Advancing Health in New York City:
Channeling the Tides to Lift All Boats

Marc N. Gourevitch, MD, MPH
Department of Population Health, NYU School of Medicine

Intersectoral Forum on Advancing Health and Equity in NYC
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Overview

• Net gains in NYC health over last 10-15 yrs are substantial and must be preserved and extended

• Unacceptable inequalities persist, some worsening

• Further gains require specific efforts to ↓ inequalities, by:
  o Sharpening focus on most disadvantaged communities
  o Engaging other sectors that also produce health
  o Optimizing impact of healthcare sector on health
Current smoking, ≥18 years old, NYC 1993–2010

Dowell & Farley, Lancet 2012
§81.08 Foods containing artificial trans fat.

(a) Artificial trans fat restricted. No foods containing artificial trans fat, as defined in this section, shall be stored, distributed, held for service, used in preparation of any menu item or served in any food service establishment or by any mobile food unit commissary, as defined in §89.01 of this Code or successor
Change in life expectancy, Females, 1985-2010

IHME, 2013
Life expectancy, by Borough, 1985-2009

Figure: Estimated life expectancy at birth in the boroughs of New York City

Alcorn, Lancet 2012
Figure 3  Life Expectancy at Birth by Race/Ethnicity, New York City, 2001–2010
Figure 4  Life Expectancy at Birth by Neighborhood-Poverty Level, New York City, 2001–2010
Prevalence of no exercise in past 30 days by neighborhood poverty among NYC adults: 2008-2012

Source: NYC Community Health Survey, 2008-2012. Data are age-adjusted to the US 2000 Standard Population. Neighborhood poverty defined as percent of zip code residents below 100% Federal Poverty Level per American Community Survey 2007-2011: low poverty <10%; very high poverty ≥30%
NY health-care pays $24B a year for ‘preventable’ illnesses to minorities: state official

By Carl Campanile

July 30, 2012 | 4:00am

It’s a financial and human disaster.

New York’s health-care system is paying a staggering $24 billion a year to help cover sky-high hospital and emergency costs for “preventable” illnesses suffered by minority patients, The Post has learned.

State Health Commissioner Dr. Nirav Shah said the minority communities are not at fault — he blames a shortage of doctors and a lack of preventive care in their neighborhoods.

The maladies and diseases include asthma, diabetes, obesity, HIV, depression, high blood pressure and other heart-related ailments.
What produces health?
Median household income & life expectancy, US counties

1990

Life expectancy

Median household income

Fairfax County, Va.

McDowell County, W.Va.

Men

Today

Fairfax County, Va.

McDowell County, W.Va.
Spending on social programs vs. healthcare: impact on health

↑ ratio of social : health expenditures in OECD countries →
   ↓ infant mortality
   ↑ life expectancy
   ↓ potential life years lost
   (after adjusting for level of health expenditures, GDP)
Mortality, USA – Yr 2000: Dx’d vs underlying causes

Underlying Behavioral Causes
N = 1.2 million
- Smoking
- Obes/inact
- Alcohol
- MVA
- Guns
- Unprot'd sex
- Drugs

Diagnosed Causes
N = 2.4 million
- Heart
- Cancer
- Stroke
- Resp
- Injury
- Diabetes
- Flu/Pneu
- Other

Mokdad JAMA 2004
Mortality, USA – Yr 2000: Social factor attribution

TABLE 3—Calculation of the Number of US Deaths in 2000 Attributable to Each Social Factor

<table>
<thead>
<tr>
<th>Social Factor and Age Group</th>
<th>RR (95% CI)</th>
<th>Prevalence, %</th>
<th>PAF, %</th>
<th>Total Deaths, No.</th>
<th>Deaths Attributable to Social Factor, No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual-level factors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Low education</td>
<td></td>
<td></td>
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<tr>
<td>≥25 y</td>
<td>1.81 (1.64, 2.00)</td>
<td>16.1</td>
<td>11.5</td>
<td>972645</td>
<td>244526</td>
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<tr>
<td>25-64 y</td>
<td>1.23 (0.86, 1.76)</td>
<td>34.5</td>
<td>7.4</td>
<td>1799825</td>
<td>132317</td>
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<tr>
<td>≥65 y</td>
<td>1.75 (1.51, 2.04)</td>
<td>9.5</td>
<td>6.7</td>
<td>972645</td>
<td>64692</td>
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<tr>
<td>Poverty</td>
<td>1.40 (1.37, 1.43)</td>
<td>9.9</td>
<td>3.8</td>
<td>1799825</td>
<td>68558</td>
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<td>Low social support</td>
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<tr>
<td>≥25 y</td>
<td>1.34 (1.23, 1.47)</td>
<td>21.0</td>
<td>6.7</td>
<td>972645</td>
<td>64819</td>
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<tr>
<td>25-64 y</td>
<td>1.34 (1.16, 1.55)</td>
<td>16.7</td>
<td>5.4</td>
<td>1799825</td>
<td>96703</td>
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<tr>
<td>≥65 y</td>
<td>1.22 (1.17, 1.28)</td>
<td>7.8</td>
<td>1.7</td>
<td>2331261</td>
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<td>Area-level factors</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Area-level poverty</td>
<td>1.17 (1.06, 1.29)</td>
<td>31.7</td>
<td>5.1</td>
<td>2331261</td>
<td>119208</td>
</tr>
<tr>
<td>Income inequality</td>
<td>1.59 (1.31, 1.94)</td>
<td>13.8</td>
<td>7.5</td>
<td>2331261</td>
<td>175520</td>
</tr>
</tbody>
</table>
Education: Bachelor’s Degree & Higher, NYC, 2000 - 2012

% NYC adults

- White
- Black
- Hispanic
- Asian
Poverty rate, NYC, 2000 - 2012

% households < poverty

- White
- Black
- Hispanic
- Asian

2000 2012
Severe crowding: % of rental households, NYC, 2006 - 2012

(>1.5 household members/room)
HEALTH DISPARITIES ALONG THE 4/5 SUBWAY:
Residents of the poorest NYC neighborhoods die earlier than other New Yorkers

New Yorkers in poor neighborhoods, such as the South Bronx (East 180th Street), Harlem (125th Street) and Central Brooklyn (Crown Heights), are twice as likely to die early than those who live in richer areas, such as the Upper East Side (86th St.) A trip on the number 4 train shows the disparities in the percent of people dying prematurely* across New York City.

*Premature death is defined as dying before 75 years of age.
Inequalities in income: Gini coefficients* by borough

*measure of income dispersion in geographic area
Inequalities in health: which way forward?
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- White
- Black
- Hispanic
- Asian

Furman Center Annual Reports, 2006 and 2012
Inequalities in health: which way forward?
House lights *and* spotlights

- City-wide approaches
  - Public health and healthcare sectors
    - Regulatory initiatives, prevention: continued promise
  - Other sectors
    - Downstream impact could be even greater

- Community/neighborhood/population – grounded approaches
  - Fundamental to eliminating health inequalities
Complementary approaches: policy and community
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Smoking rates – NYC, 2002 - 2012
Strategies forward

1. City-wide *health policy* approaches
   - Legislation
   - Regulation
   - Procurement

2. Bridge *other sectors* to tackle upstream determinants
   - Health in All Policies

3. Deepen focus on / partnership with highest need *communities*

4. Extend the population impact of *healthcare*
City-wide health policy approaches

- Legislation
- Regulation
- Procurement

**Examples:**
- Sugar-sweetened beverage portion size
- ↑ age of cigarette purchasing to 21
Bridging other sectors to tackle upstream determinants

Health in all Policies (HIAP)

• Transportation

• Education

• Housing

• Built environment
A population-level approach to buffer the adverse effects of poverty on early childhood health and development by engaging and supporting both parents and teachers of young children.

- For all children in early childhood education or childcare settings
- Family-centered program developed to be relevant and engaging for all families in disadvantaged neighborhoods, with recognition of the full breadth of diversity found in urban areas
Moving to Opportunity demonstration

- 4248 families in Boston, Baltimore, Chicago, LA, NYC

- Randomly assigned (1994-97) to:
  1. housing voucher that could be used to move to a low poverty (<10%) neighborhood
  2. housing voucher with no geographic restrictions
  3. control group

- In 2002, one adult (98% female) from each family was followed up by interview

Obesity Outcomes in MTO

Deepening partnerships w/ communities at highest risk:
Hypertension inequalities in NYC

NYC Community Health Survey 2012
Percentage which have ever been told high blood pressure by neighborhood

Percent
15.5 - 25.9
26.1 - 29.5
31.4 - 41.3

Bureau of Epidemiology Services, NYC DOHMH
Deepening partnerships w/ communities at highest risk: Health Ministry-based BP Dashboard
Extending the population impact of healthcare delivery

• Healthcare system: a minor actor?
  But:
  » Resource-rich
  » Concentrated focus on health
  » Strong evidence behind preventive interventions

• New opportunities
  » Payment mechanisms favoring population-oriented approach
  » Primary care
  » CHWs
  » Community benefit
Total Population (geopolitical area)

Subpopulation (clinical care system)

Subpopulation (government public health system)

Subpopulation (stakeholder system/systems)

Delivery system?
2020 look-back?
Community-grounded, sector-bridging

Premature Mortality

↑ Affordable housing
Univ pre-K
Minimum wage
Narcan
Green carts ubiquitous; Safe, well-lit stairwells
Accountable partnership organizations (APOs)

Moving forward

- Don’t dim the house lights

- Intensify focus on and deepen partnerships with communities at greatest disadvantage

- Broaden interface of healthcare and community health

- Actively adopt health strategies in key health-producing sectors

- Address income inequality
  - Tax policy; affordable housing policy; new entry level jobs