**
- **Education Level**
- **Family Structure (Single Parent)**
- **Housing (Home Value, Housing Stress, Tenure)**
- **Income and Income Inequality**
- **Poverty, Public Assistance, Employment**
- **Urbanicity**

COMMUNITY HEALTH ASSESSMENT for POPULATION HEALTH IMPROVEMENT:
*MOST FREQUENTLY RECOMMENDED HEALTH METRICS**

Health Outcomes Metrics		Health Correlates and Determinates Metrics			
Mortality	Morbidity	Health Care (Access & Quality)	Health Behaviors	Demographics & Social Environment	Physical Environment
Mortality - Leading Causes of Death (9)	Obesity (6)	Health Insurance Coverage (6)	Tobacco/ Smoking (8)	Age (9)	Air Quality (4)
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Motor Vehicle Mortality (3)	Cancer Rates (4)		Unsafe Sex (3)	Income (9)	Access to Healthy Food
Suicide (4)	Motor Vehicle Injury (4)		Alcohol Use (4)	Poverty (6)	Access to Recreation
Homicide (4)	Overall Health Status (4)		Seatbelt Use (3)	Educational Attainment (6)	
	STDs (chlamydia, gonorrhea, syphilis) (4)		Immunizations and Screenings (5)	Employment Status (6)	
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				Language Spoken at Home (3)	
				Marital Status (3)	
				Domestic Violence and Child Abuse (3)	
				Violence and Crime (4)	

Fulton County Summary Comparison

	Better	Average	Worse
Mortality	Chronic Lower Respiratory Disease (CLRD) Death Coronary Heart Disease Death Suicide Death	Alzheimer's Disease Death Cancer Death Diabetes Death Influenza and Pneumonia Death Motor Vehicle Traffic Death Unintentional Injuries	Chronic Kidney Disease Death Female Life Expectancy Firearm Mortality Homicide Death Male Life Expectancy Stroke Death
Morbidity	Adult Obesity Adult Overall Health Status Older Adult Asthma Prevalence Older Adult Depression Prevalence	Cancer Rates Diabetes Prevalence Older Adult Alzheimer's/Dementia Prevalence	Chlamydia Gonorrhea HIV\AIDS Preterm Births Syphilis
Health Care Access		Adult Physician Use Delay Older Adult Preventable Hospitalizations Primary Care Provider Uninsured	
Health Behaviors	Adult Smoking Routine Pap Tests	Adult Binge Drinking Adult Physical Inactivity Nutrition Seatbelt Use Teen Pregnancy	
Social Factors		High Housing Costs Inadequate Social Support	Children in single-parent households On Time Graduation Overall Poverty Unemployment
Physical Environment		Housing Stress Limited Access to Healthy Food PM2.5 Annual Concentrations Population Living Near Highways	Access to Parks Drinking Water Quality

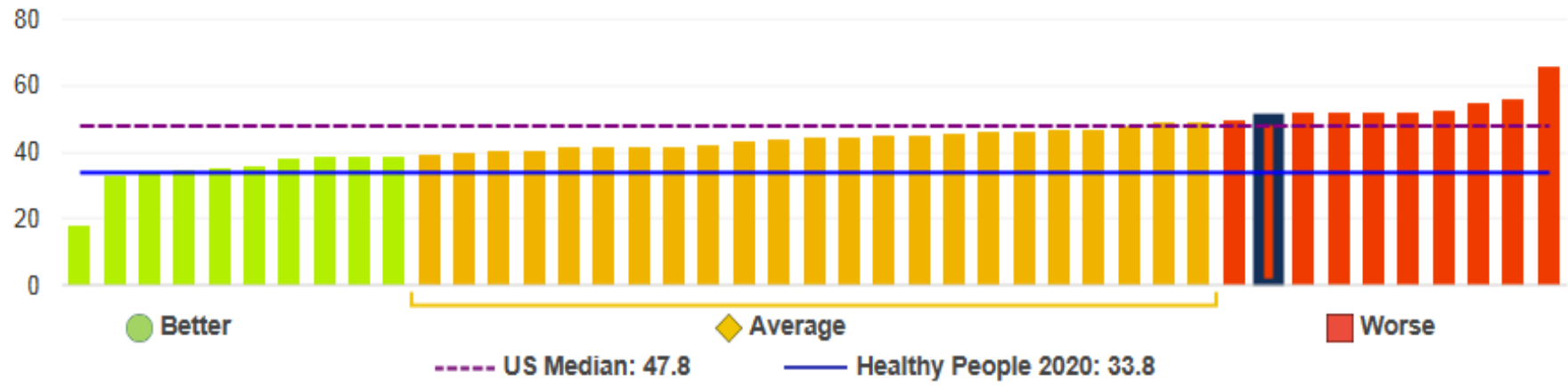
Stroke Death

The Stroke Death rate for Fulton County, GA is:

50.0 (per 100,000)

Distribution | Description | Populations | Census Tracts | Associated Indicators

Peer Distribution By **Age-adjusted Total**



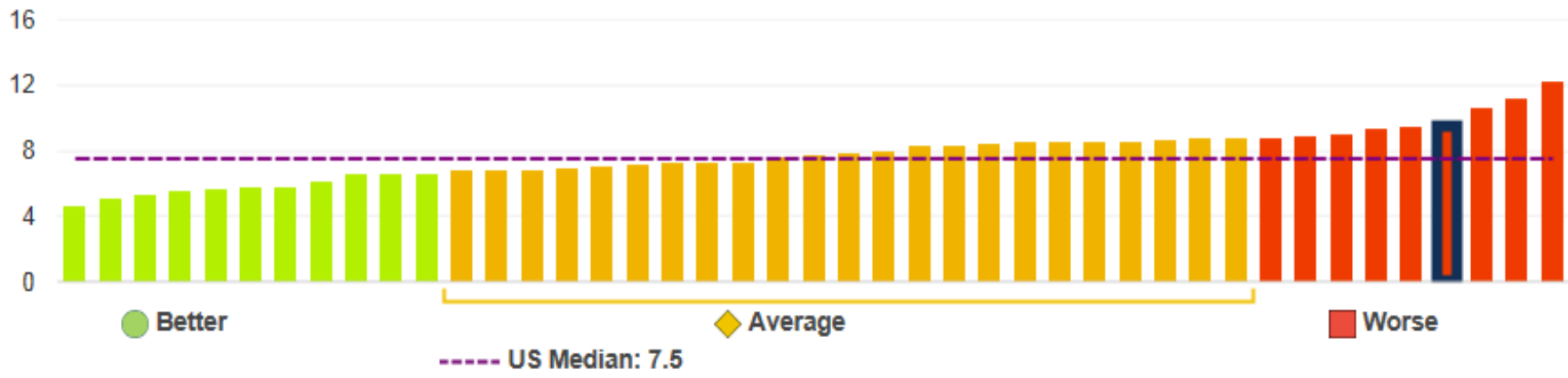
Unemployment

The Unemployment rate for Fulton County, GA is:

9.6 %

Distribution | Description | Populations | Census Tracts | Associated Indicators

Peer Distribution By **Total**



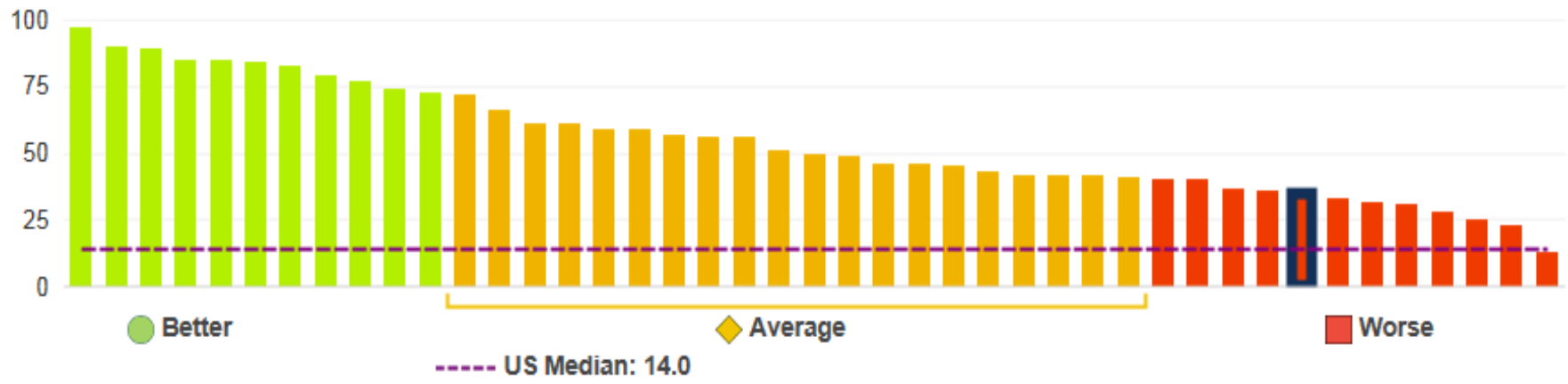
Access to Parks

The Access to Parks rate for Fulton County, GA is:

35.0 %

Distribution | Description | Populations | Census Tracts | Associated Indicators

Peer Distribution By **Total**



CHSI 2014 Acknowledgments

Michele Bohm
Adam Chen
Kenya Murray
Dolly Sinha
Norma Kanarek
Ron Bialek
Richard Klein
Lisa Lang
Lisa Sedlar
Henry Rolka
David Walker
Betsy Gunnels
Paula Yoon
Rachel Kaufmann
Richard Rothenberg
Scott Weaver
Vlad Beresovsky
Donald Malec
Joaquin Hernandez
Zachary Welch
Michael (Kiet) Ta
Shawna Mercer
Maryan Reynolds
David Delozier
Sara Bedrosian
Susan Katz
Kate Brett
Jessie Hood
Tiffany Wilson
Brett Headley
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