

Public Health Spending as Measured in the National Health Expenditures Accounts



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National Economic Accounts

- **Developed to measure the performance of a national economy, such as total production, national income, and national savings**
- **The System of National Accounts (SNA) and the System of Health Accounts (SHA) are examples of internationally accepted economic accounting systems**
- **In the U.S., the National Income and Product Accounts (NIPA) are maintained by the Bureau of Economic Analysis and the National Health Expenditure Accounts (NHEA) are maintained by CMS**

National Economic Accounts

- **In economic accounting systems, the terms used to describe the actors in the system, the activities being measured, and the type of transactions monitored must be precisely defined**
- **There is considerable ambiguity in the everyday use of terms such as: public health, public health care, public health activity, public health infrastructure, etc.**

Definitions and Boundaries

- **Is public health a true public good, i.e. a collective service?**
- **Is the activity “health care” or health-related?**
- **Is the activity within the “production boundary” (SNA) for the health sector?**
- **Are the services delivered within the “consumption boundary” (more SNA) for the intended population?**

Gross Domestic Product and National Health Expenditures

Personal Consumption Expenditures

Gross private domestic investment

Fixed investment

Nonresidential

Producers Durable Equipment

Residential

Net exports of goods and services

Exports

Imports

Government consumption expenditures and gross investment

Federal

State and local

Gross Domestic Product

Personal Health Care Expenditures

Hospitals

Physicians Services

Dental Services

Other Professional Services

Home Health Care

Drugs & Non-durable Medical Products

Durable Medical Equipment

Nursing Home Care

Other Personal Health Care

Health Services and Supplies

Public Health Activity

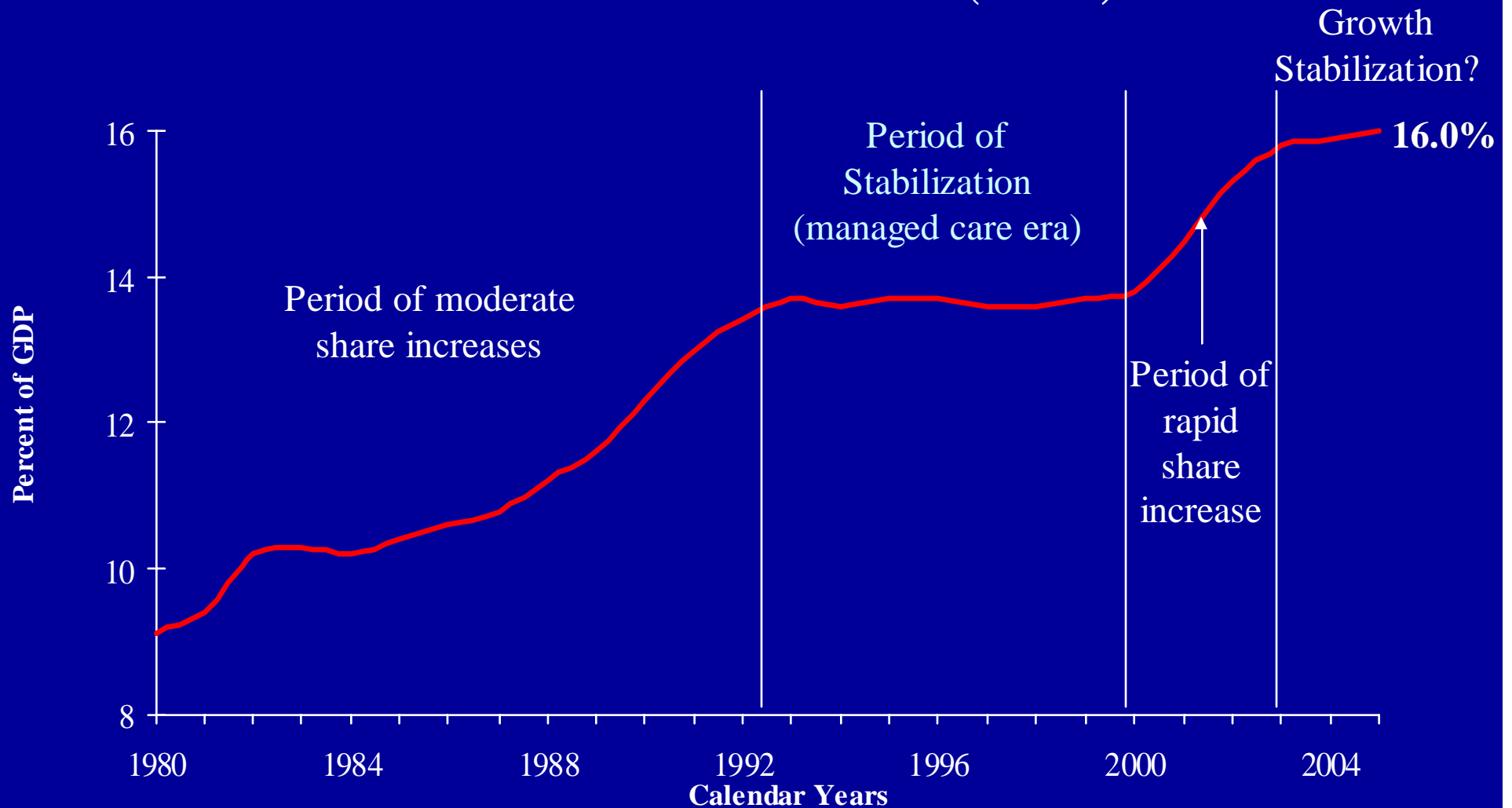
Admin. and Net Cost of PHI

National Health Expenditures

Non-commercial Research

Structures and Equipment

National Health Expenditures as a Share of Gross Domestic Product (GDP)



SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group.

Derivation of National Health Expenditures: Selected Calendar Years 1980-2005

Category	2000	2001	2002	2003	2004	2005
Millions of Dollars						
Personal Health Care Services						
Hospital Care	417,049	451,440	488,604	525,400	566,886	611,566
Physician and Clinical Services	288,609	313,162	337,880	366,740	393,713	421,170
Dental Services	39,072	42,751	45,585	49,009	52,636	56,742
Other Professional Services	61,975	67,523	73,341	76,862	81,476	86,635
Other Personal Health Care	37,076	41,884	46,339	50,385	53,278	57,158
Home Health	30,514	32,179	34,213	38,025	42,710	47,451
Nursing Home Care	95,262	101,515	105,715	110,463	115,015	121,862
Prescription drugs	120,803	138,559	157,941	174,639	189,651	200,716
Other non-durable medical goods	30,166	30,307	30,857	32,293	32,761	34,097
Durable Medical Equipment	19,330	19,637	20,752	22,440	23,128	23,975
<i>sum equals</i>						
Personal Health Care Expenditures (PHCE)	1,139,855	1,238,959	1,341,227	1,446,255	1,551,255	1,661,372
<i>plus</i>						
Government Administration and net cost of Private Health Insurance	81,227	90,378	105,185	122,621	135,199	142,960
<i>and</i>						
Government Public Health Activity	43,365	46,822	52,411	52,820	52,492	56,558
Federal	5,068	5,410	8,027	9,061	9,341	10,719
State and Local	38,297	41,412	44,384	43,760	43,151	45,840
<i>equals</i>						
Health Services and Supplies (HSS)	1,264,447	1,376,160	1,498,822	1,621,697	1,738,947	1,860,890
<i>plus</i>						
Non-commercial Research	25,599	28,754	32,548	35,848	38,264	40,014
<i>and</i>						
Medical Sector Capital Investment	63,210	64,691	71,462	75,892	81,677	86,785
<i>equals</i>						
National Health Expenditures (NHE)	1,353,256	1,469,605	1,602,832	1,733,436	1,858,888	1,987,689
Addenda: Government Public Health Activity as a percent of National Health Expenditures	3.2%	3.2%	3.3%	3.0%	2.8%	2.8%

SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary: Data from the National Health Statistics Group. 2007

Government Public Health Activity Spending in 2005

- Spending on government public health activity grew 7.7 percent to \$56.5 billion**
- \$191 per capita in spending for government public health activity**
- Spending on government public health activity accounted for 2.8% of total NHE, down from 3.2 % in 2002**
- Public health activity as a percentage of total public spending was 6.3 percent, compared to 7.3 percent in 2002**

Challenges to Measuring Spending on Government Public Health Activity

- **Lack of a universally accepted definition of public health activity**
- **Lack of consistent accounting and classification systems used by governments to measure spending on public health**
- **Lack of applicable data on public health expenditures by State and Local governments**

Lack of a universally accepted definition of Public Health Activity

- **UN, OECD, WHO, CDC, PHS and CMS all have differing definitions.**
- **Some include personal health care delivered by governments in public health. Others include only population-based health services.**
- **Some include environmental monitoring undertaken by agencies not classified as public health services – others do not.**
- **Some include medical transportation and emergency disaster services – other do not.**

Lack of a universally accepted definition of Public Health Activity

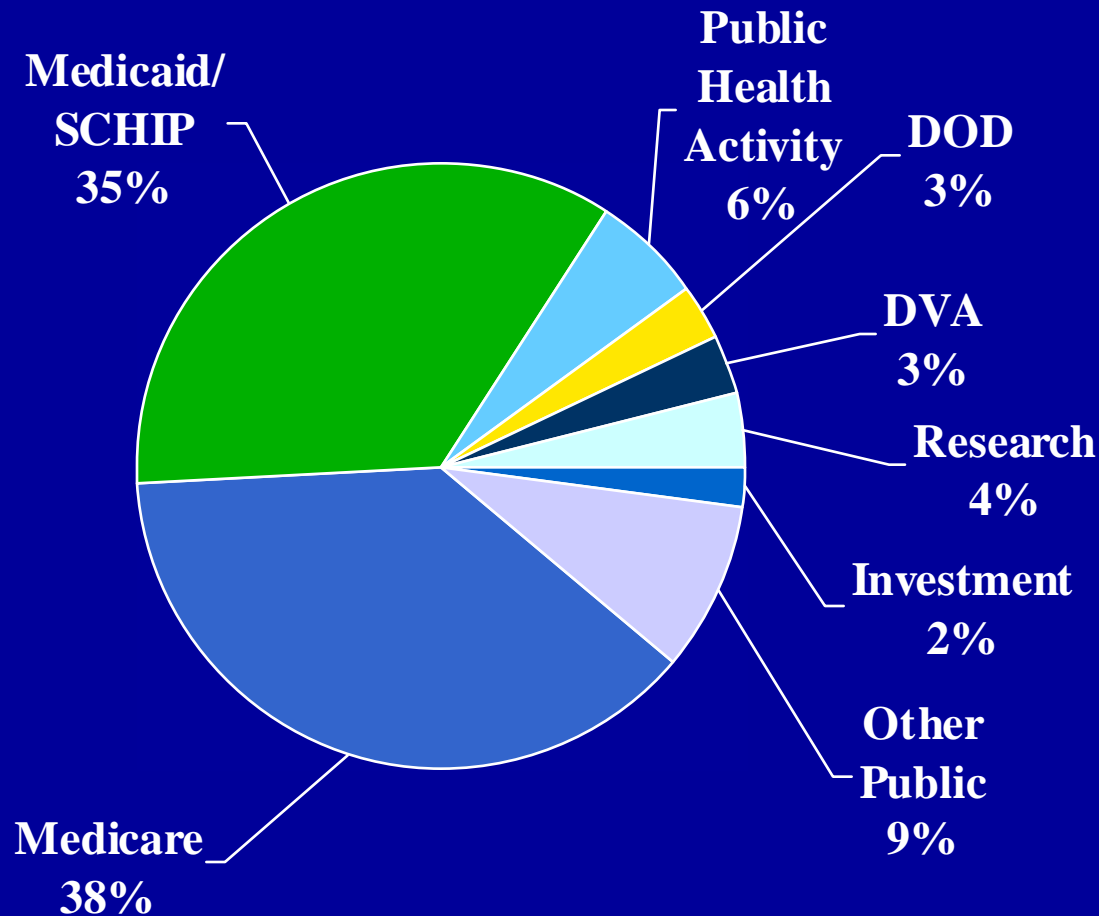
- **The SHA, in the International Classification of Health Activities for Health Accounts (ICHA-HC) functional classification, includes both personal and population-based health services.**
- **In the NHEA definition we allege that we are only counting population-based services.**

Derivation of Personal Health Care Expenditures:2000-2005

LEVELS in \$Millions	2000	2001	2002	2003	2004	2005
Total Personal Health Care	1,139,855	1,238,959	1,341,227	1,446,255	1,551,255	1,661,372
Private Funds	653,058	697,606	751,001	807,608	858,900	914,472
Consumer Payments	596,130	641,262	692,806	744,201	793,872	846,109
Other Private Funds	56,928	56,344	58,195	63,408	65,028	68,363
Public Funds	486,797	541,353	590,226	638,647	692,355	746,900
Federal Funds	370,137	412,639	449,820	487,889	530,597	568,475
Medicare	216,407	239,860	257,628	275,592	303,417	331,417
Workers' Compensation	620	658	692	707	694	720
Public Assistance	111,445	125,843	140,040	153,110	163,752	169,815
Medicaid (Title XIX)	109,728	123,323	136,713	149,379	159,527	165,197
Medicaid SCHIP Expansion (Title XIX)	662	778	875	1,018	1,112	1,288
SCHIP (Title XXI)	1,055	1,743	2,452	2,713	3,113	3,330
Department of Defense	13,255	14,782	17,670	20,379	22,670	23,917
Maternal/Child Health	606	615	632	631	629	624
Veterans' Administration	18,811	20,783	22,469	26,164	27,593	30,065
Vocational Rehabilitation	281	304	316	320	329	347
Gen Hosp/Med NEC	4,393	5,172	5,570	5,880	6,118	6,191
ADAMHA/SAMHSA	2,591	2,706	2,887	3,072	3,228	3,173
Indian Health Services	1,726	1,916	1,917	2,035	2,166	2,206
State and Local Funds	116,661	128,715	140,405	150,758	161,758	178,425
Temporary Disability	48	62	84	84	90	96
Workers' Compensation	18,934	20,439	22,374	23,276	23,755	24,788
Public Assistance	81,965	91,510	100,542	108,734	118,163	132,366
Medicaid (Title XIX)	77,244	85,560	93,947	101,515	110,364	124,106
Medicaid SCHIP Expansion (Title XIX)	256	311	351	421	479	573
SCHIP (Title XXI)	489	779	1,072	1,172	1,369	1,479
General Assistance	3,975	4,860	5,172	5,626	5,951	6,208
Maternal/Child Health	1,934	1,910	1,899	1,915	1,885	1,861
Vocational Rehabilitation	92	96	96	96	98	104
St/L Hosp + School Hlth	13,687	14,698	15,411	16,653	17,767	19,210
Addenda: Sum of Personal Health Care funds classified as public health spending under " <i>Essential Public Health Functions</i> " definitions.						
Total	28,913	31,877	33,488	35,813	37,744	39,473
Federal	9,317	10,409	11,006	11,618	12,141	12,194
State and Local	19,596	21,468	22,482	24,195	25,602	27,279

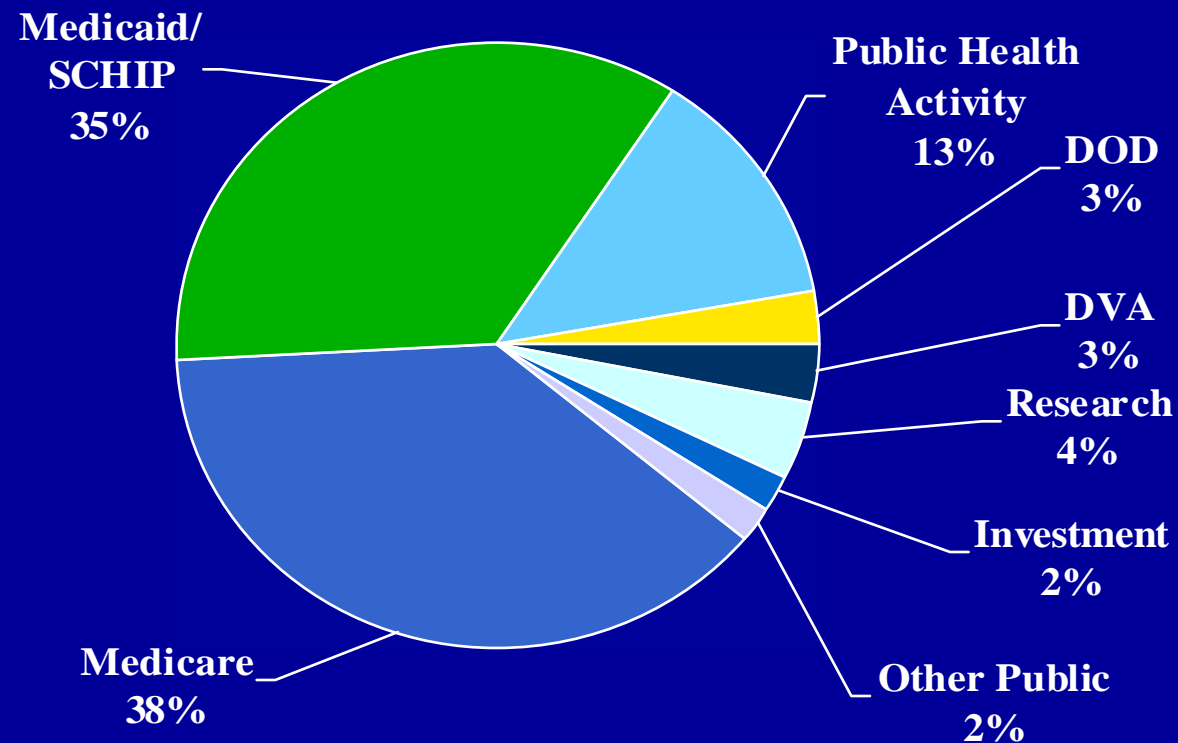
SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary: Data from the National Health Statistics Group. 2007

NHE Public Sources of Funds, CY 2005:



Other Public includes 10 public sources of funds: Worker's Compensation, Temp. Disability Ins., Maternal & Child Health, Voc Rehab, General Hospital/Medical, ADAMHA/SAMHSA, Indian Health Svcs., General Assistance, State and Local Hosp. and School Health

NHE Public Sources of Funds Essential Public Health Functions definition:



Other Public includes 4 public sources of funds: Worker's Compensation, Temp. Disability Ins., Voc Rehab., Research, Investment

Difficulty of matching the NHEA methodology with administrative record systems and budgetary data

- **Administrative records are the result of some government agency's management of a program.**
- **Examples include the Statistics of Income (IRS), Medicare claims data, Medicaid vendor reports and data from the Budget of the United States.**
- **These data are a boon to measurement economists because they are inexpensive to acquire and may substitute for surveys that are very expensive to administer.**

Difficulty of matching the NHEA methodology with administrative record systems and budgetary data

- **However, the data are compiled using whatever classification systems the administering agency uses.**
- **For example, many agencies used the Standard Industrial Code (SIC) before the North American Industrial Classification System (NAICS) was available.**
- **Many times the data are not aggregated on a basis that is applicable to the measurement undertaken. Example: Federal Budget**

Lack of applicable data on public health expenditures by State and Local governments

“Public health is typically difficult to evaluate due to a general dearth of available, accessible, accurate, and specific information about public health systems and performance, such as tracking the use of taxpayer dollars or measuring rates of many diseases in communities. Trust for America’s Health (TFAH) has recommended that this information should be considered essential for maintaining an accountable, responsive, and coordinated system designed to protect the health of communities.”

Trust for America’s Health. *Ready or not? Protecting the Public’s Health from diseases, Disasters, and Bio-Terrorism. 2005*

Lack of applicable data on public health expenditures by State and Local governments

- **Many studies since the Institute of Medicine's 1998 publication of *The Future of Public Health*.**
- **A 2004 JPHMP, article *Public Health Finance: a Conceptual Framework* makes the point that these studies, “represent important attempts to give conceptual and methodological order to an embryonic field , but have not to date led to adoption of a practitioner or scholarly consensus”.**

Moulton, A.D., et. al. JPHMP 2004, 10(5)

Suggestions for Data Development

The current definition(s) are not adequate to:

- 1. Measure expenditures for public health care activity in the NHEA**
- 2. Distinguish between personal health care services and population-based health care services.**

Establish a workable, universally accepted definition of public health services

Governments at all levels as well as advocacy groups and public health system researchers should participate in this process.

Suggestions for Data Development

The federal government could:

- 1. Expand existing data collection instruments – Census of Governments, and the Survey of Government Finances – to capture more detailed financial data on public health spending.**
- 2. Modify the Census of Governments manual so that definitions of all government health care activities are reflective of some internationally recognized classification structure.**
- 3. Modify identification codes in the Budget of the United States to capture some measure of the functions of government so that health care activities were identified on a consistent basis.**

Suggestions for Data Development

State and local governments could:

- 1. Develop accounting systems that enable public health departments to track expenditures for public health activities.**
- 2. Work to identify the revenue streams dedicated to providing public health services.**

Suggestions for Data Development

Public health advocacy groups and researchers could :

- 1. Engage interested parties at all levels of government**
- 2. Participate in the process of defining public health services**
- 3. Encourage participation in any forthcoming surveys of public health spending**

Conclusion

The importance of the emerging field of public health systems research should not be overlooked. This field can provide an important bridge between public health practice and public health financing.

Information garnered through public health systems research can inform policy and provide measures of the nations' public health systems' capacity and efficiency.