Chapter Six

Health Status, Conditions, and Risks

This chapter describes the health status of the Nation's older adults. The discussion is divided into four main topic areas: general health status, health conditions and risks, physical limitations, and dental health. The chapter includes both self-reported data and data from physical and dental exams. For some measures—specifically, ratings of general health status, reported prevalence of high blood pressure, and assessments of physical limitations—both self-reported and physician-reported data are presented.

General Health Status

NHANES-III collected information on general health status through both self-reports and physician assessments. In both cases, response options were: excellent, very good, good, fair, and poor.

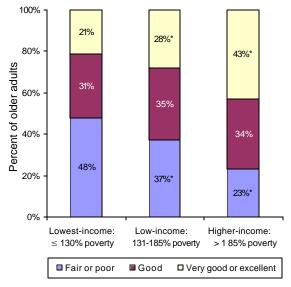
Thirty-six percent of older adults reported that they were in very good or excellent health and 31 percent reported that they were in fair or poor health (tables D-151 and D-152). Overall, the percentage of older adults who perceived themselves to be in very good or excellent health decreased with age, while the percentage reporting fair or poor health generally increased with age. Findings were similar for males and females (statistical significance of age- and gender-based differences not tested).

Older adults in the lowest-income group had a more negative perception of their health status than older adults in the other two income groups. The lowest-income older adults were *more* likely than their counterparts in either of the other income groups to rate their health status as fair or poor and *less* likely to rate their health status as very good or excellent (figure 49). Almost

half (48%) of older adults in the lowest-income group rated their health as fair or poor, compared with 37 percent of low-income older adults and 23 percent of higher-income older adults. Moreover, only 21 percent of the lowestincome older adults rated their health status as very good or excellent, compared with 28 percent of older adults in the low-income group and 43 percent of older adults in the higherincome group. This pattern of differences was noted for both males and females. However, among males, the difference between the lowest-income group and the low-income group in the percentage reporting very good or excellent health was not statistically significant (tables D-151 and D-152).

Physician assessments of general health status were consistently more positive than individuals' self-assessments. However, general trends in the data were largely consistent with those observed in the self-reported data. For example, physician assessments, like the self-assessments, revealed statistically significant differences between the lowest-income group and the other two income groups in the percentage of older adults considered to be in fair or poor health. According to physician assessments, 38 percent of older adults in the lowest-income group were in fair or poor health, compared with 28 percent of older adults in the low-income group and 17 percent in the higher-income group (figure 50 and table D-154). At the same time, physicians found 27 percent of the lowestincome older adults to be in very good or excellent health, compared with 34 percent of low-income older adults and 48 percent of higher-income older adults. The difference between the lowest-income and higher-income groups was statistically significant. This general

Figure 49—Self-reported general health status: Older adults



^{*}Statistically significant difference from lowest-income group at the .05 level or better.
Source: NHANES-III, 1988-94.

pattern was observed for both males and females.

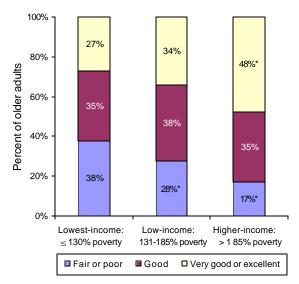
Health Conditions and Risks

High Blood Pressure

The leading chronic health problem reported by older adults in all income groups was high blood pressure. Overall, 4 out of 10 older adults reported that they had been told by a physician or other health professional that they had high blood pressure (table D-155). The reported prevalence of high blood pressure was greater for females than for males (44% vs. 34%). The percentage of individuals reporting the problem increased with age to a certain point—70-74 years for males and 75-79 years for females—and then decreased for the oldest cohorts (statistical significance of gender- and age-based differences not tested).

Older adults in the lowest-income group were no more likely to report high blood pressure than those in the low-income group, but were significantly more likely than those in the higher-income group to report this condition (46% vs.

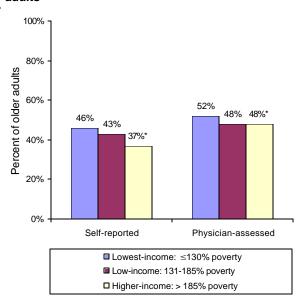
Figure 50—Physician-assessed general health status: Older adults



*Statistically significant difference from lowest-income group at the .05 level or better.
Source: NHANES-III, 1988-94.

43% and 37%) (figure 51). This difference was largely attributable to differences among 60-64-year-olds, especially males, and among 75-79-year-olds, especially females (table D-155).

Figure 51—Self-reported high blood pressure vs. physician-assessed high blood pressure: Older adults



^{*}Statistically significant difference from lowest-income group at the .05 level or better.

Source: NHANES-III, 1988-94.

The actual prevalence of high blood pressure, as measured in physician exams, was consistently greater than the self-reported prevalence (statistical significance of measure-based differences not tested). For example, physicians found that 48 percent of older adults had high blood pressure; the estimate from the self-reported data was 40 percent (tables D-155 and D-156).

The general patterns observed in the self-reported data were also observed in the physician-reported data. This includes the significant difference between the lowest-income and higher-income groups in the prevalence of high blood pressure (52% vs. 48%) (figure 51). This difference was concentrated among 60-64-year-old females. Indeed, data on actual blood pressure measurements revealed that, among 60-64-year-old females, the lowest-income group had a significantly higher prevalence of high blood pressure than either the low-income group or the higher-income group (52% vs. 35% vs. 29%) (table D-156).

Other Chronic Conditions

NHANES-III respondents were asked whether a physician or other health professional had ever told them that they had specific types of health conditions (other than high blood pressure). Queried conditions include diabetes, heart attack, stroke, emphysema, congestive heart failure, and cancer other than skin cancer. For those who reported having had one or more heart attacks, information was also collected on age at the time of the first heart attack.

Overall, none of these health conditions was reported by more than 15 percent of older adults (tables D-157 and D-158 and D-160 to D-162). Reported prevalence was generally similar for males and females. Exceptions were heart attack and emphysema/congestive heart failure. For these conditions, reported prevalence among males was somewhat greater than among females (statistical significance of gender-based differences not tested). Among older adults who had a heart attack, the mean age at the time of the first attack was 61 years, for males as well as females (table D-159).

There were no significant differences between the lowest-income group and the low-income group, overall, in the reported prevalence of any of the queried health conditions (figure 52) or, among those who had experienced a heart

¹Congestive heart failure and emphysema were combined because the prevalence of each condition was so low that most point estimates in the individual tabulations were statistically unreliable.

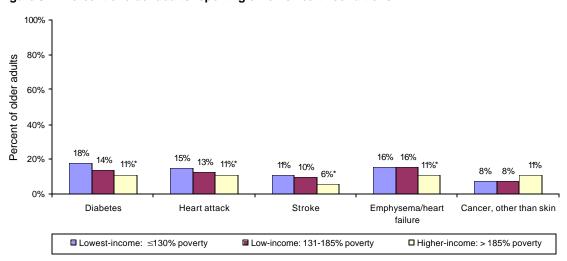


Figure 52—Percent of older adults reporting chronic health conditions

^{*}Statistically significant difference from lowest-income group at the .05 level or better. Source: NHANES-III, 1988-94.

attack, in mean age at the time of the first attack (table D-159). However, females in the lowest-income group were significantly more likely than females in the low-income group to have had a heart attack (13% vs. 8%) (table D-158). There were also isolated differences between the two groups for specific gender-and-age subgroups (tables D-157 through D-162). In almost every case, the reported prevalence was significantly greater for the lowest-income group.

In comparison with the higher-income group, the reported prevalence of five of the six health conditions examined in this analysis was significantly greater for the lowest-income group. The only condition for which no difference was detected was cancer other than skin cancer. In addition to the previously described difference in the prevalence of high blood pressure, older adults in the lowest-income group were more likely than older adults in the higher-income group to have diabetes (18% vs. 11%), to have had a heart attack (15% vs. 11%) or stroke (11% vs. 6%), and to have emphysema or congestive heart failure (16% vs. 11%) (figure 52 and tables D-157, D-158, and D-160 to D-161). There was no difference between the two groups in the mean age at which first heart attacks were experienced (table D-159).

The significant differences between the lowestand higher-income groups in the prevalence of stroke and emphysema/congestive heart failure were observed for both males and females. The difference in the prevalence of diabetes was due primarily to differences among females, particularly females between the ages of 60-64 and 70-74. And the difference in the prevalence of heart attack was concentrated among 60-64year-olds, particularly females. A striking observation is that, for every condition except cancer, statistically significant differences were detected between the lowest-income group and the higher-income group for the youngest cohort (60-64-year-olds). With the exception of diabetes, where differences were concentrated

among females, this was true for both males and females. In every case, the difference favored the higher-income group.

Although there were no significant between-group differences observed for cancer, overall, a significant difference was observed among males. The direction of the difference was the opposite of what was observed for the other health conditions. Specifically, males in the lowest-income group were *less* likely than their higher-income counterparts to have reported having cancer (other than skin cancer) now or in the past (6% vs. 11%) (table D-162). The difference was concentrated in the youngest cohorts (60 years through 74 years).

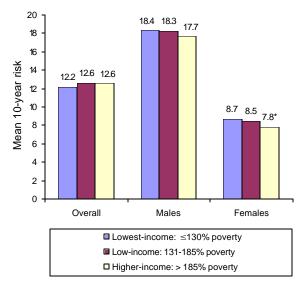
Risk of Coronary Heart Disease

The 10-year risk of coronary heart disease was computed for individuals between the ages of 60 and 79, using guidelines developed by the NCEP (NIH, 2001).² An individual's 10-year risk was determined on the basis of gender, age, total cholesterol level, smoking status, level of HDL, and systolic blood pressure. Potential risk levels range from a low of less than 1 percent to a high of 30 percent or more.

The mean 10-year risk of coronary heart disease among older adults 60 to 79 years of age was 12.4 percent (table D-163). Overall, there were no significant between-group differences in the mean 10-year risk of coronary heart disease (figure 53). Among females, however, members of the lowest-income group had a greater 10-year risk than members of the higher-income group (8.7% vs. 7.8%). This difference was concentrated among the youngest females. In this cohort (60-64-year-olds), females in the lowest-income group had a mean 10-year risk of coronary heart disease of 5.4 percent, compared with 3.8 percent for females in the higher-income group (table D-163).

²The NCEP guidelines define risk only for individuals up to the age of 79.

Figure 53—Mean 10-year risk of coronary heart disease: Older adults



*Statistically significant difference from lowest-income group at the .05 level or better.

Source: NHANES-III. 1988-94.

Overall, 56 percent of adults 60 to 79 years of age had a 10-year-risk of coronary heart disease that was greater than 10 percent (table D-164). The percentage of males with a 10-year-risk that was greater than 10 percent was markedly higher than the percentage of females (85% vs. 32%) (statistical significance of gender-based difference not tested). There were no significant differences between income groups on this measure.

Dental Health

All NHANES-III respondents who completed the examination component received a dental exam. As part of this exam, all decayed, missing, and filled teeth were charted.

Overall, older adults had an average of 21.8 missing, decayed, or filled teeth (table D-165). Means were identical for males and females and, as expected, the mean number of decayed, missing, and filled teeth increased with age (statistical significance of age-based differences not tested).

There were no significant differences, overall, between the lowest-income and low-income groups in the number of decayed, missing, and filled teeth. However, among females and 80-84-year-olds (both male and female), the mean number of problem teeth was significantly greater for the lowest-income group than the low-income group (table D-165).

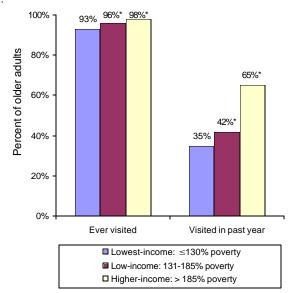
Older adults in the lowest-income group had more missing, decayed, and filled teeth than their counterparts in the higher-income group (22.8 vs. 21.2). This difference was largely attributable to a difference among females. Among males, only the difference between 80-84-year-olds was statistically significant.

Visits to a Dentist or Dental Hygienist

Overall, 97 percent of older adults reported visiting a dental health professional at least once in their lifetime (table D-166). Nonetheless, individuals in the lowest-income group were less likely than individuals in the other two income groups to have visited a dental practitioner (93% vs. 96% and 98%) (figure 54). When the data were examined by gender, the difference between the lowest-income group and the higher-income group was observed for both genders, but the difference between the lowest-income group was statistically significant only for females.

The lowest-income older adults were also significantly less likely than older adults in either of the other income groups to have visited a dental health professional within the past year. Thirty-five percent of the lowest-income older adults reported a dental visit in the past year, compared with 42 percent of low-income older adults and 65 percent of higher-income older adults (figure 54 and table D-167). In keeping with the pattern observed in the preceding analysis, the difference between the lowest-income group and the higher-income group was observed for both males and females, but the

Figure 54—Percent of older adults who have visited a dentist or dental hygienist



*Statistically significant difference from lowest-income group at the .05 level or better.
Source: NHANES-III, 1988-94.

difference between the lowest-income group and the low-income group was statistically significant only for females.

Physical Limitations

NHANES-III collected three types of data that are useful in describing the physical limitations of older adults. The first was a series of physician assessments about respondents' functional abilities. These data were collected as part of the physical exam (at the same time the previously discussed assessment of general health status was coded). The second source of data was a series of self-assessments in which respondents rated their ability to perform specific tasks. Finally, self-reported data were collected on the need for assistance with personal care or routine chores and the use of physical-aid devices, including wheelchairs, crutches or canes, special eating utensils, and devices that are used to assist with dressing.

Physician Assessments

Physicians were asked to rate the ability of each individual to perform five different tasks: walking

a quarter mile, running 100 yards, stooping, crouching or kneeling, making small motor movements with the hands, and engaging in physically active tasks such as heavy housework, gardening, and exercising. Available response options were: no difficulty, some difficulty, moderate difficulty, and could not be done.

Figure 55 and tables D-168 to D-172 present data on the percentage of individuals who physicians felt could not perform the tasks or could do so only with moderate difficulty. The results were striking. With one exception, the percentage of individuals assessed as being unable to perform a task or able to perform it only with moderate difficulty, was greater for the lowest-income group than for either of the other income groups. Moreover, the differences were statistically significant in 7 of the 10 comparisons between the lowest-income group and the other income groups. Only the differences between the lowest-income group and the low-income group for running 100 yards, stooping, crouching, or kneeling, and small motor movements were not statistically significant.

Two of the most noteworthy findings relate to the ability of older adults to do general physical activity, such as heavy housework, gardening, and exercise, and the ability to walk a quarter mile. Physicians estimated that 54 percent of older adults in the lowest-income group could not do heavy housework, gardening, or exercise, or could do so only with moderate difficulty. The same was true for 46 percent of older adults in the low-income group and 32 percent of those in the higher-income group. Physician assessments also revealed significant differences between income groups in the percentage of individuals who could not walk a quarter mile or could do so only with moderate difficulty. This was true for 35 percent of the lowest-income seniors, compared with 29 percent of low-income seniors and 17 percent of higher-income seniors.

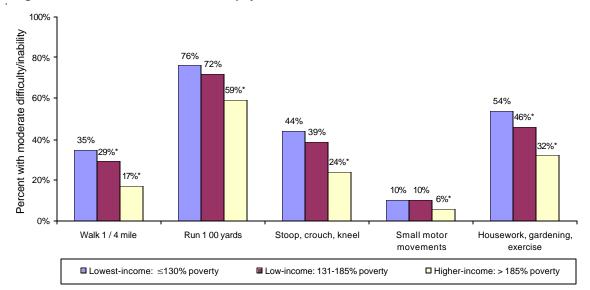


Figure 55—Percent of older adults with physician-assessed functional limitations

*Statistically significant difference from lowest-income group at the .05 level or better. Source: NHANES-III. 1988-94.

Differences between the lowest-income group and the higher-income group observed in the overall analysis held for both males and females. Differences between the lowest-income group and the low-income group (observed only for walking a quarter mile and heavy housework, gardening, and exercise) were significant only for females.

Self-Assessments

Respondents were asked to rate how much difficulty they experienced (or would experience) performing a variety of tasks that tend to be difficult for people who have health or physical limitation. Respondents were asked to answer in terms of performing the tasks when they were on their own and without the use of aids. Response options were: no difficulty, some difficulty, much difficulty, and unable to complete.

There was some overlap between the tasks queried in the self-assessments and the items covered in the physician assessments; however, the list of activities included in the self-assessments was more extensive. Tasks included: walking a quarter mile, walking up 10 steps

without resting, lifting or carrying 10 pounds, doing chores around the house, preparing meals, managing money, stooping, crouching, or kneeling, walking from one room to another, standing up straight from an armless chair, getting in and out of bed, eating or drinking from a glass, and dressing oneself.

Tables D-173 to D-184 present data on the percentage of individuals who reported that they would have much difficulty performing the task or would be unable to do it. Figure 56 summarizes these data for selected tasks. The pattern of differences observed between income groups was comparable to the pattern seen in the physician assessments. For the tasks summarized in figure 56, the percentage of individuals who reported that they could only do a task with difficulty or could not do it at all was greater for the lowest-income group than for either of the other income groups. In this case, differences between the lowest-income group and the other income groups were statistically significant for 10 of the 12 between-group comparisons. Only the differences between the lowest-income group and the low-income group for meal

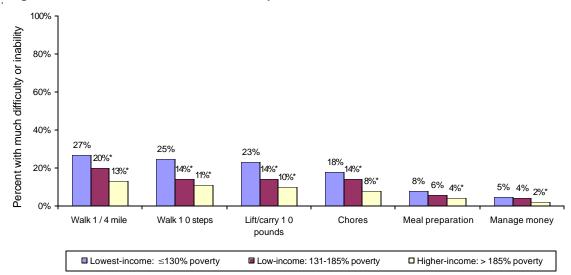


Figure 56—Percent of older adults with self-reported functional limitations

preparation and managing money were not statistically significant.

For the tasks summarized in figure 56, differences noted between the lowest-income group and the higher-income group generally held for both males and females. The one exception was meal preparation. For this task, the betweengroup difference was not statistically significant for females. For the differences noted between the lowest-income group and the low-income group, two were observed for both males and females (walking 10 steps without resting and lifting or carrying 10 pounds). The difference between the lowest- and low-income groups in reported difficulty walking a quarter mile was observed only among females and was concentrated among females 80 and older. The difference in self-reported difficulty doing household chores was not observed in either genderspecific analysis. The difference was concentrated among females 80 and older.

For the tasks not summarized in figure 56—stooping, crouching, or kneeling, walking from one room to another, standing up straight from an armless chair, getting in and out of bed, eating or drinking from a glass, and dressing oneself—

the percentage of individuals who could not do the task or could do it only with difficulty was consistently greater for the lowest-income group than the higher-income group, and the differences were statistically significant (tables D-179 to D-184). With one exception (eating or drinking from a glass), this was true for both males and females.

Significant differences were detected between the lowest-income and low-income groups for four of the six tasks, overall or by gender. For two tasks (stooping, crouching, or kneeling and getting in or out of bed), differences were observed for the overall population as well as for males and females separately. For the other two tasks (standing up from an armless straight chair and dressing oneself), between-group differences varied by gender.

Need for Assistance from Others and Use of Physical Aids

Respondents were asked whether they needed the help of other persons because of an impairment or health problem. This question was asked in relation to personal-care needs (eating, bathing, dressing, getting around the house) as well as "routine needs" (everyday household

^{*}Statistically significant difference from lowest-income group at the .05 level or better. Source: NHANES-III. 1988-94.

chores, taking care of business matters, shopping, and getting around for other purposes). Respondents were also asked about their use of physical aids, including canes, wheelchairs, crutches, and walkers, special eating utensils, and devices used to assist with dressing.

Overall, 8 percent of older adults reported needing assistance with personal-care needs. As expected, this percentage increased with age, from 4 percent for 60-64-year-olds to 24 percent for those 85 and older (table D-185) (statistical significance of age-based differences not tested). Patterns were similar for males and females.

Older adults in the lowest-income group were more likely to require assistance with personal-care needs than older adults in either of the other income groups (11% vs. 8% and 6%). The difference between the lowest-income and low-income groups was not significant in either of the gender-specific analyses. However, the difference between the lowest- and higher-income groups was observed for both males and females.

Eleven percent of older adults reported needing assistance with routine chores (table D-186). Again, the percentage of individuals in the lowest-income group needing assistance was greater than the percentage for either the lowincome or higher-income groups (17% vs. 10% and 8%). In both cases, differences were observed separately for males and females. The difference between the lowest-income and lowincome groups was concentrated among those 80 years and older, particularly females. In contrast, the difference between the lowest-income group and the higher-income group was noted for every age group *except* the oldest group (85 years and older).

Use of mobility aids (canes, wheelchairs, crutches, and walkers) was reported by 14 percent of older adults overall, increasing from 5

percent among 60-64-year-olds to 45 percent among those 85 years and older (table D-187) (statistical significance of age-based differences not tested). Patterns were similar for males and females.

Overall, there was no significant difference between the lowest-income group and the low-income group in the use of such devices. In comparison with the higher-income group, however, the lowest-income group was more likely to use mobility aids (20% vs. 11%). This was true for both males and females and for four of the six age groups included in the analysis.

Finally, reported use of special eating utensils and devices used to assist with dressing was relatively rare (1-2%, overall) (tables D-188 and D-189). Use of dressing aids increased with age, and was most common among those 85 and older (8%). There were no significant differences between income groups on either of these measures.