

National Data Sources for Measures or Indicators



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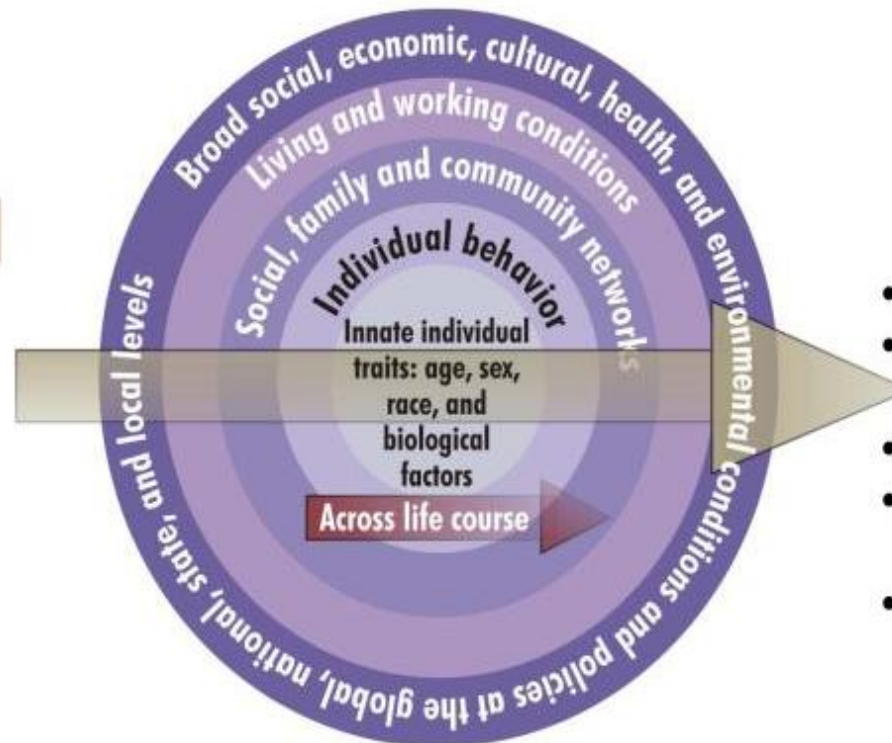
SAFER • HEALTHIER • PEOPLE™

Action Model to Achieve Healthy People 2020 Overarching Goals

Determinants of Health

Interventions

- Policies
- Programs
- Information



Outcomes

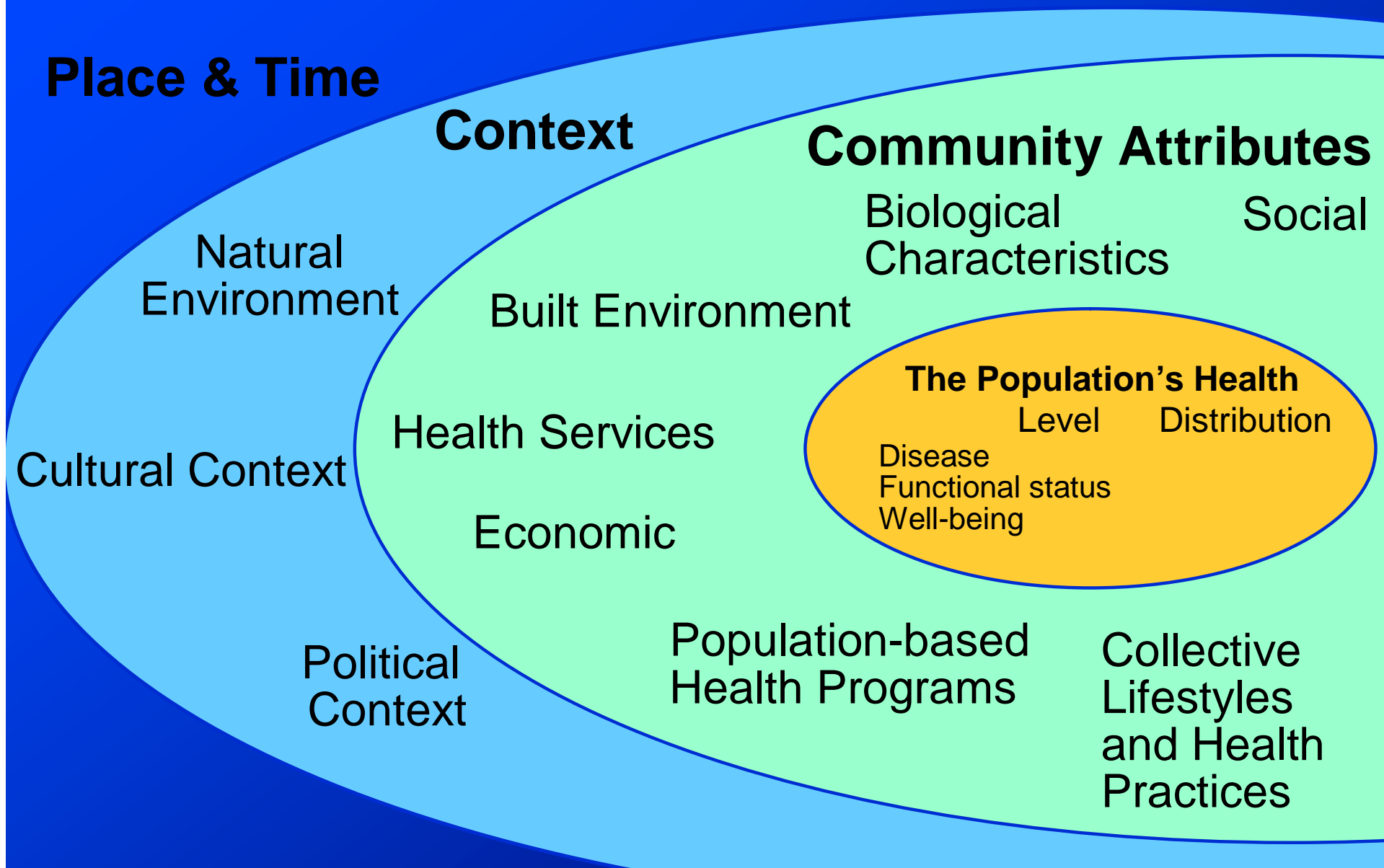
- Behavioral outcomes
- Specific risk factors, diseases, and conditions
- Injuries
- Well-being and health-related Quality of Life
- Health equity

Assessment, Monitoring, Evaluation & Dissemination



Vision for 21st Century Health Statistics System

Influences on the Population's Health



Measures/Indicators and Data Sources

National Population Data Healthy People 2010

HP 2010 Statistics:

- 467 objectives/966 total measures (January 2007)
 - 833 Measurable
 - 133 Developmental (sources identified)
 - 168 Data sources
 - 21 "major data sources"
 - Track 5 or more objectives (all measures) or
 - Track 10 or more measures

Minimum Template Population-Based Objectives

Race:

American Indian or Alaska Native only
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White only
2 or more races
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or

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High school graduate
At least some college

National Population Data Choosing Data Sources

è Meet monitoring needs

- Issues –

- Data must be representative
- Support population-specific analyses
- Include supporting variables and be timely to support
 - Evaluation
 - Changes in interventions
- Supported through sustained funding
- Link to Regional, State and Local data
 - Promotion of Standards

28 Focus Areas

Access to Care

Arthritis

Cancer

Chronic Kidney Disease

Diabetes

Heart disease

Infectious diseases

HIV

Disability

Education/Community

Environment

Family Planning

Food Safety

Communication

Injury and Violence Prevention

Maternal, Infant, and Child Health

Medical Product Safety

Mental Health & Mental Disorders

Nutrition and Overweight

Occupational Safety and Health

Oral Health

Physical Activity and Fitness

Public Health Infrastructure

Respiratory Diseases

Sexually Transmitted Diseases

Substance Abuse

Tobacco Use

Vision and Hearing

Major Data Sources (5+ objectives or 10+ measures)

Data Source	Objectives Tracked	Measures Tracked
National Health Interview Survey (NHIS)	71	111
National Health and Nutrition Examination Survey (NHANES)	33	69
National Vital Statistics System – Mortality (NVSS-M)	31	46
Youth Risk Behavior Surveillance System (YRBSS)	14	20
National Survey on Family Growth (NSFG)	11	29
National Hospital Discharge Survey (NHDS)	10	15
National Vital Statistics System – Natality (NVSS-N)	9	22
United States Renal Data System (USRDS)	8	9
School Health Policies and Programs Study (SHPPS)	7	22
National Survey on Drug Use and Health (NSDUH)	7	21
National Hospital Ambulatory Medical Care Survey (NHAMCS)	7	9
Behavioral Risk Factor Surveillance System (BRFSS)	6	6
Medical Expenditure Panel Survey (MEPS)	5	8
HIV/AIDS Surveillance System	5	6
National Crime Victimization Survey (NCVS)	5	5
National Notifiable Disease Surveillance System (NNDSS)	4	20
Monitoring the Future (MTF)	3	16
State Tobacco Activities Tracking and Evaluation System (STATE)	3	12
Survey of Occupational Injuries and Illnesses (SOII)	2	10
National Profile of Local Health Departments (NPLHD)	1	18
Comprehensive Laboratory Services Survey (CLSS)	1	11
National Immunization Survey (NIS)	1	10

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Data Sources Recommendations

- Drill down capability – from National to State to Local
 - Standards and definitions
 - Ability to pool data
- Network of data collection
 - Coordinated surveys
 - Ideally with consistent methods
 - Capability to address local needs
- Training for State and local staff
 - è Coordination

Major National Data Systems

- Vital Statistics
- Health Status and Health Risks
 - National Health Interview Survey
 - National Health and Nutrition Examination Survey
- Health Care
 - Health Care Surveys
 - Inpatient
 - Ambulatory care
 - Other facilities
- National Survey on Family Growth

Examples of Data in the Vital Statistics System

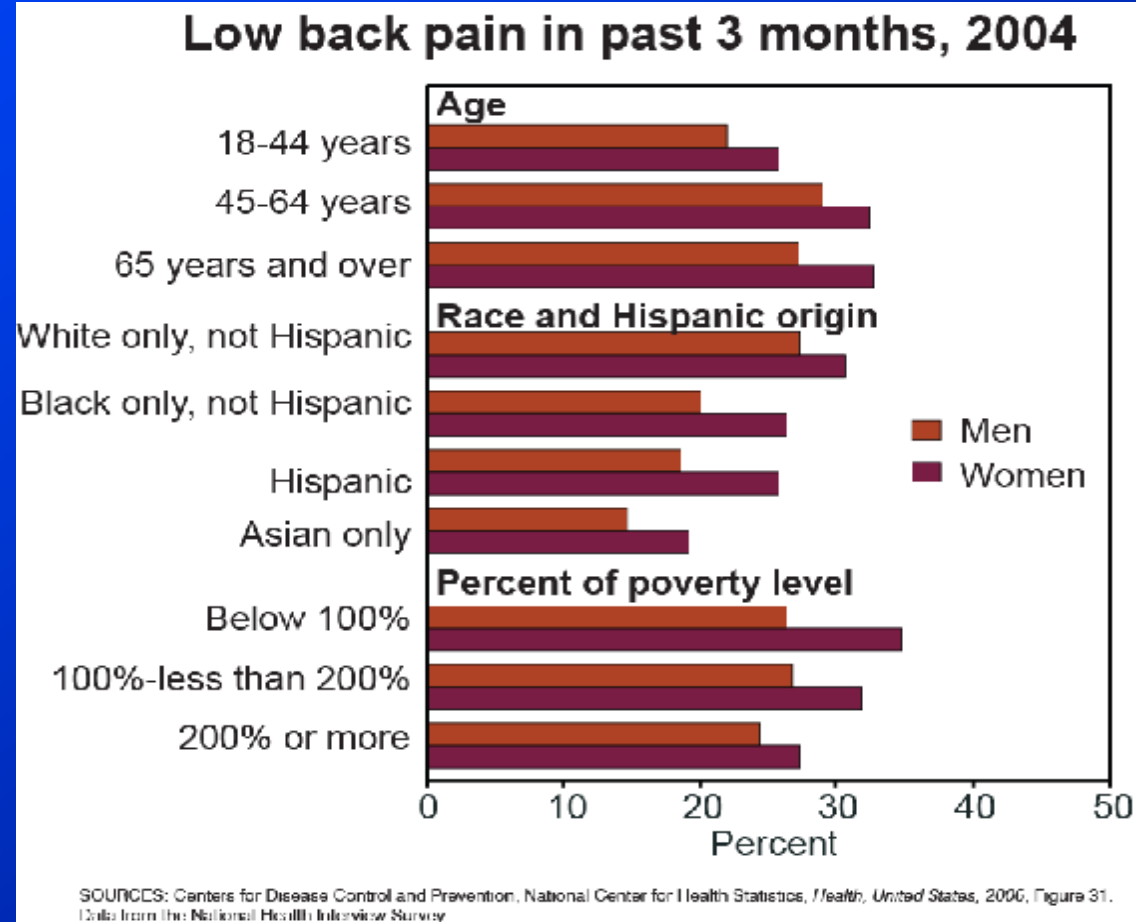
- Life expectancy
 - At birth
 - By gender/race
- Birth rates
 - Teens
 - Older moms
- Twins/multiples
- Nonmarital births
- Birthweight and gestation
- Prenatal care
 - Timing
 - Number of visits
- Pregnancy outcomes
- Infant mortality
- Occupational mortality
- Work injuries
- Causes of death
 - Leading causes
 - Multiple

Examples of NHIS Data

- **Health status**
 - Chronic conditions
 - Acute illness and injury
- **Disability**
 - Time lost from work/school
 - Bed disability
 - Limitation of activity
- **Insurance coverage**
 - Current
 - At any time
 - Never
- **Use of health services**
 - Doctor and dental visits
 - Hospitalizations
 - Complementary and alternative care
- **Access to care**
 - Usual place of care
 - Barriers to care
- **Immunization**
- **Health behaviors**
 - Physical activity
 - Smoking/Alcohol

National Health Interview Survey

- Data source
 - Representative in person, in home survey of 100,000 respondents
- Data applications
 - **Health status and disability**
 - Insurance coverage
 - Access to and use of health services
 - Extent of illness and disability
 - Immunization
 - Health behaviors



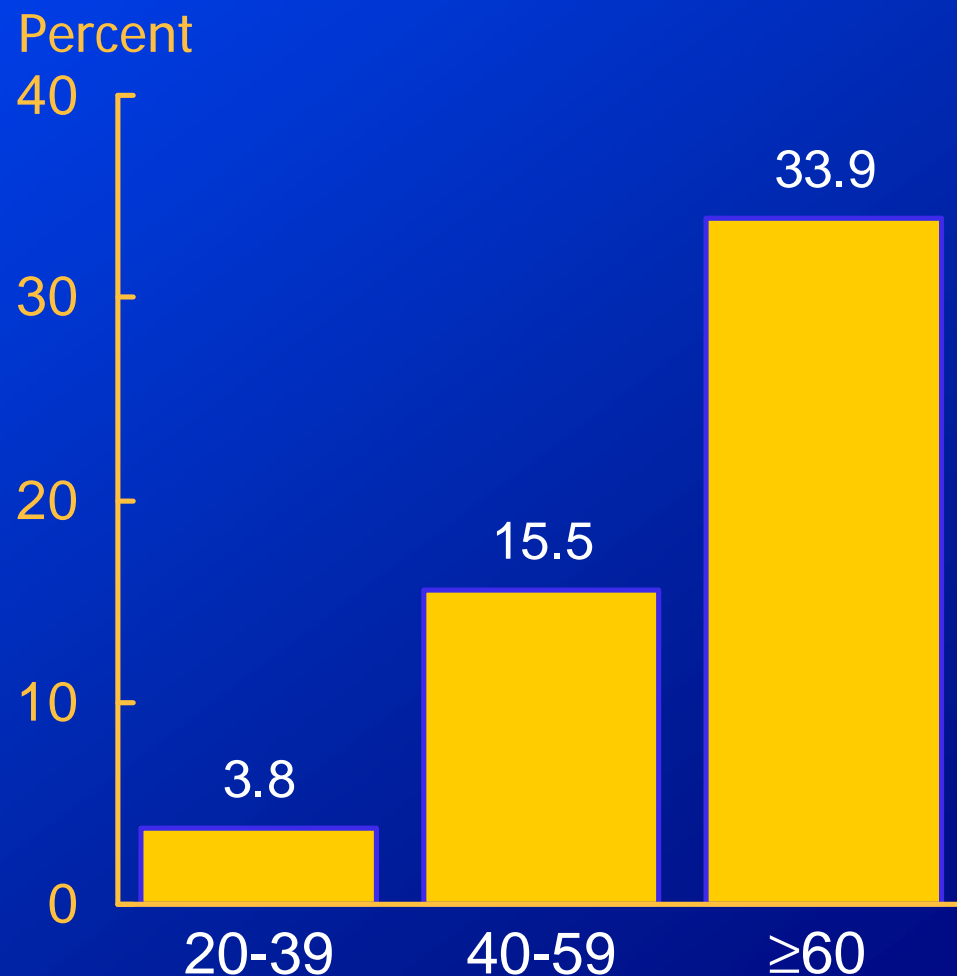
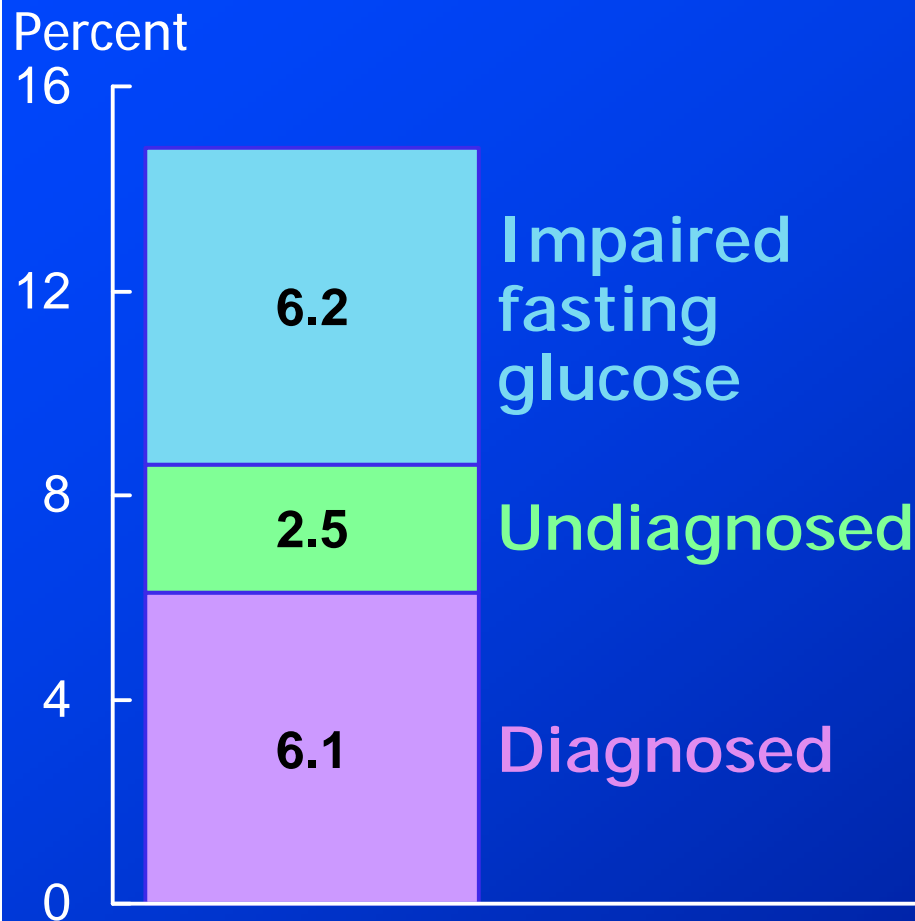
Examples of NHANES Data

- Disease or condition prevalence
 - Heart disease
 - Hypertension
 - Diabetes
- Risk factors
 - Overweight/obesity
 - Smoking
 - High cholesterol
- Nutrition monitoring
 - Dietary intake – fats, carbs, protein
 - Dietary supplements – vitamins, minerals
- Body measurements
 - Height
 - Weight
- Growth and development
 - Pediatric growth charts
- Disease monitoring
 - Trends
 - Impact
- Environmental exposures
 - Lead
 - Pesticides/Chemicals
- Medical care
 - Prescribed/OTC drugs
- Exposures
 - Lead
 - Polycarbons
 - 200+ others

National Health and Nutrition Examination Survey



Impaired Fasting Glucose, 1999-2000 and Diabetes



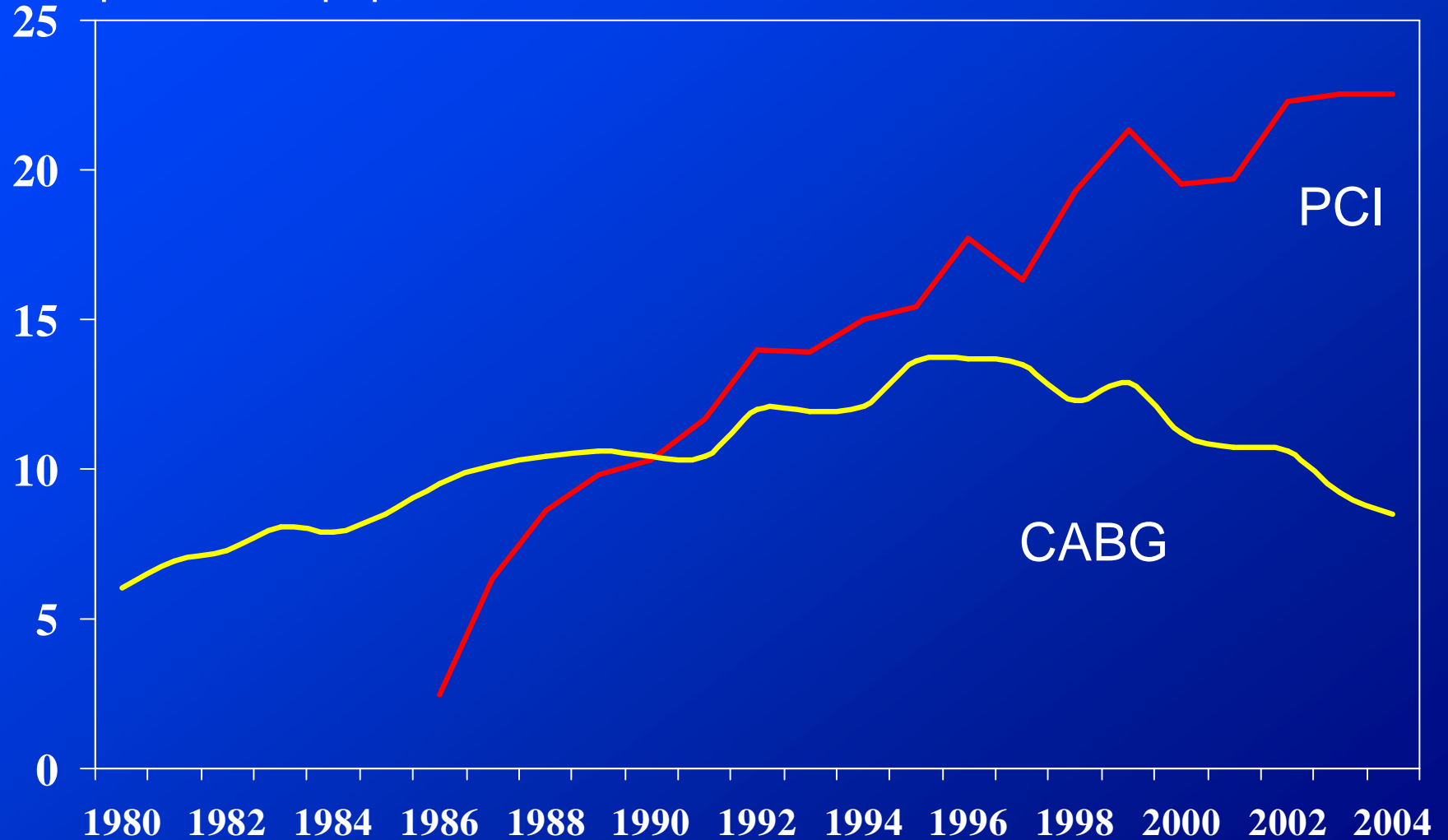
SOURCE: CDC/NCHS, National Nutrition and Health Examination Survey, 1999-2000

Examples of Health Care Surveys Data

- Patterns of disease
 - Diagnoses
 - Symptoms
- Characteristics of patients
 - Age
 - Sex
 - Source of payment
- Treatment
 - Surgical procedures
 - Therapeutic services
 - Counseling/education
 - Medication in various settings
- Trends in use of services
 - Length of stay
 - Utilization rates
- Characteristics of health care providers
 - Specialty
 - Size/location of practice or facility
- Use of medical technology
 - Electronic medical records
- Emergence of alternative care sites

Coronary Artery Bypass Graft (CABG) and Percutaneous Coronary Intervention (PCI), 1980-2004

Rate per 10,000 population



Source: National Hospital Discharge Survey 1980-2004.

Status of the NCHS Data Systems

- Vital Statistics
 - Need to building an electronic system for mortality reporting
 - Increased local support
- National Health Interview Survey
 - Restoring sample to near design level (87,500 persons per year)
 - Support/guidance/coordination
- National Health and Nutrition Examination Survey
 - Maintaining 5,000 annual sample
 - Consulting with local areas on CHANES (Community HANES)
- Health Care Surveys
 - Proposed increased in sample sizes for ambulatory care surveys
 - For example, to monitor sub-national ABCS

Summary Measures

Summary Measures

- Useful for grabbing attention
 - US ranks 37th
- Actionable: Important to inform action
- Sensitive: The Summary Measure should respond to improved health
- Health Interview Survey collects information for
 - Years of life w/o activity limitation
 - Years of life in good or excellent health
 - Years of life w/o selected chronic conditions
 - HRQOL
- Not routinely reported in Health, US

Summary Measures Recommendations

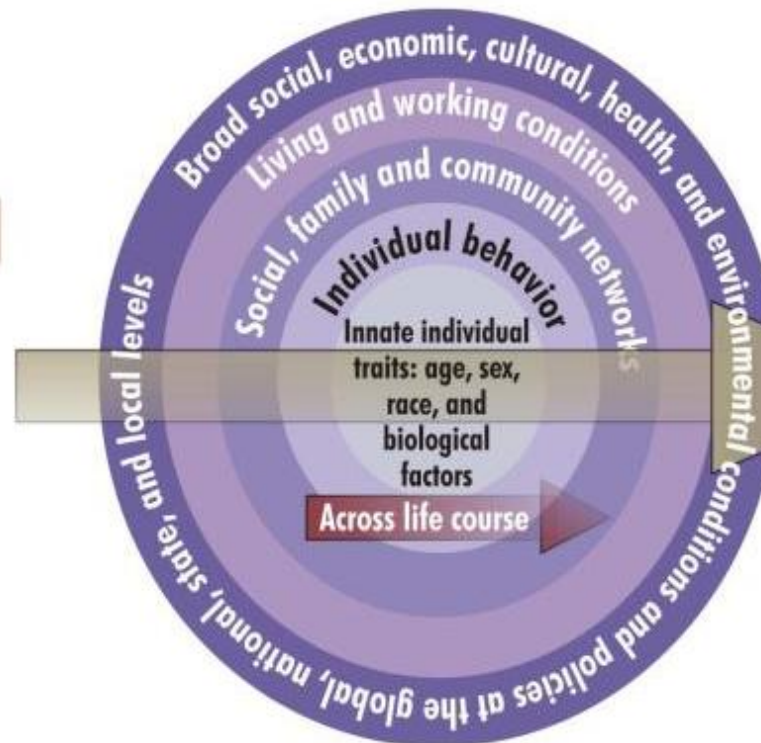
- Consider improved displays of data summarizing problems
 - For example – “bubble” charts showing relative magnitudes of health conditions (Karolinska, Google, SUSA)
 - Size of the population affected
 - Cost
 - Functioning
- National evaluation of use of information from State and local initiatives
 - Use of Summary Measures
 - Use of component indicators
- Linkage of State and local efforts to National reporting
 - Healthy People
 - Health US (Secretary’s report to the Nation)

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