

Statistical Brief #5: Medical Care and Treatment for Chronic Conditions, 2000

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Introduction

The quality of the health care received by Americans is an issue of public policy concern for several reasons. First, the level of quality of the health care delivery system affects the capacity to provide timely, accessible, effective and efficient medical care to the population in need of services. Secondly, estimates of quality are vital to evaluate the costs and outcomes of health care delivery and to help identify potential areas where improvements are necessary. Finally, all components of the population may not be receiving care equally. Following these population subgroups over time can provide information about whether greater equity has been achieved or whether serious gaps remain. The treatment and preventive care of persons with chronic conditions is an issue of particular public policy concern. To ensure adequate access to care is available to persons with chronic conditions, it is essential to know how many persons suffer from such conditions, as well as the treatment regimens and preventive care they receive.

Beginning in 2000, enhancements were made to the Medical Expenditure Panel Survey (MEPS) to elicit information about the quality of health care received by the people in the United States. Questions were added to the core questionnaire to collect data pertaining to selected chronic conditions, and the course of treatment and preventive care taken for such conditions. A self-administered questionnaire ascertaining information about the health care and screening tests received by persons with diabetes was also added. This MEPS statistical brief presents preliminary analyses of the treatment regimens for individuals with selected chronic conditions based on data from the 2000 MEPS. Medical care/treatment for persons 18 or older with diabetes, cardiovascular disease, asthma, stroke, and high blood pressure are examined (all coverage estimates based on health insurance status for the first part of 2000). All results discussed in this statistical brief are statistically significant at the 0.05 level. Standard errors for tables are provided following the tables.

HIGHLIGHTS

Likelihood of selected chronic conditions

Overall, 10.3 percent of the U.S. civilian noninstitutionalized population age 18 or older reported having heart disease, 23.0 percent reported having high blood pressure, 9.1 percent reported having asthma, and 6.2 percent reported having diabetes ([Table 1](#)). In addition, the population age 65 and over had a significantly higher likelihood of having reported heart disease, high blood pressure and diabetes relative to those age 18 to 64. Hispanics 18 or older were less likely than blacks, or whites and persons of other races to have reported heart disease (5.1 percent, 8.9 percent and 11.2 percent, respectively). This pattern also held for those 18 or older that reported having high blood pressure (15.2 percent, 27.5 percent, and 23.4 percent, respectively), as well as those reported having asthma (7.2 percent, 9.7 percent, and 9.3 percent, respectively) ([Figure 1](#)). Whites and persons of other races 18 and older were more likely to have reported heart disease (11.2 percent) than blacks (8.9 percent), whereas blacks 18 and older were more likely to have reported high blood pressure (27.5 percent) than whites and persons of other races (23.4 percent). Hispanics and blacks 18 or older were more likely to have reported diabetes

(7.3 percent and 8.9 percent, respectively) than whites and persons of other races (5.6 percent).

Table 1 also shows persons 18 or older with public insurance only were more likely to have reported having heart disease (23.0 percent), high blood pressure (42.7 percent), asthma (13.0 percent), and diabetes (13.6 percent) than individuals with any private insurance and the uninsured (heart disease 9.0 and 5.2 percent, respectively; high blood pressure 21.5 and 13.2 percent, respectively; asthma 8.7 and 7.9, respectively; and diabetes 5.3 and 3.7 percent, respectively). Those 18 and older with any private insurance were more likely than those uninsured to report having heart disease (9.0 percent versus 5.2 percent), high blood pressure (21.5 percent versus 13.2 percent) and diabetes (5.3 percent versus 3.7 percent).

Medical care for individuals with diabetes

In 2000, 69.4 percent of diabetics aged 18 or older reported having had a Hemoglobin A_{1c} test and 62.8 percent reported having had their feet checked for sores or irritations. For the time period covering 2000 through early 2001, 65.9 percent reported having an eye exam in which their pupils were dilated (Table 2). It was also noted that Hispanics age 18 or older with diabetes were less likely than blacks, as well as whites and individuals of other races to have had a routine check-up within the past 12 months (79.7 percent versus 91.7 percent and 87.9 percent, respectively).

Uninsured individuals with diabetes between the ages of 18 to 64 were less likely than the privately insured to report having had a Hemoglobin A_{1c} test during 2000 (61.7 percent versus 78.5 percent) (Figure 2). Uninsured individuals aged 18 to 64 with diabetes were also less likely than the privately insured to report having had their feet checked for sores or irritations in 2000 (48.4 percent versus 65.1 percent) or to report having had a routine check-up within the past 12 months (75.0 percent versus 88.1 percent). Furthermore, uninsured persons age 18-64 with diabetes were less likely than those with private insurance or those with public coverage only to report having their pupils dilated in an eye exam which occurred between 2000 through early 2001 (48.9 percent versus 63.8 percent and 67.5 percent, respectively).

Treatment regimens for individuals with asthma

The measures under consideration for asthma treatment were prescribed medication utilization, use of a steroid inhaler, and having a peak flow meter at home. Table 3 indicates that 47.9 percent of all asthmatics age 18 or older reported taking prescribed medicines, 29 percent reported using steroid inhalers, and 17 percent reported having a peak flow meter in their home.

Lifestyle advice from healthcare providers and frequency of routine medical exams for persons with cardiovascular disease or stroke

Table 4 illustrates that for persons age 65 and older with heart disease, the likelihood of getting a blood pressure check in the past year was somewhat higher than those age 18-64 (98.6 versus 92.9 percent). Similarly, the age 65 and older population with heart disease were more likely to have had a routine check-up in the past 12 months (89.2 percent versus 75.3 percent) or to have been counseled by a healthcare professional to moderate their diet (64.7 percent versus 57.2 percent) (Figure 3).

Nearly 97 percent (96.5 percent) of persons 18 or older who reported having a stroke reported having their blood pressure checked in the past year, and close to 60 percent were told to moderate their diet (59.1 percent) or increase their level of physical activity (58.7 percent). Persons age 18-64 reporting having a stroke were less likely to have a routine check-up within the past 12 months (73.4 percent) than those age 65 and older (86.8 percent).

About MEPS

The Medical Expenditure Panel Survey (MEPS) is conducted to provide nationally representative estimates of health care use, expenditures, sources of payment, and insurance coverage for the U.S. civilian non-institutionalized population. MEPS is sponsored by the Agency for Healthcare Research and Quality (AHRQ). More information about MEPS can be obtained from the MEPS web site at <http://www.meps.ahrq.gov> or by calling the MEPS Project Director at (301) 594-1406.

Table 1: Percent of persons 18 or older with selected chronic conditions by demographic characteristics and health insurance status, 2000

Population characteristics	Total population (number of persons in 000's)	Percent with heart disease*	Percent with high blood pressure	Percent with asthma	Percent with diabetes
Total	200,926	10.3	23.0	9.1	6.2
Age					
Age 18-64	167,995	6.2	17.0	9.2	4.4
65 and older	32,930	31.1	53.8	8.5	15.4
Race/Ethnicity and Age					
White and other	156,924	11.2	23.4	9.3	5.6
Age 18-64	128,540	6.6	17.0	9.5	4.0
65 and older	28,384	31.6	52.4	8.5	13.3
Black	22,921	8.9	27.5	9.7	8.9
Age 18-64	20,144	6.0	22.0	9.9	6.3
65 and older	2,777	29.4	66.9	8.3	27.8
Hispanic	21,081	5.1	15.2	7.2	7.3
Age 18-64	19,311	3.2	11.6	6.9	5.4
65 and older	1,769	24.9	54.8	10.2	28.6
Sex and Age					
Male	95,174	10.7	22.4	7.5	6.0
Age 18-64	81,340	6.3	17.8	7.8	4.4
65 and older	13,834	36.2	49.9	5.8	15.9
Female	105,751	9.9	23.5	10.6	6.3
Age 18-64	86,655	6.0	16.3	10.6	4.4
65 and older	19,096	27.4	56.5	10.5	15.0

Health Insurance and Age					
Any private	140,227	9.0	21.5	8.7	5.3
Age 18-64	122,610	5.8	17.1	8.9	4.1
65 and older	17,616	31.3	52.3	7.5	14.1
Public only	27,357	23.0	42.7	13.0	13.6
Age 18-64	12,269	13.0	26.9	16.8	9.5
65 and older	15,088	31.1	55.6	9.8	17.0
Uninsured	33,342	5.2	13.2	7.9	3.7
Age 18-64	33,116	5.2	13.1	7.9	3.7
65 and older	--	--	--	--	--

* Combines coronary heart disease, angina, myocardial infarction and other heart disease diagnoses.

-- Cell size under 100 observations or standard error equal to or greater than 30 percent.

Note: The diabetes population for Table 1 is based on answering “yes” to a question in the Priority Conditions section of the MEPS questionnaire, whereas the diabetes population for Table 2 is based on completing the self administration of the MEPS Diabetes Care Supplement.

Numbers may not add to totals due to rounding.

Source: Center for Cost and Financing Studies, AHRQ, Medical Expenditure Panel Survey, 2000.

Table 2: Number of persons 18 or older with diabetes by selected demographic characteristics and insurance status, and percent with specific medical examinations and routine check-ups, 2000

Population characteristics	Total population (number of persons in 000's)	Percent who had Hemoglobin A_{1c} test	Percent who had feet checked for sores or irritations	Percent who had an eye exam in which pupils were dilated**	Percent with routine check-up within past 12 months
Total	12,306	69.4	62.8	65.9	87.5
Age					
Age 18-64	7,223	74.1	61.5	62.0	85.5
65 and older	5,082	62.8	64.7	71.5	90.4
Race/ Ethnicity and Age					
White and other	8,741	71.1	64.5	67.5	87.9
Age 18-64	4,910	77.5	64.0	63.2	85.7
65 and older	3,831	62.8	65.1	73.0	90.7
Black	2,029	62.6	56.0	64.7	91.7
Age 18-64	1,288	63.5	53.1	60.8	90.5
65 and older	--	--	--	--	--
Hispanic	1,536	69.2	62.6	58.5	79.7
Age 18-64	1,025	71.1	60.3	57.7	78.4
65 and older	--	--	--	--	--
Sex and Age					
Male	5,565	70.2	65.9	68.3	88.6
Age 18-64	3,344	75.7	64.5	64.1	86.6
65 and older	2,221	61.8	67.9	74.5	91.6
Female	6,741	68.8	60.4	64.0	86.6
Age 18-64	3,879	72.7	59.0	60.2	84.6
65 and older	2,861	63.6	62.2	69.1	89.3

Health Insurance and Age					
Any private	7,444	73.3	65.4	66.7	89.6
Age 18-64	4,940	78.5	65.1	63.8	88.1
65 and older	2,504	63.0	66.0	72.4	92.8
Public only	3,700	64.3	62.4	69.6	87.2
Age 18-64	1,127	67.8	59.5	67.5	85.3
65 and older	2,572	62.7	63.6	70.5	88.0
Uninsured	1,162	61.4	48.1	49.2	75.2
Age 18-64	1,156	61.7	48.4	48.9	75.0
65 and older	--	--	--	--	--

** Percentages in this column include those having an eye exam in 2000 through the early part of 2001.

-- Cell size under 100 observations or standard error equal to or greater than 30 percent.

Note: The diabetes population for Table 1 is based on answering “yes” to a question in the Priority Conditions section of the MEPS questionnaire, whereas the diabetes population for Table 2 is based on completing the MEPS Diabetes Care Supplement.

Numbers may not add to totals due to rounding.

Source: Center for Cost and Financing Studies, AHRQ, Medical Expenditure Panel Survey, 2000.

Table 3: Number of persons 18 or older with asthma by selected demographic characteristics and insurance status, and percent with specific treatments and routine check-ups, 2000

Population characteristics	Population (number of persons in 000's)	Percent that take prescription medicines for asthma	Percent that use steroid inhaler for asthma	Percent that have peak flow meter at home	Percent with routine check-up within past 12 months
Total	18,322	47.9	29.0	17.0	64.0
Age					
Age 18-64	15,511	46.5	27.6	16.1	59.3
65 and older	2,811	55.8	36.9	21.7	90.0
Race/Ethnicity and Age					
White and other	14,571	47.2	28.6	16.1	62.5
Age 18-64	12,172	45.6	27.0	15.1	57.1
65 and older	2,399	55.6	36.6	21.5	89.9
Black	2,231	51.4	30.4	19.5	67.0
Age 18-64	2,000	50.3	28.8	20.2	64.3
65 and older	--	--	--	--	--
Hispanic	1,520	49.7	31.2	21.8	74.2
Age 18-64	1,339	49.4	30.8	20.0	72.0
65 and older	--	--	--	--	--
Sex and Age					
Male	7,156	36.8	22.0	12.1	53.6
Age 18-64	6,353	33.9	19.9	11.1	49.0
65 and older	--	--	--	--	--
Female	11,166	55.1	33.5	20.1	70.7
Age 18-64	9,158	55.3	32.9	19.6	66.4
65 and older	2,008	54.3	36.3	22.3	90.0

Health Insurance and Age					
Insured	15,701	49.0	29.5	17.4	65.7
Age 18-64	12,906	47.6	27.9	16.5	60.4
65 and older	2,795	55.6	36.8	21.5	90.1
Uninsured	2,621	41.4	26.2	14.8	54.0
Age 18-64	2,605	41.0	26.0	14.6	53.8
65 and older	--	--	--	--	--

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Numbers may not add to totals due to rounding.

Source: Center for Cost and Financing Studies, AHRQ, Medical Expenditure Panel Survey, 2000.

Table 4: Percent of persons 18 or older with cardiovascular conditions obtaining lifestyle advice or routine medical exams from healthcare providers, 2000

Population characteristics	Population (number of persons in 000's)	Percent with blood pressure check within past 12 months	Percent told to moderate diet	Percent told to increase exercise	Percent with routine check-up within past 12 months
Reported Condition and Age					
Heart disease*	20,596	95.7	60.9	62.0	82.2
Age 18-64	10,364	92.9	57.2	60.5	75.3
65 and older	10,232	98.6	64.7	63.6	89.2
Stroke	4,895	96.5	59.1	58.7	81.9
Age 18-64	1,802	94.3	52.6	55.5	73.4
65 and older	3,093	97.8	62.9	60.5	86.8

* Combines coronary heart disease, angina, myocardial infarction and other heart disease diagnoses.

Numbers may not add to totals due to rounding.

Source: Center for Cost and Financing Studies, AHRQ, Medical Expenditure Panel Survey, 2000.

**Standard errors to accompany
Table 1: Percent of persons 18 or older with selected chronic conditions by
demographic characteristics and health insurance status, 2000**

Population characteristics	Percent with heart disease*	Percent with high blood pressure	Percent with asthma	Percent with diabetes
Total	0.33	0.55	0.24	0.26
Age				
Age 18-64	0.26	0.48	0.30	0.23
65 and older	1.10	1.20	0.79	0.82
Race/Ethnicity and Age				
White and other	0.38	0.60	0.27	0.28
Age 18-64	0.29	0.52	0.36	0.26
65 and older	1.23	1.30	0.83	0.87
Black	0.79	1.38	0.93	0.83
Age 18-64	0.62	1.28	1.02	0.70
65 and older	2.98	3.03	1.90	2.42
Hispanic	0.47	0.90	0.61	0.55
Age 18-64	0.39	0.79	0.65	0.53
65 and older	3.11	3.89	2.15	2.97
Sex and Age				
Male	0.39	0.64	0.38	0.35
Age 18-64	0.34	0.61	0.43	0.32
65 and older	1.41	1.66	0.84	1.27
Female	0.48	0.70	0.36	0.32
Age 18-64	0.39	0.59	0.44	0.27
65 and older	1.39	1.50	1.10	0.97
Health Insurance and Age				
Any private	0.36	0.58	0.31	0.29

Age 18-64	0.29	0.52	0.35	0.28
65 and older	1.49	1.55	0.85	1.13
Public only	0.98	1.30	0.84	0.88
Age 18-64	1.03	1.50	1.18	1.09
65 and older	1.33	1.71	1.14	1.19
Uninsured	0.55	0.71	0.67	0.37
Age 18-64	0.52	0.72	0.67	0.37
65 and older	--	--	--	--

* Combines coronary heart disease, angina, myocardial infarction and other heart disease diagnoses.

-- Cell size under 100 observations or standard error equal to or greater than 30 percent.

Note: The diabetes population for Table 1 is based on answering “yes” to a question in the Priority Conditions section of the MEPS questionnaire, whereas the diabetes population for Table 2 is based on completing the self administration of the MEPS Diabetes Care Supplement.

Source: Center for Cost and Financing Studies, AHRQ, Medical Expenditure Panel Survey, 2000.

Standard errors to accompany

Table 2: Number of persons 18 or older with diabetes by selected demographic characteristics and insurance status, and percent with specific medical examinations and routine check-ups, 2000

Population characteristics	Percent who had Hemoglobin A_{1c} test	Percent who had feet checked for sores or irritations	Percent who had an eye exam in which pupils were dilated**	Percent with routine check-up within past 12 months
Total	1.60	1.69	1.81	1.41
Age				
Age 18-64	1.97	2.26	2.48	1.77
65 and older	2.61	2.64	2.74	1.77
Race/ Ethnicity and Age				
White and other	1.85	2.36	2.28	1.83
Age 18-64	2.53	2.95	2.90	2.34
65 and older	3.09	3.34	3.21	2.30
Black	4.43	4.27	4.69	2.27
Age 18-64	6.22	6.52	6.14	2.93
65 and older	--	--	--	--
Hispanic	3.54	4.01	4.05	3.51
Age 18-64	4.20	5.18	5.25	4.26
65 and older	--	--	--	--
Sex and Age				
Male	2.62	2.25	2.88	1.73
Age 18-64	3.24	3.03	3.60	2.46
65 and older	4.26	3.29	4.27	2.38
Female	1.97	2.34	2.13	1.78
Age 18-64	2.27	3.26	3.01	2.11
65 and older	3.56	3.70	3.09	2.49

Health Insurance and Age				
Any private	2.10	2.33	2.35	1.56
Age 18-64	2.62	2.58	2.95	1.89
65 and older	3.62	4.22	3.95	1.87
Public only	2.83	2.99	2.90	2.41
Age 18-64	5.26	5.57	4.32	4.92
65 and older	3.67	3.67	3.73	2.63
Uninsured	5.02	5.85	6.17	4.51
Age 18-64	5.04	5.89	6.18	4.53
65 and older	--	--	--	--

** Percentages in this column include those having an eye exam in 2000 through the early part of 2001.

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Note: The diabetes population for Table 1 is based on answering “yes” to a question in the Priority Conditions section of the MEPS questionnaire, whereas the diabetes population for Table 2 is based on completing the MEPS Diabetes Care Supplement.

Source: Center for Cost and Financing Studies, AHRQ, Medical Expenditure Panel Survey, 2000.

Standard errors to accompany

Table 3: Number of persons 18 or older with asthma by selected demographic characteristics and insurance status, and percent with specific treatments and routine check-ups, 2000

Population characteristics	Percent that take prescription medicines for asthma	Percent that use steroid inhaler for asthma	Percent that have peak flow meter at home	Percent with routine check-up within past 12 months
Total	1.72	1.36	1.26	1.63
Age				
Age 18-64	1.88	1.37	1.35	1.75
65 and older	3.89	3.93	3.10	2.24
Race/Ethnicity and Age				
White and other	2.03	1.61	1.32	1.86
Age 18-64	2.25	1.61	1.48	1.97
65 and older	4.37	4.50	3.47	2.51
Black	3.43	3.55	4.05	3.86
Age 18-64	3.76	3.65	4.43	4.22
65 and older	--	--	--	--
Hispanic	4.73	3.82	4.32	4.19
Age 18-64	5.02	4.12	4.43	4.62
65 and older	--	--	--	--
Sex and Age				
Male	2.43	2.01	1.58	2.45
Age 18-64	2.60	2.05	1.56	2.67
65 and older	--	--	--	--
Female	1.97	1.64	1.82	1.92
Age 18-64	2.26	1.79	2.11	2.18
65 and older	4.34	4.42	3.44	2.61
Health Insurance and Age				

Insured	1.97	1.55	1.26	1.84
Age 18-64	2.20	1.58	1.36	1.99
65 and older	3.92	3.95	3.10	2.25
Uninsured	3.80	3.23	3.04	3.76
Age 18-64	3.82	3.26	3.05	3.77
65 and older	--	--	--	--

-- Cell size under 100 observations or standard error equal to or greater than 30 percent.

Source: Center for Cost and Financing Studies, AHRQ, Medical Expenditure Panel Survey, 2000.

Standard errors to accompany

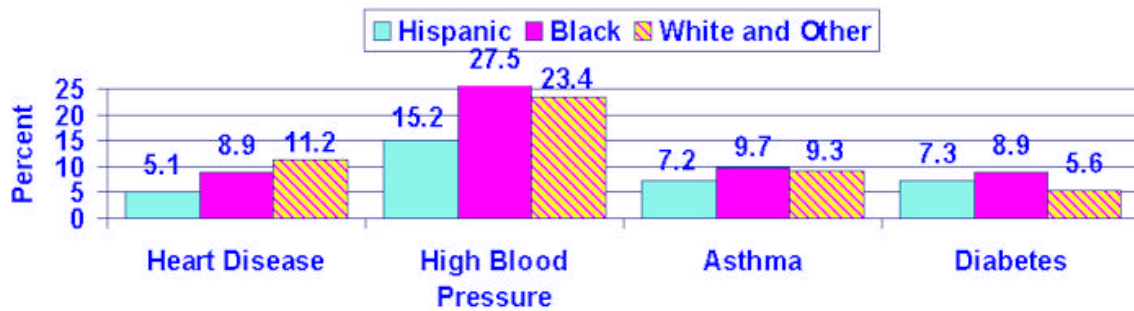
Table 4: Percent of persons 18 or older with cardiovascular conditions obtaining lifestyle advice or routine medical exams from healthcare providers, 2000

Population characteristics	Percent with blood pressure check within past 12 months	Percent told to moderate diet	Percent told to increase exercise	Percent with routine check-up within past 12 months
Reported Condition and Age				
Heart disease*	0.57	1.24	1.60	1.22
Age 18-64	1.11	1.87	1.94	1.68
65 and older	0.39	1.66	2.33	1.52
Stroke	0.94	2.99	2.65	2.45
Age 18-64	1.84	5.53	5.15	4.33
65 and older	1.03	3.41	3.28	3.04

* Combines coronary heart disease, angina, myocardial infarction and other heart disease diagnoses.

Source: Center for Cost and Financing Studies, AHRQ, Medical Expenditure Panel Survey, 2000.

Figure 1
Percent of persons 18 or older with heart disease, high blood pressure, asthma, and diabetes by race/ethnicity

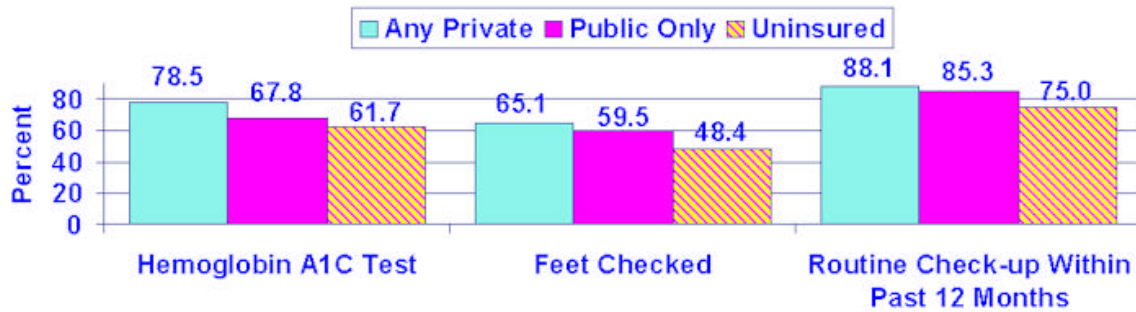


Hispanics 18 or older were less likely than blacks, or whites and persons of other races to report having heart disease, high blood pressure, or asthma.

Source: Center for Cost and Financing Studies, AHRQ, Medical Expenditure Panel Survey, 2000



Figure 2
Percent of persons age 18-64 with diabetes that had selected medical care examinations by insurance status, 2000

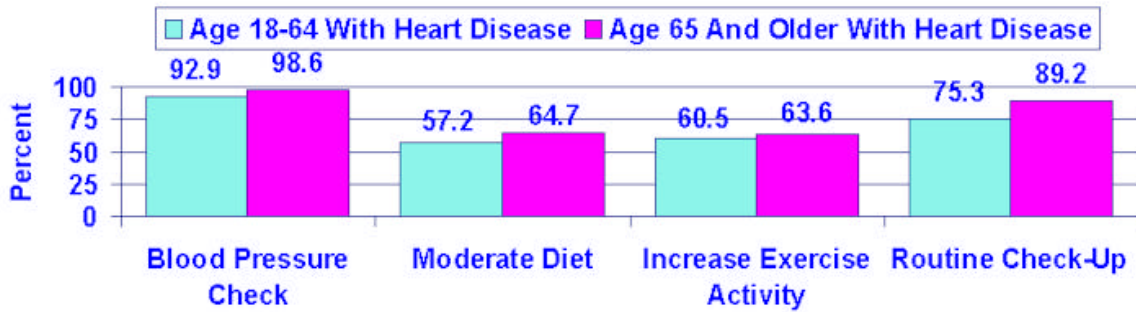


In 2000, uninsured persons age 18-64 with diabetes were less likely than persons with any private insurance to have reported having a Hemoglobin A_{1c} test, their feet checked for sores/irritations, or a routine check-up within the past 12 months.

Source: Center for Cost and Financing Studies, AHRQ, Medical Expenditure Panel Survey, 2000



Figure 3
Percent of persons 18 or older with heart disease obtaining lifestyle advice or routine medical exams from healthcare providers within the past 12 months by age, 2000



In 2000, those age 18-64 with heart disease were less likely to have a blood pressure check within the past 12 months, to be advised to moderate their diet, or have a routine check-up within the past 12 months than those age 65 and older.

Source: Center for Cost and Financing Studies, AHRQ, Medical Expenditure Panel Survey, 2000

