The Harmonies of Community Health & Health Care

Five Levels of Integration to Achieve Optimal & Equitable Outcomes in Chronic Disease

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Father of Dan & Christina, Husband of Cindy,
Grandfather of Gracie
Professor of Behavioral Sciences & Social Medicine
Director, FSU-COM Center for Medicine & Public Health
Limitations of a Primary Care Clinician Serving High-Disparity Populations

- Uninsured Patients
- Limited Resources
- Cultural & Linguistic Barriers
- Professional Isolation
Health Behaviors
Social
“Determinants”
Poor Outcomes are Rooted in Clinical & Social Complexities
Upstream Downstream “Determinants” of Health

- A Cascade of Causation, but not Unidirectional

Moving Upstream: How Interventions that Address the Social Determinants of Health can Improve Health and Reduce Disparities

David R. Williams, PhD, MPH\textsuperscript{1,2}, Manuela V. Costa, MPH\textsuperscript{1}, Adebola O. Odunlami, MPH\textsuperscript{1}, and Selina A. Mohammed, PhD\textsuperscript{1}
Health Disparities

“Of all the forms of inequality, injustice in health care is the most shocking and inhumane.”

“More than one-quarter of the American Indian and Alaska Native population is living in poverty, a rate that is more than double that of the general population and one that is even greater for certain tribal groups (e.g., approaching 40%).”

A nationwide population-based study identifying health disparities between American Indians/Alaska Natives and the general populations living in select urban counties. Castor ML¹, Smyser MS, Taualii MM, Park AN, Lawson SA, Forquera RA.
### American Indian Disparities

American Indians and Alaska Natives (AI/AN) in the IHS Service Area
2009-2011 and U.S. All Races 2010
(Age-adjusted mortality rates per 100,000 population)

<table>
<thead>
<tr>
<th>Cause</th>
<th>AI/AN Rate 2009-2011</th>
<th>U.S. All Races Rate - 2010</th>
<th>Ratio: AI/AN to U.S. All Races</th>
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<tbody>
<tr>
<td>ALL CAUSES</td>
<td>999.1</td>
<td>747.0</td>
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<tr>
<td>Diseases of the heart (Heart Disease)</td>
<td>194.7</td>
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<td>Malignant neoplasm (cancer)</td>
<td>178.4</td>
<td>172.8</td>
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<td>Accidents (unintentional injuries)*</td>
<td>93.7</td>
<td>38.0</td>
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<td>Diabetes mellitus (diabetes)</td>
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<td>Cerebrovascular diseases (stroke)</td>
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<td>Chronic liver disease and cirrhosis</td>
<td>42.9</td>
<td>9.4</td>
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Racial Disparities are Severe and Persistent

What If We Were Equal? A Comparison Of The Black-White Mortality Gap In 1960 And 2000

Closing this gap could eliminate more than 83,000 excess deaths per year among African Americans.

by David Satcher, George E. Fryer Jr., Jessica McCann, Adewale Troutman, Steven H. Woolf, and George Rust

ABSTRACT: The United States has made significant progress in reducing health disparities, housing, and education. However, the gap in life expectancy between black and white individuals has continued to widen. In 1960 and 2000, the black-white life expectancy gap was significant. In 1960, it was estimated that 83,571 excess deaths occurred among black Americans compared to white Americans, a difference of 2.5 years. By 2000, the gap widened to 2.9 years, with an estimated 114,000 excess deaths.

The 1985 task force on health disparities in minority health and health care priorities concluded that the black-white life expectancy gap was widening, a trend that is still evident today. In 2000, the gap was estimated to be 2.9 years, with an estimated 114,000 excess deaths.

The black-white standardized mortality ratio, which measures the ratio of black mortality to white mortality, was 1.472 in 1960, 1.454 in 1970, 1.410 in 1980, 1.496 in 1990, and 1.412 in 2000. This trend indicates that the mortality gap between black and white individuals has been persistent and significant, with the ratio generally decreasing but not eliminating the gap.

Black-White Standardized Mortality Ratios, 1960-2000

1.472 1.454 1.410 1.496 1.412

The persistent gap in life expectancy and mortality rates between black and white individuals highlights the ongoing challenges in reducing health disparities. Further research and policy initiatives are needed to address these disparities and improve health outcomes for all Americans.
Black-White racial inequalities in health outcomes cost Fulton County 28,022 excess years of potential life lost due to premature deaths.
Insurance, quality of care blamed for racial disparity in breast cancer mortality

BY HALLIE D. MARTIN
FEB 28, 2008

The breast cancer mortality rate for black women is 68 percent higher than for white women in Chicago, a study by Sinai Urban Health Institute found, and while the reasons for the disparity are complicated, experts said insurance is a major factor.

“Black women are two years behind,” said Sharon Brown, supervisor at the Breast Imaging Center at Rush Medical College. “[Doctors] don’t catch it early, and it tends to be more aggressive.”

Black and White Breast Cancer Mortality
Chicago, 1981-2007

Graph: Age-Adjusted Female Breast Cancer Mortality for Chicago, Per 100,000 Population

Prepared by The Sinai Urban Health Institute
Determinants

Deficits

Disparities

Despair

OVERWHELPED
Sure, I CAN HANDLE THE LOAD. No Problem.

3 D’s

POVERTY
Rollback of Health & Safety
Re-assumance of white Anglo men making all the decisions

Systemic Racism

Medicaid Cut-Backs
Education Inequality
Anti-Immigrant Hostility
Believe in the Possible!

“Living through the Civil Rights movement showed me that I could be a part of change. I realized then that you don’t have to accept things the way they are.”

-- David Satcher, MD, PhD

The Community Foundation for Greater Atlanta;
Two Questions:

• For what leading causes of death did the U.S. achieve a successful reduction in mortality (>50% in 50 years)?

• What accounted for the success in most of these conditions?
Triangulating on Success to Improve America’s Health

- Cardiovascular:
  - Heart Disease
  - Stroke
- Cancer:
  - Uterine/Cervical Cancer
  - Gastric (Stomach) Cancer
- Traumatic Injuries
  - Unintentional Injuries

- Infectious Disease:
  - HIV-AIDS
  - Tuberculosis
  - Syphilis
  - Influenza / Pneumonia

What accounted for the successful reduction in mortality (>50% in 50 years) for most of these conditions?
**Local Area Variation: Evidence that Equality Is Achievable**

- **Racial Disparities are not Inevitable!**

**United States Counties with Low Black Male Mortality Rates**

- Robert S. Levine MD, George Rust MD, Muktar Aiyu MD, PhD, Maria Pisue PhD, Roger Zoorob MD, MPH, Irwin Goldwagen MS, Paul Juarez PhD, Baqar Husaini PhD, Charles H. Hennekens MD, DrPH

<table>
<thead>
<tr>
<th></th>
<th>Black Men. USA</th>
<th>Black Men. 66 Selected Counties</th>
<th>White Men. USA</th>
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<td>2007</td>
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- **Table Data**

| Percentage of black men aged 25+ y with less than high school graduation | 20% | 31% | <.001 |
| Percentage of black male civilian veterans aged 65+ y | 59% | 49% | <.001 |
| Black:white poverty ratio | 2.6 | 2.5 | .550 |
| Residential isolation index (black) | 0.1 | 0.1 | .416 |
| Residential isolation index (white) | 0.8 | 1.1 | .526 |
Trends in disparities are not the same in all communities.
Stretching the Boundaries of Health Care & Health Outcomes Management

- Public Health / Health Promotion / Health Behaviors
- Primary Care / Specialty Care
- Behavioral Health (Mental Health & Substance Use)
- Community Strengths & Resiliency
- Social Determinants of Health
Example: To prevent complications of obesity and diabetes, *all you have to do* is modify a person’s health beliefs and attitudes, daily habits, eating preferences, daily activities, exercise habits, grocery stores, neighborhood walk-ability, food advertising, self-care, employability, economic empowerment, access to medical care, clinical inertia, provider quality, and medication adherence, all in the context of his or her family and social relationships.
Two Seemingly Contradictory Ideas

Focusing on One Person at a Time

Focusing on the Whole Community

Community Health

Primary Care
Five Levels of Integration

Population Outcomes

Community

Healthcare System

Practice

Person

Find the Beauty in Achieving Harmony!
Integration!

Person-Level
Integrating Behavioral Health & Primary Care
- Behavior Change
- Mental Health
- Substance Use

Population Outcomes
Community
Healthcare System
Practice
Person
Managing Clinical and Social Complexities for Whole Persons

One Diabetic Patient:
- Diabetes
- Arthritis
- COPD
- CHF
- Stroke
- Pneumonia
- Cancer
- Depression
- Alcohol / substance abuse

* 21 ER Visits    * 143 hospital bed-days

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<td>$217,657</td>
<td>$7,105</td>
<td>$29,756</td>
<td>$10,498</td>
<td>$3,155</td>
<td>$12,182</td>
<td>$280,353</td>
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Mental Health ↔ Physical Health

• “Baseball is 90% mental -- the other half is physical.”
  -- Yogi Berra

• Stress
• Depression
• Anxiety
• Substance Abuse
• Domestic Violence
• Schizophrenia
• Bipolar Illness

• Nervios
• Susto
• Mal de Pelea
• Social Isolation
• Migration Stress
• Acculturation Stress
Behavioral Health + Primary Care Continuum of Integration

Separate → Referral → Coordinated → Collaborative → Integrated

Separate → Co-located → Common
Relational Integration = Collaborative Team

Cherokee Health Systems

“Integrated Care” Model:

– Biopsychosocial approach
– Addresses the whole person by integrating behavioral services into primary care.
– Combines the best traditions of primary care and mental health services in an integrated health care team to treat the whole person
– Services include education, behavioral management, assessments, brief interventions, as well as treatment for mental health disorders.
Integration!

Practice-Level
- Patient-Centered,
  Panel-based,
  Team-Driven
Care & Outcomes Management

Population Outcomes
Community
Healthcare System
Practice
Person
Primary Care -- Healing Whole Persons with our “Radical Human Presence”

“Radical Human Presence”, phrase used in a presentation called “How the Heart Learns” by Landon Saunders; AAMFT, 2004 annual mtg.

- Listening
- Touching
- Affirming
- Comforting
- Diagnosing
- Treating
- Grieving
- Supporting
- Healing
Doctor-Centered Medical Home: the Exam Room and the Doctor-Patient Visit
Personalismo, Familismo, & Confianza

Trusted Relationships Trump Evidence-Based Arguments
Teamwork: Everyone works up to the Level of their License

- Example: Empower More Clinical Staff to Initiate Preventive Services
- Medical assistants and Licensed Practical Nurses offer mammography as a routine part of the clinic encounter

Staffing Models:
(8,000 patient panel)

- 5 MD’s
- 2 PA’s
- 1 RPH

- 2 MD’s
- 3 PA’s
- 1 NP/Care Mgr
- 1 LCSW or Psychol/Behav
- 1 RPH /Pharm D (+ pharm tech)
- 3 Promotoras
Who says group visits have to happen in the clinic?
Integration!

Healthcare Systems Level:

- Information Systems
- Delivery Systems (Pharmacy, Specialty Care, Emergency Dept, Hospital, etc.)
Health Information Systems

Individual Level:
- Flags or triggers to promote compliance at each visit and to decrease missed opportunities
- Evidence-based guideline alerts

Practice Level:
- Average A1c level in all diabetics
- % of Patients with A1c > 8
- Lists of patients with A1c > 8 for outreach / action
From Uncoordinated Care to Full Information Exchange

- Jane Doe -- 37 y/o F w/ Bipolar Disorder
  - Lithium (Lithobid®)
  - Aripiprazole (Abilify®)
  - Divalproex Sodium (Depakote®)

- Jane Doe – 37 y/o fertile female smoker with HTN & two-weeks of productive cough
  - Azithromycin (Zithromax Z-Pack®)
  - ACE + HCTZ (Zestoretic®)
  - OCP’s (Yaz®)
  - Bupropion (Zyban®)
Guideline-concordant prescribing

Patient Rx-Adherence

Action Alerts
- J Smith: Elevated A1c
- Mary Lin: Rx not refilled
Cohesive, Comprehensive, Integrated Local Health Systems

Faith Communities

Hospitals

Emergency Room

Mental Health

Public Health

Primary Care

Business & Community Leaders
The Power of Integration

What would happen if all the health folks came together and created a therapeutic community of healers for whole people?
Integration!

Community-Level:
- Patient at home
- Family and culture
- Social Determinants
Free-Range Humans

(when patients escape from the exam room!)
Cultural Relevance / Community Ownership / Team-Based Care

South Central Foundation – Anchorage, Alaska
Promotores / Promotoras & Community Health Workers

- Enhanced Use of Complex Health Systems (Navigators)
- Immunization Rates
- Healthy Eating & Exercise
- Control of Household Asthma Triggers
- Farmworkers Eye Safety
- Compliance with TB Treatment
- Breast & Cervical Cancer Screening
- Blood Pressure Control
Healthy People Need Healthy Communities

The Continuum of Community Health

**Healthy Community**
- People Out & About
- Safety
- Sense of “Community”
- Culture of Healthy Behaviors
- Resiliency
- Hope

**Positive Health Factors**
- Produce Markets
- Parks
- Sidewalks
- Worship Centers
- Primary Care Health Homes

**Negative Health Factors**
- Unhealthy Fast-Food
- No Safe Place to Walk or Play
- Liquor Stores
- Mini-Marts
- Crime
- Joblessness

**Unhealthy Community**
- Unsafe, Insecure
- Fragmented
- Economically-Depressed
- Drug-Infested
- Despairing
Addressing Social “Determinants” of Health, Community Cohesiveness, Health Behaviors, Behavioral Health, and Medical Care all at the same time!

Community Health as Community Development

- Leadership Development
- Economic Development
- Health Development
- Educational Empowerment
- Political Empowerment

H. Jack Geiger (L), John W. Hatch (b1928) (R) construction of Delta Health Center, Bayou Mound, Mississippi 1968

John Hatch: Head of community organizing Delta CHC; first African-American endowed chair UNC School of Public Health.

Jack Geiger: used “health care as an instrument of social justice and empowerment for those oppressed by racism and poverty.”

“The Flint Disaster: Why Doesn’t Black Health Matter?” (Geiger. Feb 3 2016 physiciansforhumanrights.org/blog)

https://www.slideshare.net/JimBloyd/physicans-health-reform-and-health-equity-when-we-fight-we-win
Beyond Deficits: Asset-Based Community Development

**True partnership** builds on community strengths to work seamlessly together on a shared agenda!
Integration!

Population Level Outcomes
- Clinical
- Economic
Tying it All Together in a Rapid-Cycle Improvement Process

How Do We Tie it All Together?
Can we continuously improve interventions in each domain and in the spaces in-between the practice and the community or between the hospital and home, with a rapid-cycle outcomes feedback loop and provider-community coalitions all working together to keep improving connections and processes and outcomes until we achieve more optimal and equitable outcomes for all?
Holding Ourselves Accountable to *Achieve Equality in Outcomes*

- **Community Level Metrics**
  - Mortality
  - Hospital Bed-Days
  - Preventable Adverse Events (e.g., amputations)

- **Practice-Level Data**
  - ED Visits
  - Hospital Bed-Days

- **Person-Level Feedback**
  - Missed refills
  - Inadequate Care
  - ED Visit yesterday!
Tying it All Together to Achieve Health Equity

- Community Leadership & Resiliency
- Community Health & Economic Development
- Health Behaviors
- Health Care
- Health Outcomes

- Social Determinants of Health
John Kania & Mark Kramer first wrote about collective impact in the *Stanford Social Innovation Review* in 2011 and identified five key elements:

- **Operationalizing real-world hope** requires an affirmative vision, an expectation of success, broad coalitions taking action cohesively, and frequent measures of collective impact to drive rapid-cycle improvement.

Rust G. Hope for Health Equity. *Ethnicity & Disease, 2018.*


**Common Agenda**
- Keeps all parties moving towards the same goal

**Common Progress Measures**
- Measures that get to the TRUE outcome

**Mutually Reinforcing Activities**
- Each expertise is leveraged as part of the overall

**Communications**
- This allows a culture of collaboration

**Backbone Organization**
- Takes on the role of managing collaboration
In the 1980’s, Infant Mortality in the Olancho state of Central Honduras was over 70 per 1,000 (7%); Since 2006, there have been no infant deaths in the 27 villages covered by the comprehensive community development work of Honduras Outreach (Rancho Paraiso)

Data source: World Bank, World Development Indicators - Last updated Apr 26, 2011
What Accounts for Success in the Agalto Valley, Honduras?

Public Health / Sanitation

Education / Nutrition

Prenatal Care / Primary Care

Economic & Community Development
Human chain rescues trapped swimmers

Morning Express with Robin Meade

A family stuck in a rip current narrowly avoided a tragedy when a crowd of strangers linked together in a human chain to bring them back to land at a Florida beach. Source: HLN
Humility in Working Together

“We are all as angels, with only one wing;
We can only fly when we embrace each other.

-- Luciano de Crescenzo