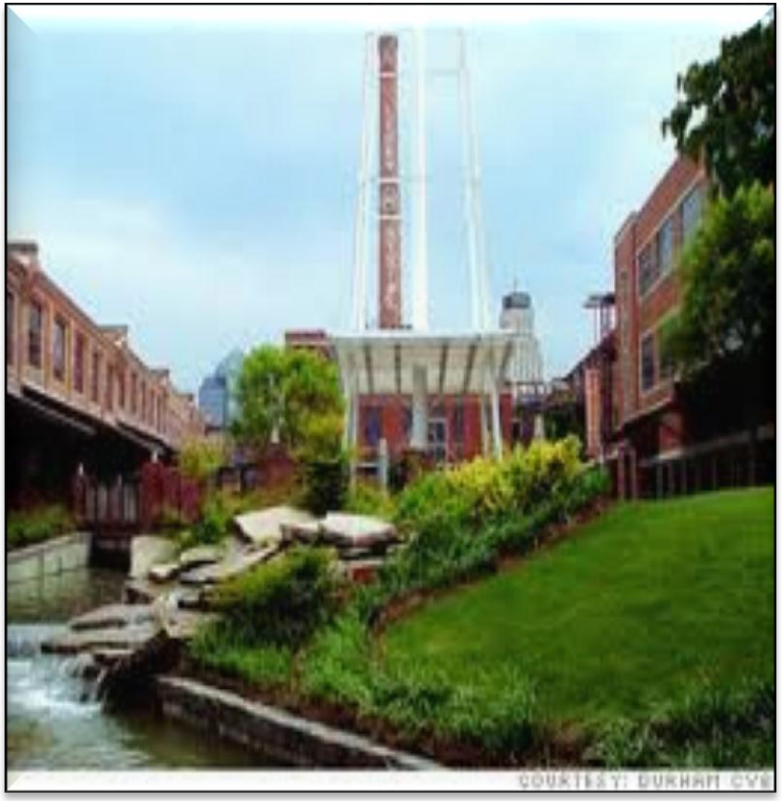
Durham and Duke -
From a “City of Medicine” to a Community of Health

J. Lloyd Michener, MD - Professor and Chair
Department of Community and Family Medicine – Duke Medicine
Public Health Workforce - Atlanta, Georgia
December 13, 2012



North Carolina

AMERICA'S HEALTH RANKINGS
United Health Foundation

State Rank: 32

Better than 2010

2010 rank: 35
Improved: 3

Top Five Healthiest States

1. Vermont
2. New Hampshire
3. Connecticut
4. Hawaii
5. Massachusetts

Diabetes Rank **36**

30 Obesity Rank

28.6% of people in NC have a BMI > 30

Percent of people obese nationally **27.5**

1 in 10

people in NC suffers from diabetes

12.0

percent reported binge drinking

Binge Drinking Rank **8**

Source: America's Health Rankings/ United Health Foundation

We have a strong Public Health Department

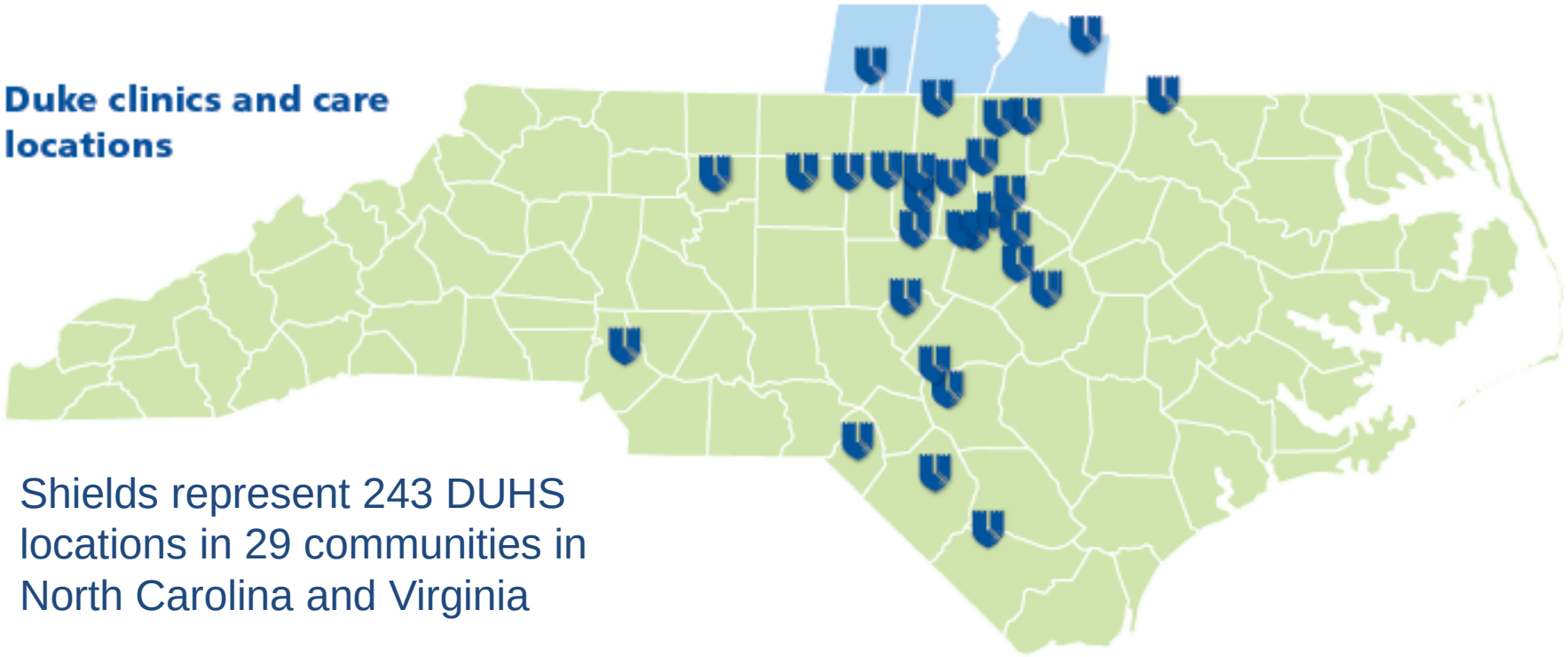
Public Health

“Working with our community to prevent disease, promote health, and protect the environment"

Adopted by the Board of Health, July, 2011.

GAYLE B. HARRIS, MPH, RN
Public Health Director

Duke provides services across central NC



Shields represent 243 DUHS locations in 29 communities in North Carolina and Virginia

Community Care of North Carolina

62,000 Medicaid patients, 52 primary care sites, all health departments

6 Counties: Durham (DCHN), Vance, Granville, Warren, Person, Franklin

Latino population

Teams of community health workers, DSS social workers, nurses work with patients at home

- *patient education and support, system navigation, self-management skill training*

Electronic links among practices, hospitals, DSS, Health Departments, and care teams

$2.50 pmpm

$2.50 to Network

- *additional $2.50/$3.00 pmpm for high acuity enrollees*

North Carolina Division of Medical Assistance
Estimated Cost Savings Calculated Using Method 1

Fiscal Year	Avg members per month	PMPM Savings	Total Annual Savings	Percent Savings
FY07	983,356	$8.73	$103,000,000	1.9%
FY08	1,083,636	$15.69	$204,000,000	3.4%
FY09	1,176,778	$20.89	$295,000,000	4.6%
FY10	1,253,292	$25.4	$382,000,000	5.8%

Source: Milliman Client Report for the NC Division of Medical Assistance December 15, 2011

Improving Health Care for Seniors: Just For Us

- 350 patients since 2000
- Average age 70, multiple chronic conditions
- 44% have mental illness
- All are home-bound
- 84% African-American; many with low to no family support
- Low literacy or illiterate

Community Partners

City of Durham, Housing Authority
Lincoln Community Health Center
Durham Council on Seniors
Area Mental Health Agency
Durham County Health Department
Durham County Department of Social Services

Practice Partners

Duke CFM, SON, DUH, DRH, Center for Aging, Department of Psychiatry

Just For Us

Outcomes

Ambulance costs	↓	49%
ER costs	↓	41%
Inpatient costs	↓	68%
Prescription costs	↑	25%
Home health costs	↑	52%

All patients with hypertension 79% ≤ 140/90

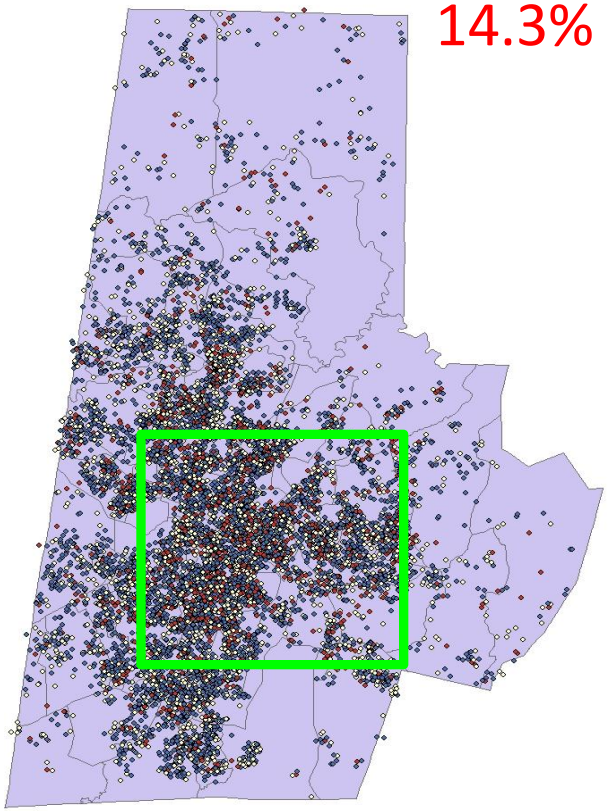
Diabetics with hypertension 84% ≤ 140/90

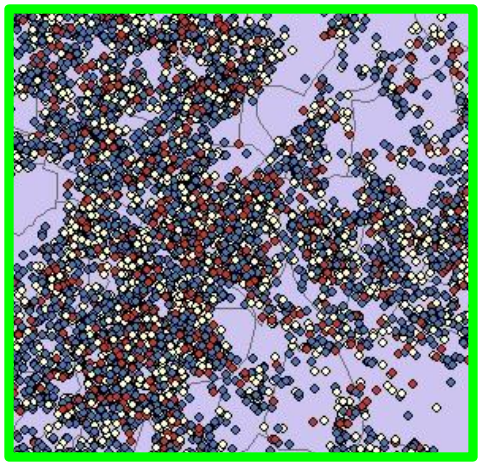
Diabetes in Durham

- DM patients seen at Duke, 2007-2009
- 14,345 unique patients:

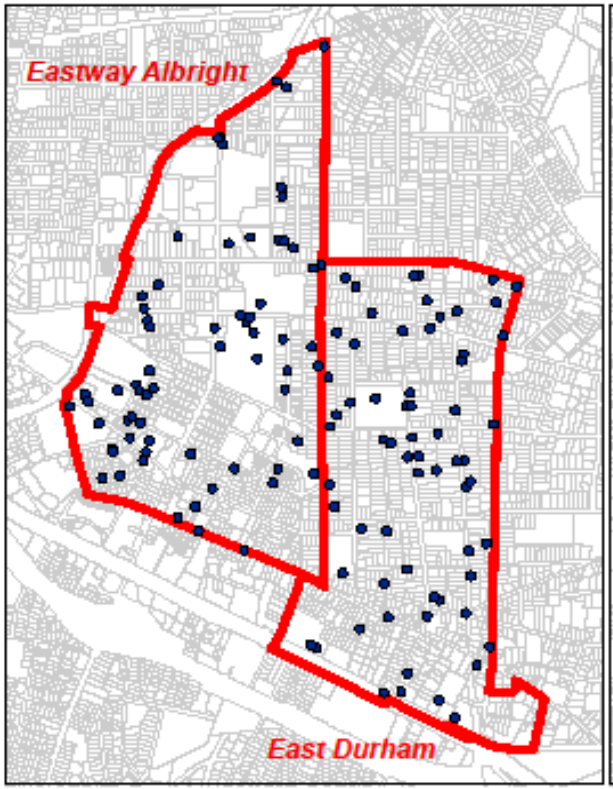
  8.7% of all patients >20 years old

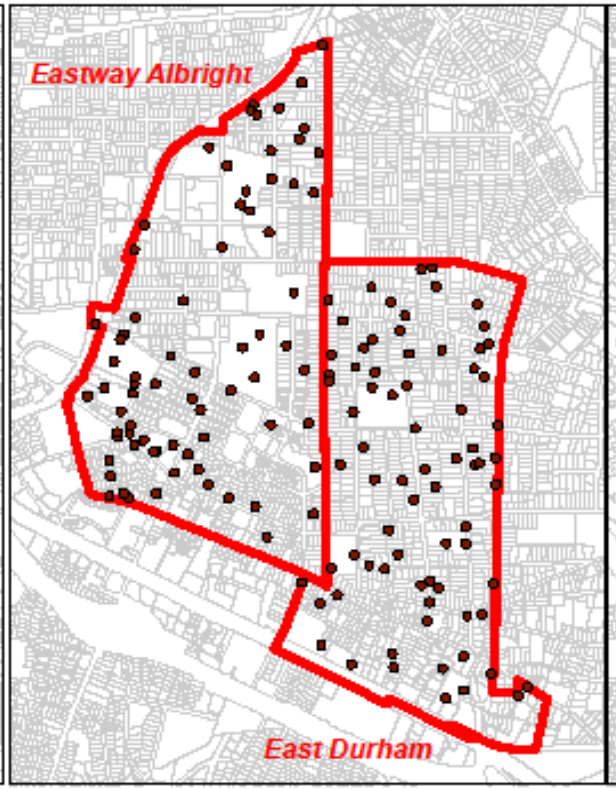
  14.3% of all patients >40 years old

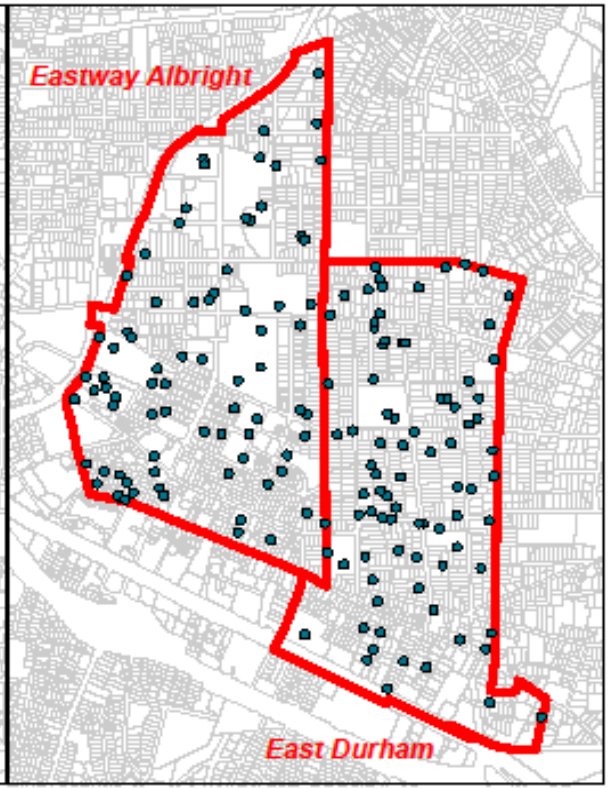




NE Central Durham Obesity Patients





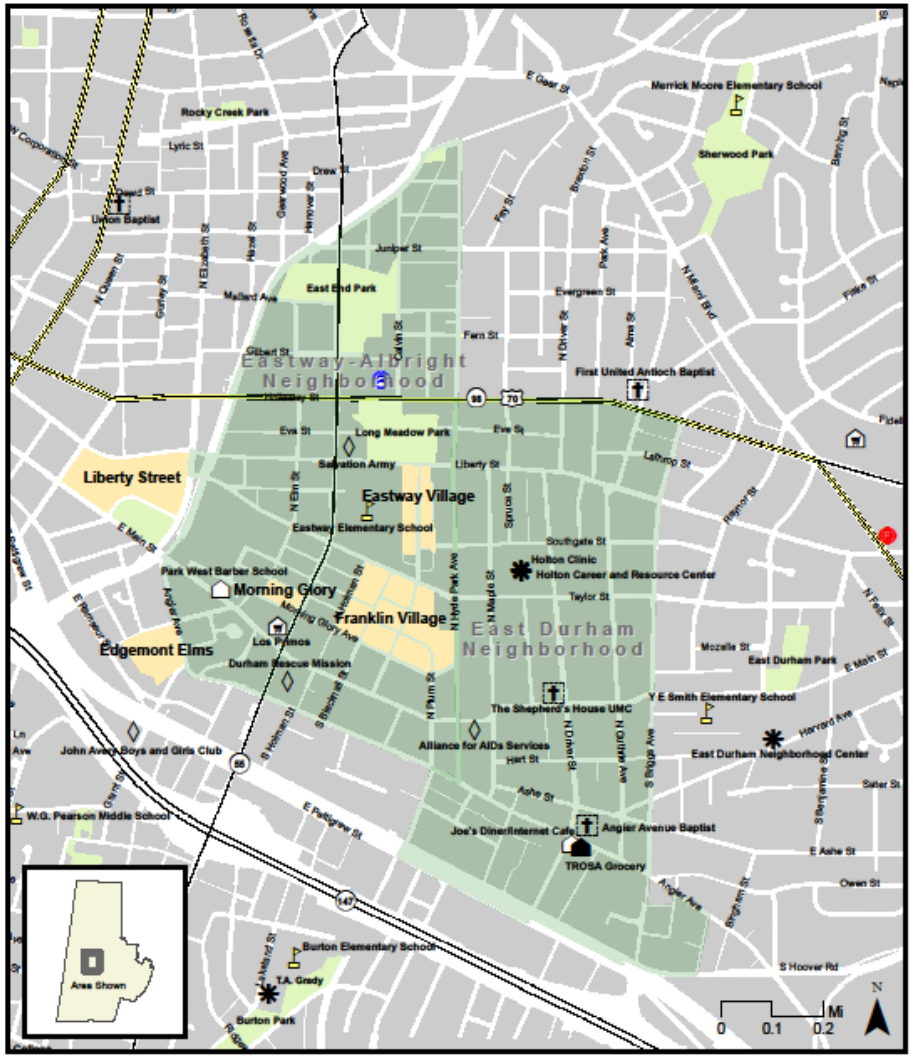


2007 Obesity Patients
Count: 131
Mean Age: 41
African American: 85%
White: 9%
Female: 79%
On Medicaid/Medicare: 55%
Average Health System Visits: 16
Average ED Visits: 2

2008 Obesity Patients
Count: 149
Mean Age: 41
African American: 82%
White: 14%
Female: 74%
On Medicaid/Medicare: 59%
Average Health System Visits: 17
Average ED Visits: 2

2009 Obesity Patients
Count: 161
Mean Age: 40
African American: 79%
White: 12%
Female: 78%
On Medicaid/Medicare: 59%
Average Health System Visits: 18
Average ED Visits: 2

Building Capacity in NECD Neighborhoods



Northeast Central Durham Neighborhood Community Assets

Community/Recreation Center	Grocery	Police Station
Church	Non-Profit	Fire Station
Business	Housing Community	School (K-12)
Multiple		Public Park

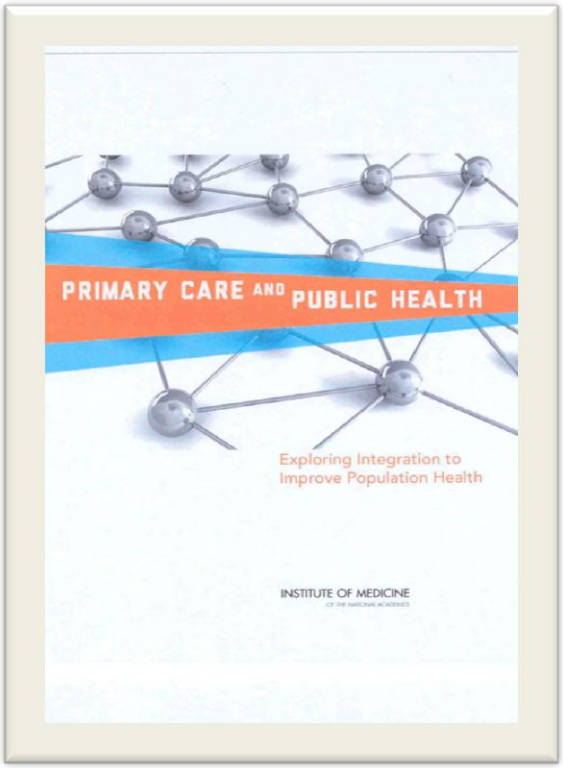
DHI teams are connecting community partners and working with neighborhood residents to ensure:

- **Healthy schools and neighborhoods**
- **Safe places to exercise**
- **Access to healthy foods**
- **Access to health information**

For example, the Achieving Healthy Bodies for a Lifetime (AHL) team has been successful in:

- Calculating body mass index (BMI) for every child at YE Smith (n=360)
- Providing raw fruit or vegetable (FV) snack to all students at YE Smith three days/week in conjunction with Durham Public Schools (DPS) and Child Nutrition Services (CNS) USDA grant
- Achieved 100% teacher and student participation in Teacher & Student Walking Groups and 100% classroom participation in the Dine for Life program offered by DCHD Nutrition Division and augmented by AHL.
- Organized and taught first half of premier Interfaith Food Shuttle cooking class offered as “Friday Club” choice in regular school curriculum.
- Launched new aspect of “Let’s Move, Faith Communities” program in Union Baptist; expanding to other faith organizations.

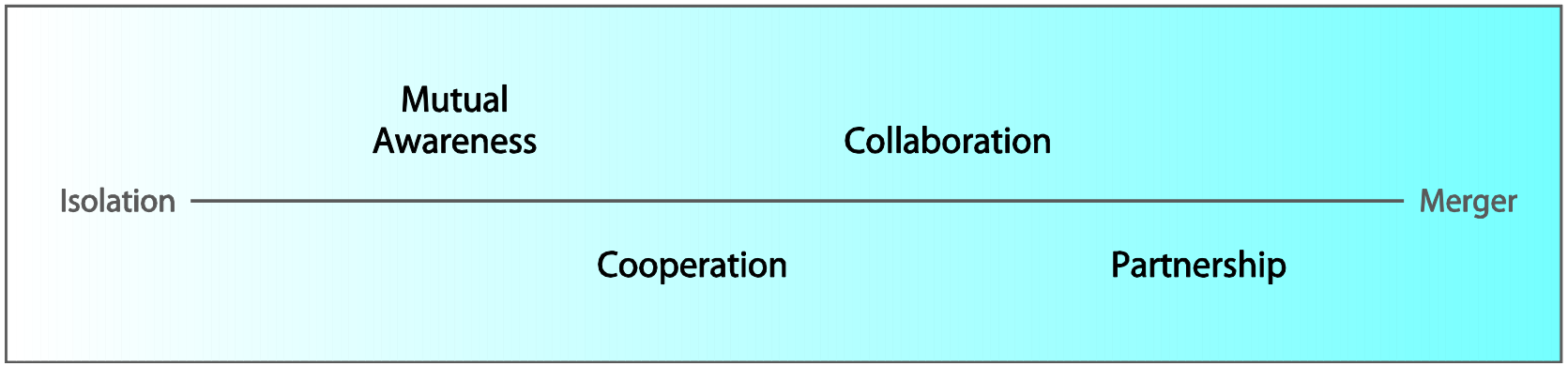
DHI teams are currently evaluating their efforts and expanding them to other health ambassador sites.



INSTITUTE OF MEDICINE
OF THE NATIONAL ACADEMIES

ww.iom.edu/primarycarepublichealth

Degrees of Integration:



The Population Health Competency Map - for Clinicians

Training Levels:

1. **Foundational** — Basic **awareness** of the principles and appreciation for their impact and importance in community health.

2. **Applied** — An intermediate level of learning, enabling **skilled participation** in community-engaged population health activities.

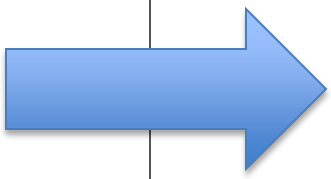
3. **Proficient** — Advanced learners who achieve competence for **independent practice** or leadership of the design and implementation of community-engaged health improvement activities.

Competencies

- Public Health
- Community Engagement
- Critical Thinking
- Team Skills

Competency Map:
Integrating Population Health into Clinician Education

Learners:	medical PA, PT students	FM residents	nurse leaders	FM faculty
Competency:				
Public Health	F			P
Community Engagement	F			P
Critical Thinking	F			P
Team Skills	F			P



F = Foundational (Basic) Awareness
A = Applied (Intermediate) Skilled participation
P = Proficient (Advanced) Independent practice

Conclusions

- Community health takes a community
- Needs vary; one size does not fit all
- **Redesigning care can improve health – especially for those most in need**

Meeting Community Health Needs – The Combined Role of the Physician, Health Department and Hospital

Social and economic changes - the lengthening life span, the shift of population from rural to urban areas, the growth of industry and other factors - have brought about radical changes in the nation's health needs. Our greatest health problem today is chronic illness. To cope with these problems public health, medical care and hospital services, which are at present geared primarily for acute illness, must be revised.

L. E. BURNEY, M.D.
Assistant Surgeon General, U. S. Public Health Service,
Department of Health, Education, and Welfare, Washington 25, D. C.
Presented before the Joint Meeting of the Sections on Public Health and Pediatrics at the 84th Annual Session of the California Medical Association, San Francisco, **May 1-4, 1955.**