The Emerging Public Health Issues:

Progress Is Providing An Alternative To A Sickness-oriented Health Care System

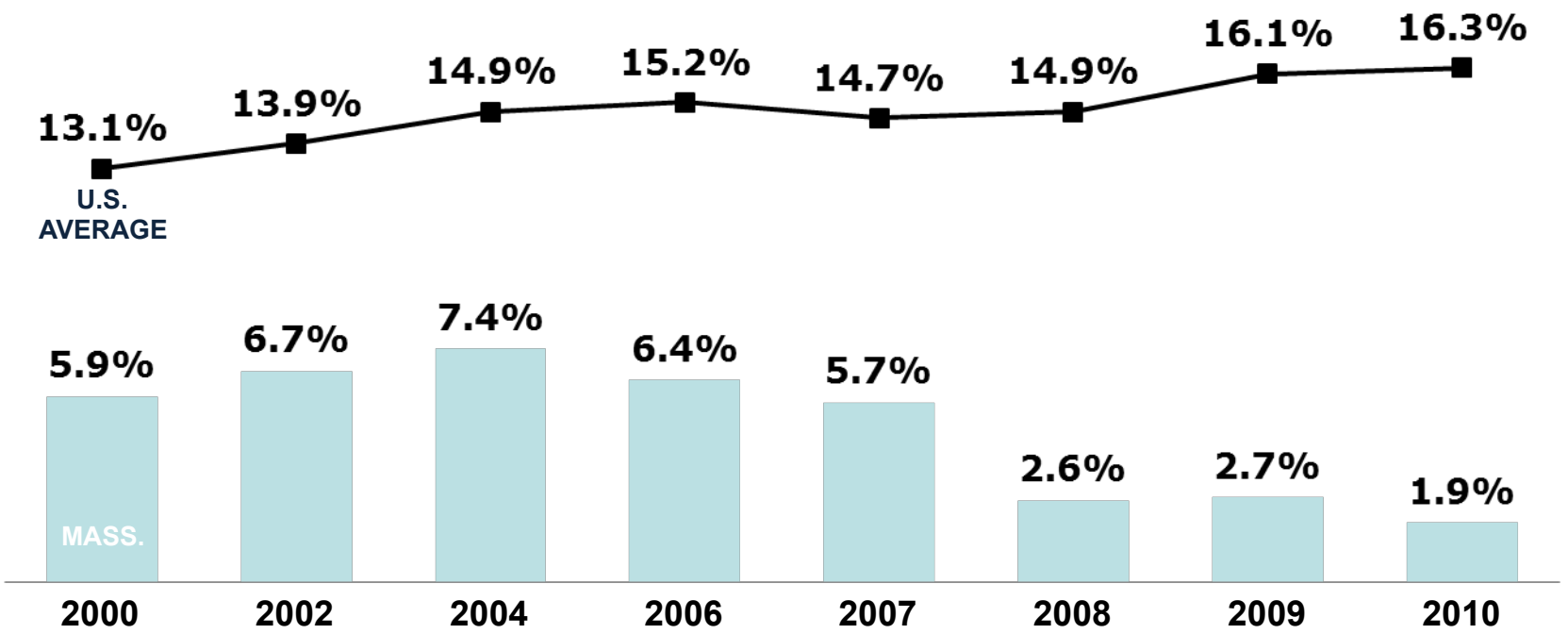
Emerging Trends

- **Greater access to clinical care** – including prevention services
- **A new model of comprehensive primary care** – linking complete clinical and population health
- **A focus on changing the conditions** – *Health in All Policies*

Greater Access To Clinical Care
Including Prevention Services

Massachusetts now has the lowest rate of uninsurance in the country

PERCENT UNINSURED, ALL AGES

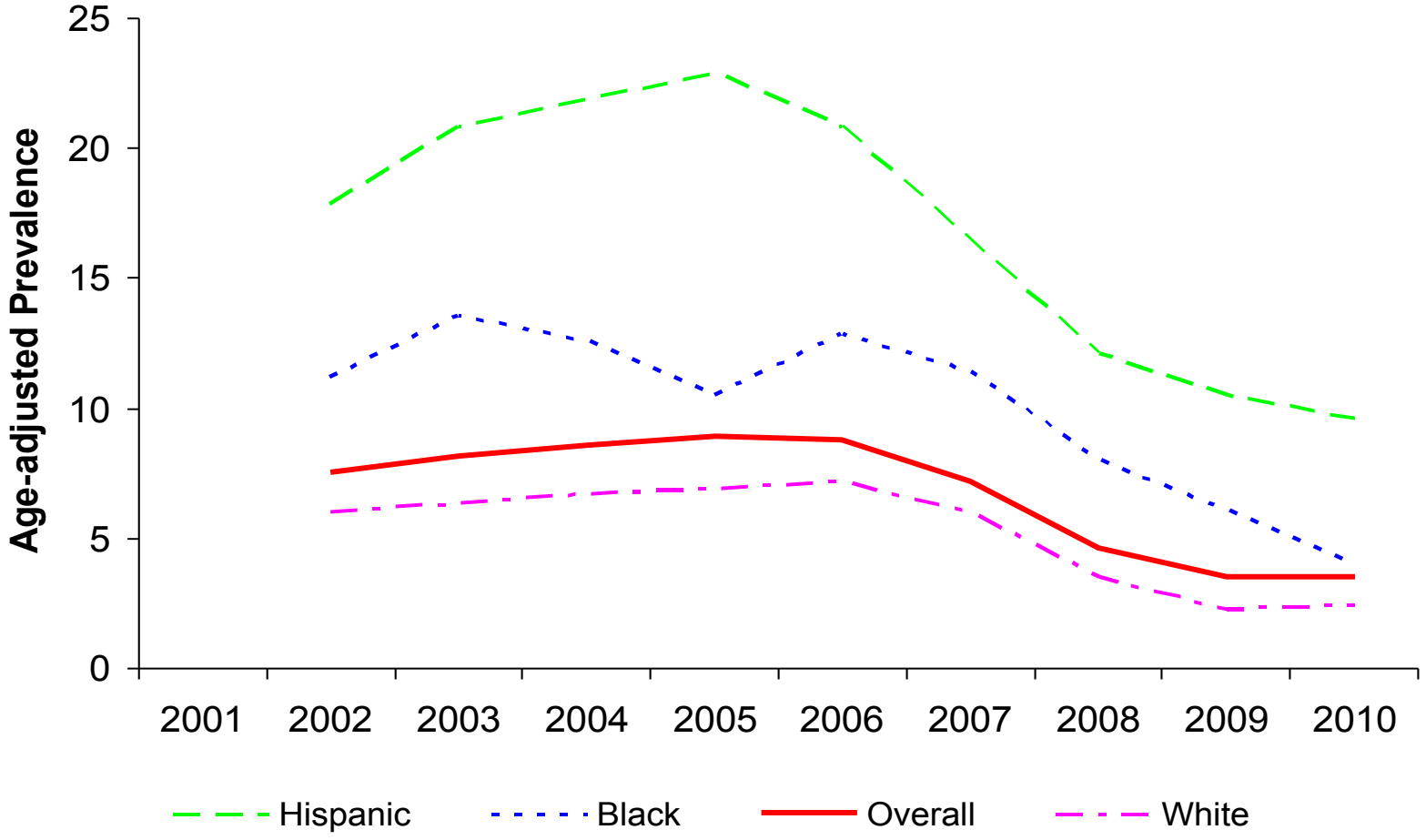


NOTE: The Massachusetts specific results are from a state-funded survey — the Massachusetts Health Insurance Survey (MHIS). Using a different methodology, researchers at the Urban Institute estimated that 507,000 Massachusetts residents were uninsured in 2005, or approximately 8.1 percent of the total population. Starting in 2008, the MHIS sampling methodology and survey questionnaire were enhanced. These changes may affect comparability of the 2008 and later results to prior years. The national comparison presented here utilizes a different survey methodology, the Current Population Survey, which is known to undercount Medicaid enrollment in some states.

SOURCES: Urban Institute, *Health Insurance Coverage and the Uninsured in Massachusetts: An Update Based on 2005 Current Population Survey Data In Massachusetts*, 2007; Massachusetts Division of Health Care Finance and Policy, *Massachusetts Health Insurance Survey* 2000, 2002, 2004, 2006, 2007, 2008, 2009, 2010; U.S. Census Bureau, Current Population Survey 2010.

Among insured, the race/ethnicity gap narrowed

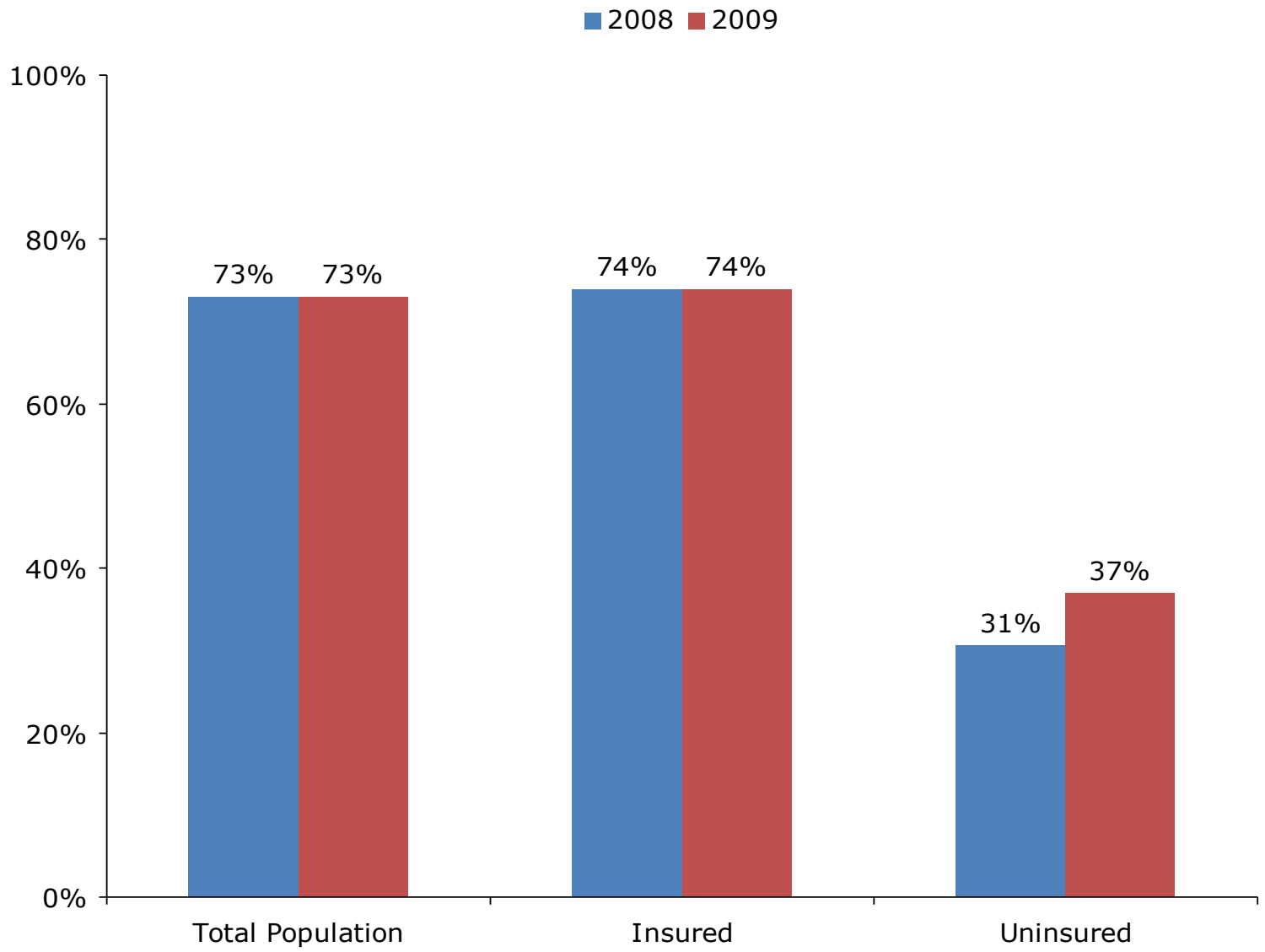
2001-2010 (NON-ELDERLY)



All percentages are age-adjusted to standard population (U.S. 2000)
Chart shows two-year moving averages
Data Source: MA Behavioral Risk Factor Surveillance System (BRFSS)

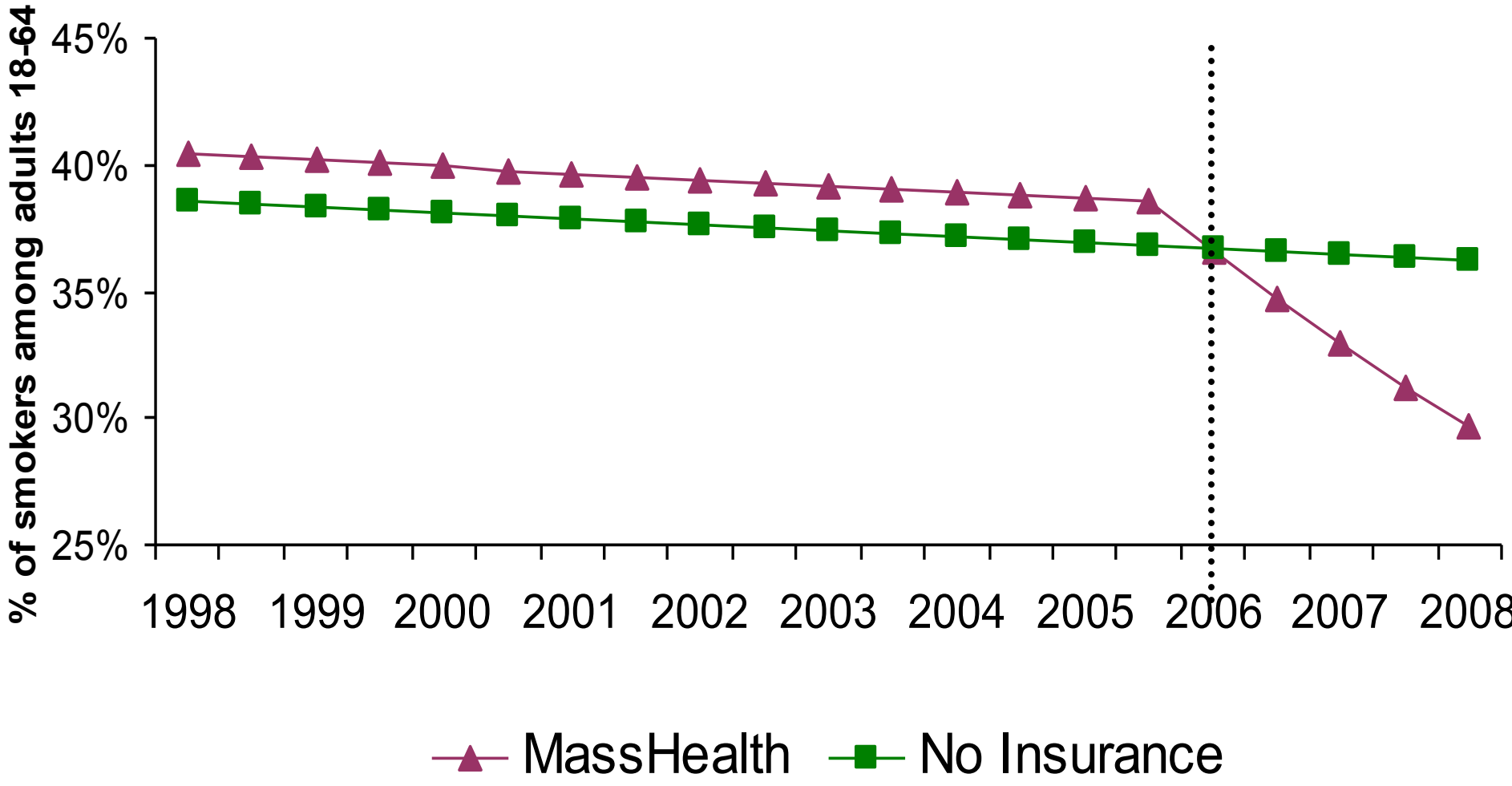
Preventive care was 2x as likely

Past 12 mo. by insurance status



Massachusetts Division of Health Care Finance and Policy

MA Health Care Reform led to a dramatic decrease in smoking



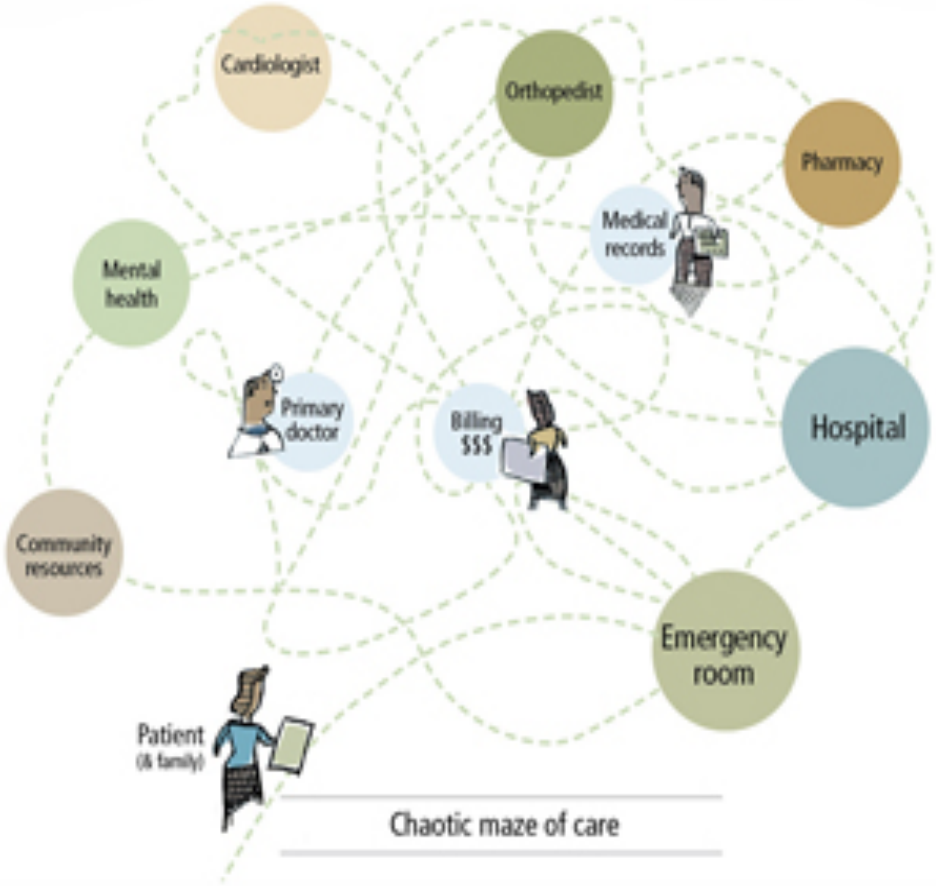
6-Month Annual Rolling Average,
Model Estimates

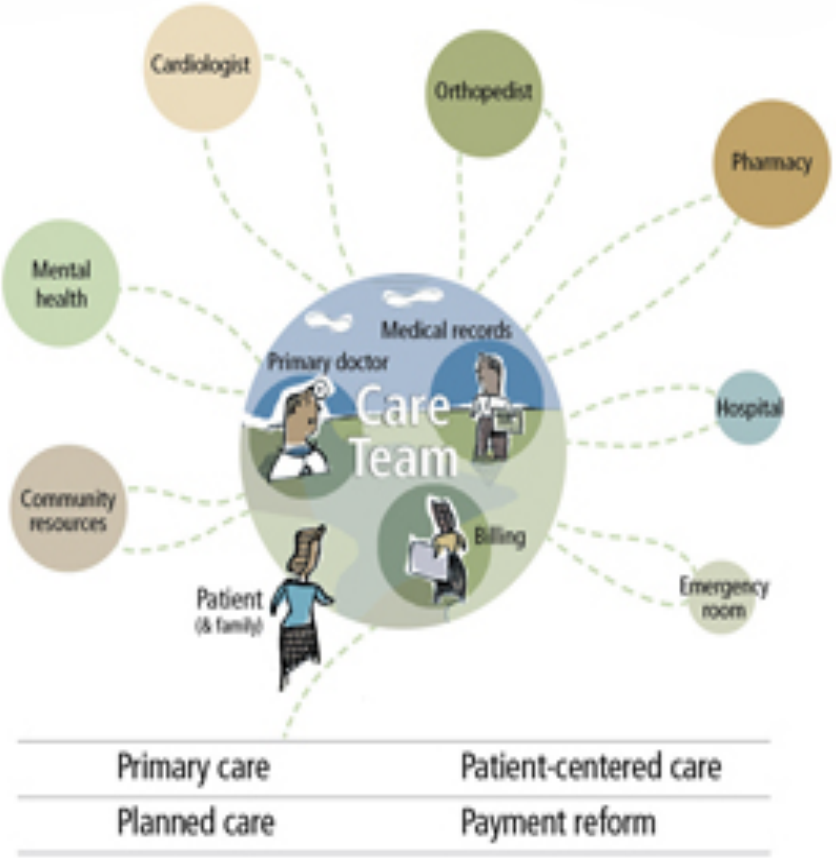
Source: MA BRFSS, 1998-2008

A New Model Of Care
Linking Clinical And Population Health

…and including the full mix of services including behavioral and oral

Replacing a maze with a medical home





Characteristics of Primary Care Medical Homes

- **Comprehensive** –physical, mental, acute & chronic
- **Patient-Centered** –patients/families as partners
- **Coordinated** – transitions of care; shared records
- **Accessible** – shorter waits, emails, phone calls
- **High Quality and Safe** – evidence-based

Linkage of the Clinical Setting to the Home Setting

Community health needs assessments (CHNAs)

- Hospitals must conduct CHNAs & implement strategies to address gaps

- CHNAs must take into account input from "persons who represent the broad interests of the community served by the hospital facility, **including those with special knowledge of or expertise in public health."**

A Focus On Changing The Conditions

Health In All Policies

Under the past/current system focus is on medical treatment of a problem

- Mr. Dan Edwards at doctor for his first physical in 5 years
- 55 years old, married, smokes, overweight, little exercise
- Previously diagnosed with high blood pressure. Stopped meds. Pre-diabetic.

Other Issues Matter…a Lot

- But this approach ignores **"social determinants of health"**
- Effects of economy–*unemployment*
- Conditions in his family- *meals, physical activity*
- Conditions in neighborhood– *housing, safety*
- Conditions at his job– stress

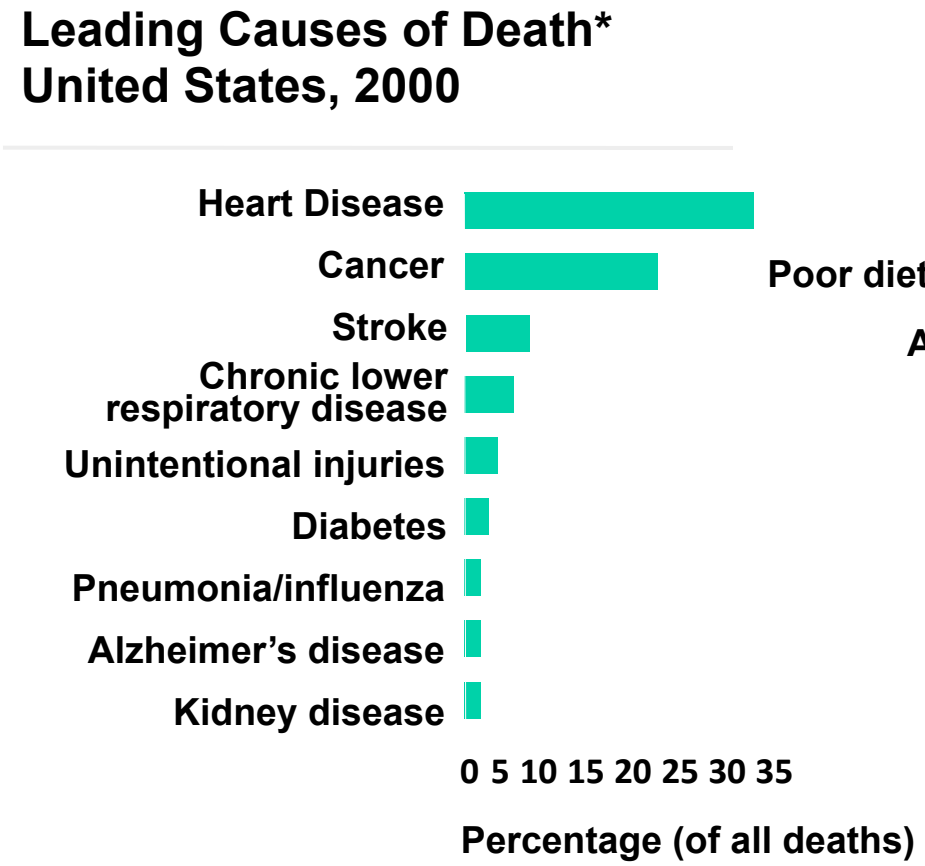
More than anything race and income matters

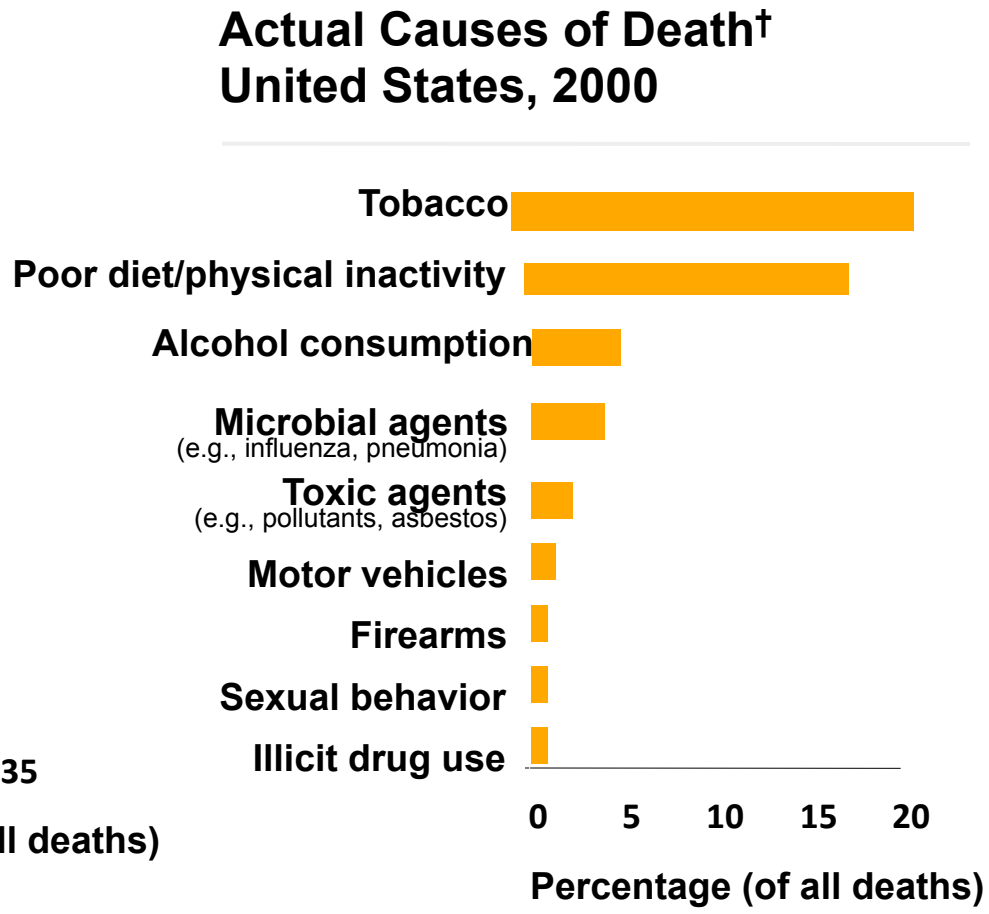
	% ever had Hypertension	% ever had Diabetes	% Current Smokers
Race/Ethnicity			
White	23.8%	6.4%	15.2%
Black	34.4%	12.1%	17.3%
Hispanic	31.1%	14.3%	13.5%
Asian	19.2%	15.5%	---
Annual Household Income			
<$35,000	30.3%	12.2%	24.7%
$35,000-$74,999	25.0%	6.6%	16.8%
>$75,000	21.0%	5.0%	9.6%

And instead of a focus on treating the causes of death

1	Diseases of heart
2	Cancer
3	Chronic lower respiratory diseases /COPD
4	Cerebrovascular diseases /stroke
5	Accidents (unintentional injuries)
6	Alzheimer's disease
7	Diabetes mellitus
8	Influenza and pneumonia
9	Nephritis/kidney disease
10	Intentional self-harm (suicide)

There's a growing movement to focus on the actual causes of the illnesses

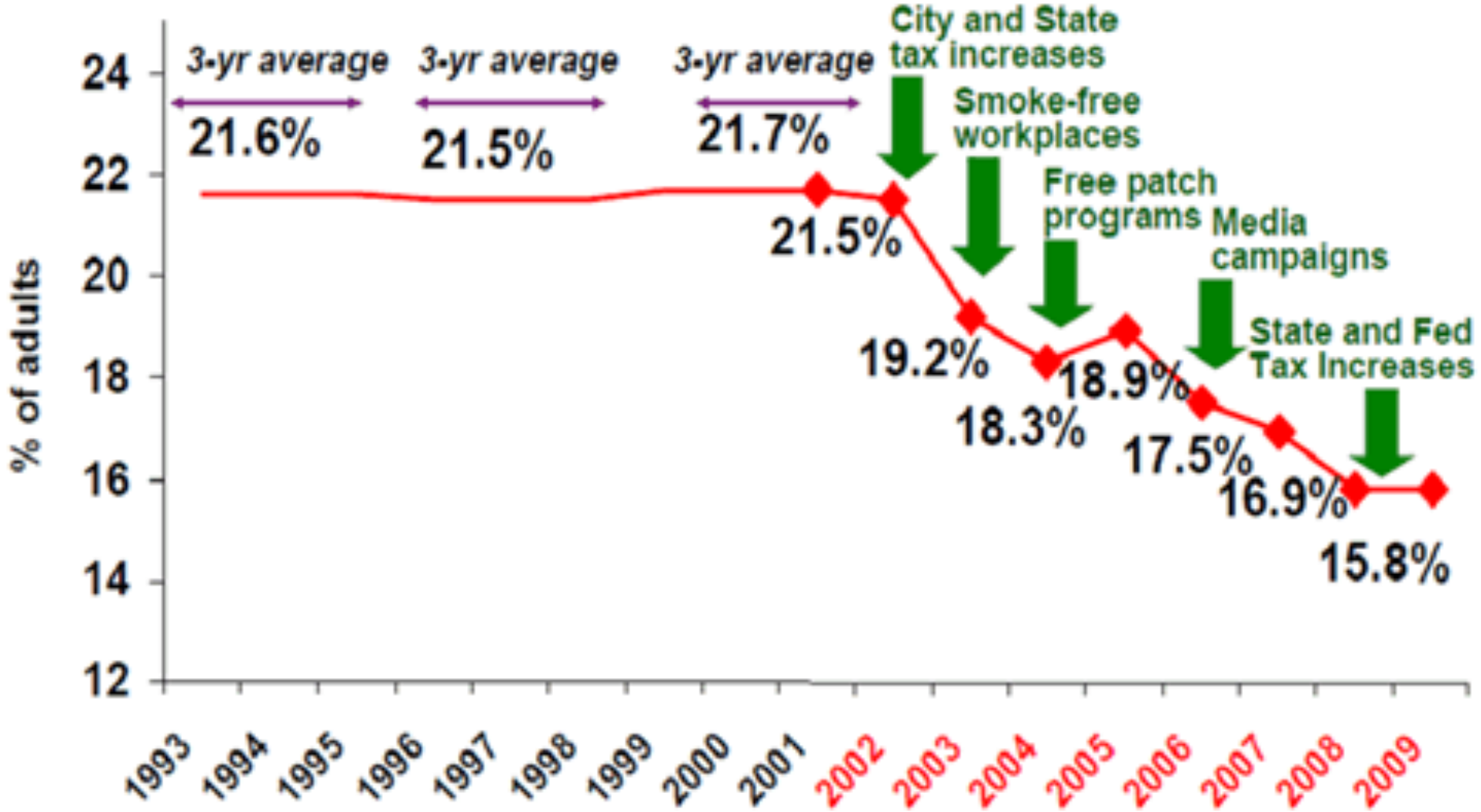




*Minino AM, Arias E, Kochanek KD, Murphy SL, Smith BL. Deaths: final data for 2000. National Vital Statistics Reports 2002; 50(15):1-20.

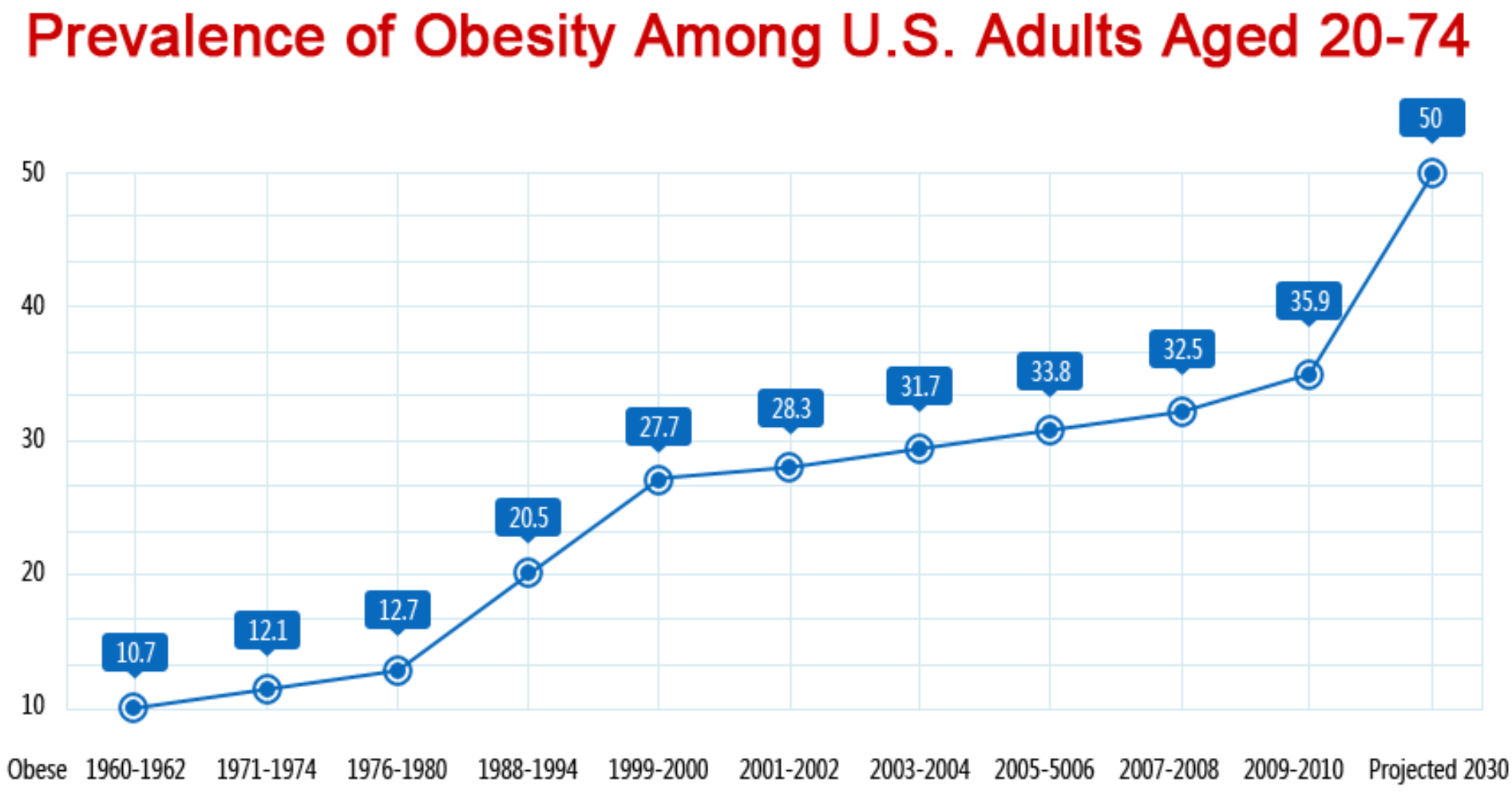
†Mokdad AH, Marks JS, Stroup DF, Gerberding JL. Actual causes of death in the United States, 2000. JAMA. 2004;291 (10): 1238-1246.

Adult Smoking in NYC Down Almost 30% since 2002



Source: BRFSS 1993-2001; NYC Community Health Survey 2002-2009

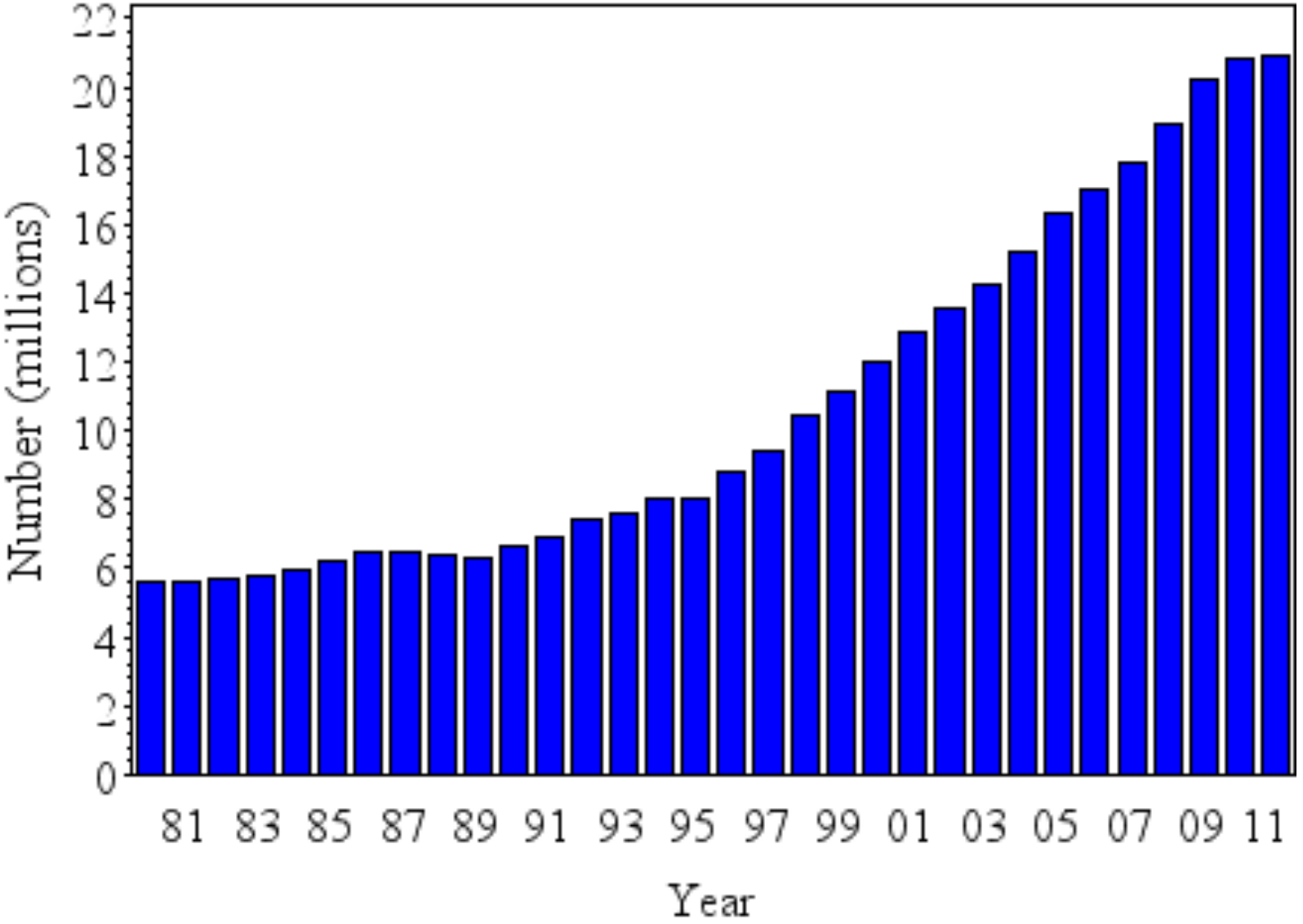
And let's look at another major cause of illness…



Derived from NHANES data (http://www.cdc.gov/nchs/data/hestat/obesity_adult_09_10/obesity_adult_09_10.html#table1)

Diabetes Cases Among Adults

From 1980-2011, the number of Americans with diabetes has more than tripled



How did this problem develop?

- Food policies
- Transportation policies
- Entertainment
- Concerns with safety
- Everyone works

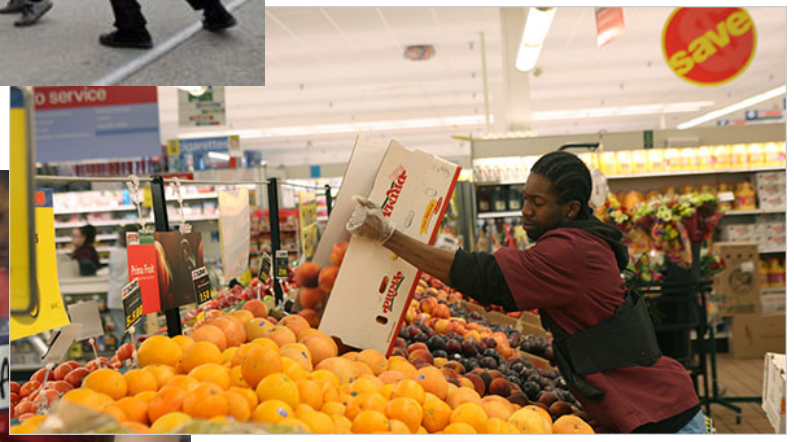
Relative Price Changes for Certain Foods

1/1980 – 11/2003

- All consumer prices 137%
- Fresh fruit 276%
- Fresh vegetables 252%
- Dairy products 96%
- Frozen food 83%
- Frozen potatoes 93%
- Potato chips 77%
- Ground beef 90%
- Soda 53%

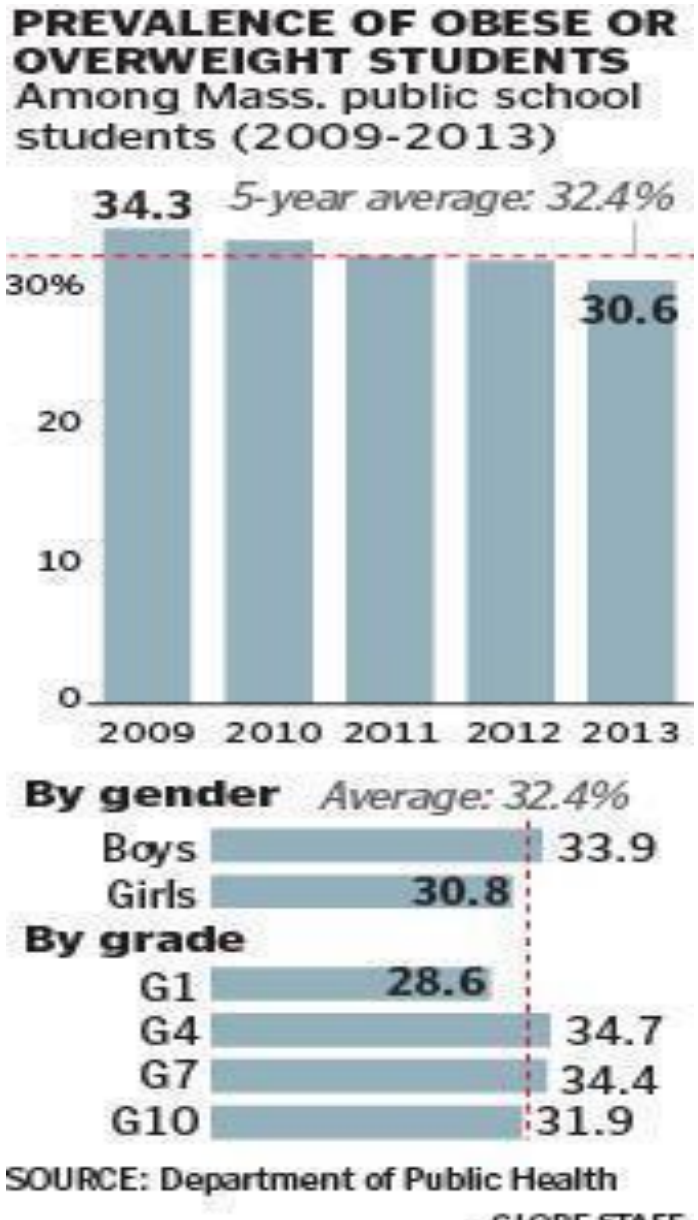
Programs that Change Local Conditions

Mass in Motion, CTG



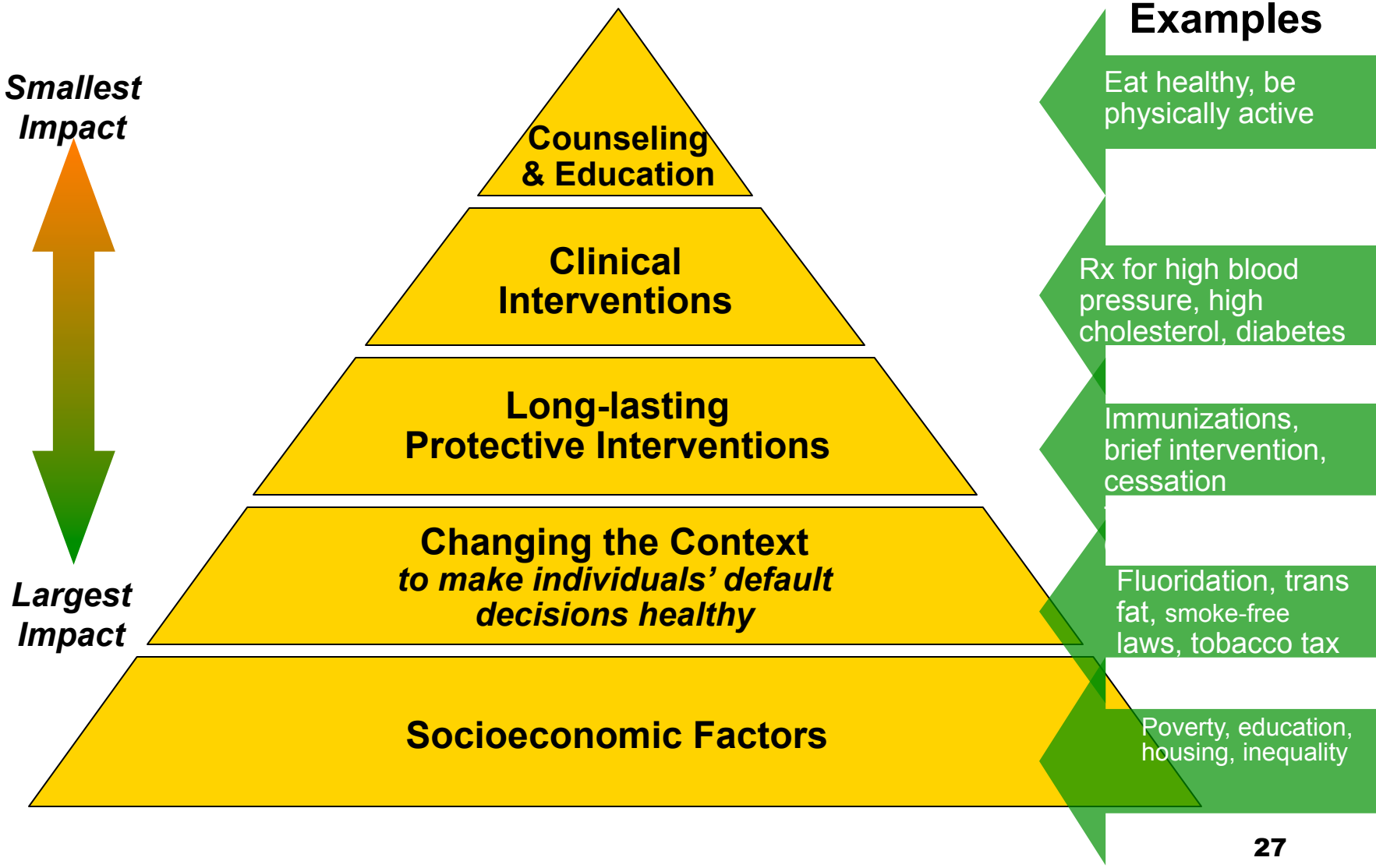
Prevention efforts appear to be working

- **Study 1**: MA students who are overweight decreased 3.7 percentage points to 30.6 percent after years of annual increases
- **Study 2**: Mass in Motion communities vs. controls indicates reduction in overweight/obesity among children after 3 years



There’s some new approaches that link all three of the trends

Working at the base of the pyramid



A focus on changing the conditions
MA: Prevention and Wellness Trust

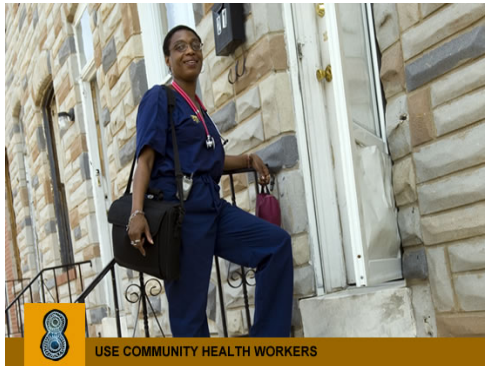
- **Funds**: $60 million for 4 yrs
- **Goals**: Reduce preventable conditions & cost
- **Grants:** 6-12 clinical-community partnerships
- **Priorities**: tobacco, asthma, hypertension, falls with links to mental health

And at the federal level a multi-billion $ Public Health and Prevention Trust

Payment Reform: New models of insurance funding

1. Clinical preventive measures

2. The community-clinical linked model



3. Community health

One way to consider outcome metrics: A Diversified Portfolio

1. Prioritize already measured prevention interventions
2. Measure & analyze key patient panel health indicators
3. Measure & analyze key population-wide health indicators
4. Support community-level care
5. Support community-level changes in conditions

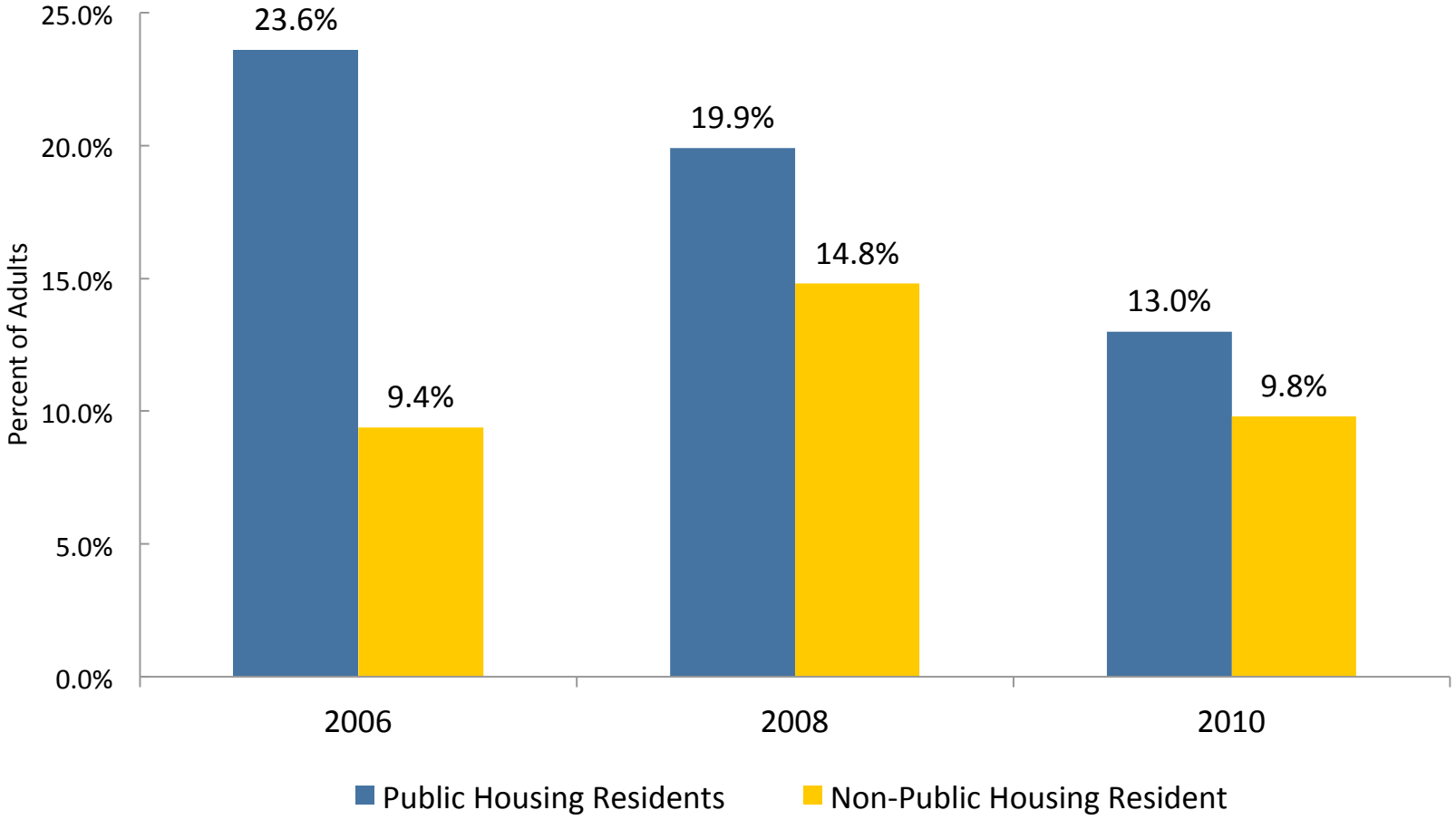
Example - tobacco

1. Screening for tobacco use
2. Measure practice panel tobacco use
3. Analyze population-wide tobacco use
4. Ensure accessible smoking cessation groups
5. Support proven anti-smoking policies

Opportunity: Identify changes that will both reduce costs of already symptomatic patients and prevent unhealthy behaviors more broadly

Asthma By Housing Status, Boston

ADULTS, 2006, 2008 AND 2010



DATA SOURCE: Boston Behavioral Risk Factor Survey 2006 ,2008, and 2010 Boston Behavioral Risk Factor Surveillance System (BBRFSS), Boston Public Health Commission
DATA ANALYSIS: Boston Public Health Commission Research Office

The National Strategic Direction: Health In All Policies

- **Healthy and Safe Community Environments:** Create communities that promote health and wellness
- **Clinical and Community Preventive Services:** Ensure prevention-focused health care and community efforts are available & integrated
- **Empowered People:** Support people in making healthy choices
- **Elimination of Health Disparities:** Eliminate disparities; improve health for all

Back to the Case Study

- Mr. Dan Edwards at doctor for his first physical in 5 years
- 55 years old, married, overweight, smokes, little exercise
- Previously diagnosed with high blood pressure. Stopped meds. Pre-diabetic
- New office job now with insurance; money is tight in the family
- Lives in a neighborhood with a high crime rate, no supermarket and few parks