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# SMI Trust Fund

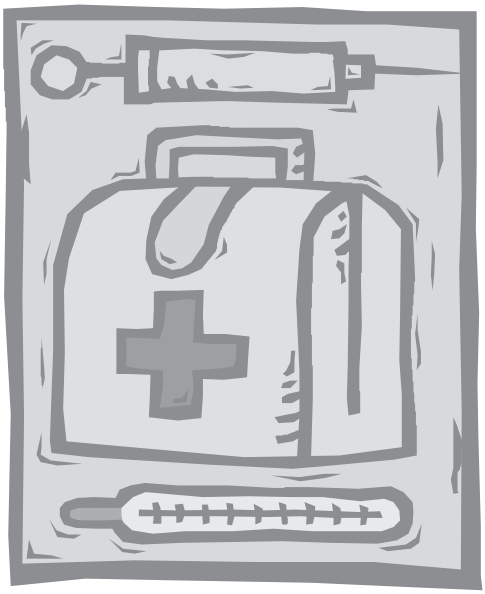
## Estimates Under Alternative II Assumption for Aged and Disabled Enrollees (Excluding End-Stage Renal Disease)

*Editor's Note: The following excerpt is taken from Section III.B, "Actuarial Methodology and Principal Assumptions for Cost Estimates for the Supplementary Medical Insurance Program," in the 2003 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds. Copies of the 2003 Annual Report are available from Sol Mussey (410-786-6386).*

This section describes the basic methodology and assumptions used in the estimates for SMI (Medicare Part B) under the intermediate assumptions. In addition, projections of program costs under two alternative sets of assumptions are presented.

### Assumptions

The economic and demographic assumptions underlying the projections shown in this report are consistent with those in the 2003 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds. These assumptions are described more fully in that report.



### Program Cost Projection Methodology

Estimates under the intermediate assumptions are prepared by establishing for each category of enrollee and for each type of service the allowed charges or costs incurred per enrollee for a recent year (to service as a projection base) and then projecting these charges through the estimation period. The per-enrollee charges are then converted to reimbursement amounts by subtracting the per-enrollee values of the deductible and coinsurance. Aggregate reimbursement amounts are calculated by multiplying the per-enrollee reimbursement amounts by the projected enrollment. In order to estimate cash disbursements, an allowance is made for the delay between receipt of and payment for the service.

### a. Projection Base

To establish a suitable base from which to project the future costs of the program, the incurred payments for services provided must be reconstructed for the most recent period for which a reliable determination can be made. Therefore, payments to providers must be attributed to dates of service, rather than payment dates. In addition, the nonrecurring effects of any changes in regulations, legislation or administration of the program and of any items affecting only the timing and flow of payments to providers must be eliminated. As a result, the rates of increase in the incurred cost of the program differ from the increases in cash disbursements.

### • Carrier Services

Reimbursement amounts for physician services, durable medical equipment (DME), laboratory tests performed in physician offices and independent laboratories and other services (such as physician administered drugs, free-standing ambulatory surgical center facility services, ambulance and supplies) are paid though organizations acting for the Centers for Medicare & Medicade Services (CMS). These organizations referred to as "carriers," determine whether billed services are covered under the program and establish the allowed charges for the covered services. A record of the allowed charges, the applicable deductible and coinsur-

ance and the amount reimbursed after the reduction for coinsurance and the deductible is transmitted to CMS.

The data are tabulated on an incurred basis. As a check on the validity of the projection base, incurred reimbursement amounts are compared with cash expenditures reported by the carriers through an independent reporting system.

### • Intermediary Services

Reimbursement amounts for institutional services under the SMI program are paid by the same fiscal intermediaries that pay for HI services. Institutional services covered under the SMI program are outpatient hospital services, home health agency services, laboratory services performed in hospital outpatient departments, and other services such as renal dialysis performed in freestanding dialysis facilities, services in outpatient rehabilitation facilities, and services in rural health clinics. Reimbursement for institutional services occurs in two stages. First, bills are submitted to the intermediaries and interim payments are made on the basis of these bills. The second stage takes place at the close of a provider's accounting period, when a cost report is submitted and lump-sum payments or recoveries are made to correct for the difference between interim payments and final settlement amounts for providing covered services (net of coinsurance and deductible amounts). Tabulations of the bills are prepared by date of service and the lump-sum settlements, which are reported only on a cash basis, are adjusted (using approximations) to allocate them to the time of service.

### • Managed Care Services

Managed care plans with contracts to provide health services to Medicare beneficiaries are reimbursed directly by CMS on either a reasonable cost or capitation basis. Comprehensive data on such direct reimbursements are available only on a cash basis. Certain approximations must be made to allocate expenses to the period when services were rendered.

## b. Fee-for-Service Payments for Aged Enrollees and Disabled Enrollees without End-Stage Renal Disease (ESRD)

Disabled persons with ESRD have per-enrollee costs that are substantially higher and quite different in nature from those of most other disabled persons. Hence, program costs for them have been excluded from the analysis in this section and are contained in a later section. Similarly, costs associated with beneficiaries enrolled in managed care plans are discussed separately.

### Physician Services

Medicare payments for physician services are based on a fee schedule which reflects the relative level of resources required for each service. The fee schedule amount is equal to the product of the procedure's relative value, a conversion factor and a geographic adjustment factor. Payments are based on the lower of the actual charge and the fee schedule amount. Increases in physician fees are based on growth in the Medicare Economic Index (MEI), plus a performance adjustment reflecting whether past growth in the volume and intensity of services met specified targets under the sustainable growth rate mechanism.

Table III.B1 on page 16 shows the projected MEI increases and performance adjustments for 2004 through 2012.

The physician fee updates shown through 2003 are actual values. The modified update shown in column four reflects the growth in the MEI, the performance adjustment, as well as any legislative impacts such as the addition of preventative services.

Per capita physician charges also have increased each year as a result of a number of other factors besides fee increases, including more physician visits per enrollee, the aging of the Medicare population, greater use of specialists and more expensive techniques and certain administrative actions. The fifth column of Table III.B1 shows the increases in charges per enrollee resulting from these residual factors. Because the measurement of increased allowed charges per service is subject to error, this error is included implicitly under residual causes.

(continued on page 14)

Based on the increases in Table III.B1, Table III.B2 (not included here) shows the estimates of the incurred reimbursement for carrier services per fee-for-service enrollee.

## DME, Laboratory and Other Carrier Services

As with physician services over time other unique fee schedules or reimbursement mechanisms have been established for virtually all other non-physician carrier services.

Table III.B1 on page 16 shows the increases in the allowed charges per fee-for-service enrollee for DME, laboratory services and other carrier services. Based on the increases in Table III.B1, Table III.B2 (not included here) shows the corresponding estimates of the average incurred reimbursement for these services per fee-for-service enrollee.

The fee schedules for each of these expenditure categories are updated by increases in the Consumer Price Index (CPI), together with applicable legislated limits on payment updates. In addition, per capita charges for these expenditure categories have grown as a result of a number of other factors, including increased number of services provided, the aging of the Medicare population, more expensive services and certain administrative actions. This growth is projected based on recent past trends in growth per enrollee.

## Intermediary Services

Over the years, legislation has been enacted to establish new payment systems for virtually all SMI intermediary services. A fee schedule was established for tests performed in laboratories in hospital outpatient departments. The Balanced Budget Act of 1997 (BBA) implemented a prospective payment system (PPS), effective August 1, 2000, for services performed in the outpatient department of a hospital. It also implemented a PPS for home health agency services, which began October 1, 2000.

The historical and projected increases in charges and costs per fee-for-service enrollee for intermediary services are shown in Table III.B3 (see page 17). The projected increases shown in this table reflect the impact of the BBA, provisions of which include the transfer of a substantial portion of home health agency services from the HI trust fund to the SMI trust fund starting in 1998. All benefit payments for those home health agency services being transferred are to be paid out of the SMI trust fund beginning January 1998. However, for the 6-year period 1998 through 2003, sums of money will also be transferred from the HI trust fund to the SMI trust fund to phase in the financial impact of the transfer of these services. It should be noted that in this section with the exception of Table III.B8 (not shown), the estimates for home health agency costs for 1998 through 2003 are the gross amounts associated with the payment of benefits and are not adjusted for the funds transferred from the HI trust fund.

Based on the increases in Table III.B3, Table III.B4 (not included here) shows the estimates of the incurred reimbursement for the various intermediary services per fee-for-service enrollee. Each of these expenditure categories is projected on the basis of recent past trends in growth per enrollee, together with applicable legislated limits on payment updates.

### c. Fee-for-Service Payments for Persons Suffering from ESRD

See SMI 2003 Annual Report.

### d. Managed Care Costs

Program experience with managed care payments has generally shown a strong upward trend. However, in recent years, there has been a slowdown in the number of Medicare beneficiaries choosing to enroll in managed care plans, and in 2001, 2002 and 2003, an overall reduction in this number. Capitated plans currently account for approximately 95 percent of all SMI managed care payments. For capitated plans, per capita payment amounts have grown following the same trend as fee-for-service per capita cost growth, based on the formula in the law to calculate managed care capitation amounts. The projection of future per capita amounts follows the requirements of the Balanced Budget Act of 1997 as related to the Medicare + Choice capitation amounts, which increase at rates based on the per capita growth for all of Medicare, less specified adjustments in 1998 to 2002.

The projected rates are further adjusted by the Benefits Improvement and Protection Act of 2000. Table III.B6 (not included here) shows the estimated number of SMI beneficiaries enrolled in a managed care plan and the aggregate incurred reimbursements associated with those enrollees.

A decline in Medicare + Choice enrollment is projected for the next few years as the provisions of the BBA (as subsequently modified) continue to limit growth in capitation rates. Thereafter, Medicare+Choice enrollment is assumed to gradually accelerate. In addition, there will be preferred provider plan demonstrations conducted 2003 through 2005 that will increase total managed care enrollment for those years. ◆

'Hypertext versions of the 2003 Social Security and Medicare Trustees Reports as well as " A Summary of the 2003 Annual Reports" are available on the Internet at the following addresses:

**Social Security (OASDI):**
http://www.ssa.gov/OACT/TR/TR03/index.html

**Medicare (HI and SMI):**
http://www.cms.hcfa.gov/publications/trusteereport/

**Summary:**
http://www.ssa.gov/OACT/TRSUM/trsummary.html

**Other information about Social Security benefits and services is available at:**
http://www.ssa.gov
or by calling toll-free 1.800.772.1213

**Other information about Medicare benefits and services is available at:**
http://www.cms.hhs.gov
or by calling toll-free 1.800.663.4227

**Table III.B1** Components of Increases in Total Allowed Charges Per Fee-for-Service Enrollee for Carrier Services (in Percent)

| | Physician Fee Schedule | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Increase Due to Price Changes | | | | | | | | |
| Calendar Year | MEI | MPA[1] | Net Increase in Allowed Fees[2] | Residual Factors | Total Increase[3] | CPI | DME | Lab | Other Carrier |
| **Aged** | | | | | | | | | |
| 1998 | 2.2 | 1.2 | 2.9 | 1.3 | 4.2 | 1.3 | -2.1 | -9.3 | 10.1 |
| 1999 | 2.3 | 0.0 | 2.7 | 1.2 | 3.9 | 2.2 | 5.0 | -0.1 | 10.7 |
| 2000 | 2.4 | 3.0 | 5.8 | 3.5 | 9.5 | 3.5 | 10.1 | 7.3 | 14.2 |
| 2001 | 2.0 | 3.0 | 5.7 | 3.5 | 9.4 | 2.7 | 12.7 | 7.7 | 16.6 |
| 2002 | 2.6 | -7.0 | -4.0 | 7.9 | 3.6 | 1.4 | 9.4 | 6.8 | 14.4 |
| 2003 | 3.0 | -1.1 | 1.4 | 3.0 | 4.5 | 2.3 | 3.0 | 4.5 | 11.2 |
| 2004 | 2.0 | -6.1 | -4.2 | 4.4 | 0.1 | 2.4 | 6.7 | 6.0 | 10.4 |
| 2005 | 2.2 | -4.6 | -1.7 | 3.7 | 2.0 | 2.7 | 5.8 | 5.1 | 10.9 |
| 2006 | 1.8 | -3.6 | -0.9 | 3.6 | 1.7 | 2.9 | 6.1 | 5.2 | 10.5 |
| 2007 | 2.1 | -2.5 | -0.5 | 3.3 | 2.8 | 3.0 | 6.2 | 5.4 | 9.9 |
| 2008 | 2.1 | -1.8 | 0.3 | 3.1 | 3.3 | 3.0 | 6.3 | 5.6 | 9.2 |
| 2009 | 2.1 | -1.6 | 0.5 | 3.0 | 3.5 | 3.0 | 6.3 | 5.6 | 8.4 |
| 2010 | 2.2 | -1.5 | 0.7 | 3.0 | 3.7 | 3.0 | 6.3 | 5.6 | 7.9 |
| 2011 | 2.1 | -1.6 | 0.5 | 3.0 | 3.5 | 3.0 | 6.4 | 5.6 | 7.9 |
| 2012 | 2.1 | -1.8 | 0.3 | 3.1 | 3.3 | 3.0 | 6.4 | 5.6 | 8.0 |
| **Disabled** (excluding ERSD) | | | | | | | | | |
| 1998 | 2.2 | 1.2 | 2.9 | 1.9 | 4.8 | 1.3 | 2.7 | -5.9 | 10.9 |
| 1999 | 2.3 | 0.0 | 2.7 | 0.9 | 3.6 | 2.2 | 2.7 | 3.1 | 11.3 |
| 2000 | 2.4 | 3.0 | 5.8 | 3.5 | 9.5 | 3.5 | 11.0 | 3.9 | 11.9 |
| 2001 | 2.0 | 3.0 | 5.7 | 5.3 | 11.3 | 2.7 | 16.7 | 9.6 | 21.1 |
| 2002 | 2.6 | -7.0 | -4.0 | 7.1 | 2.9 | 1.4 | 11.0 | 7.3 | 15.6 |
| 2003 | 3.0 | -1.1 | 1.4 | 3.0 | 4.5 | 2.3 | 6.4 | 5.0 | 10.7 |
| 2004 | 2.0 | -6.1 | -4.2 | 4.4 | 0.0 | 2.4 | 6.7 | 5.9 | 10.1 |
| 2005 | 2.2 | -4.6 | -1.7 | 3.7 | 1.9 | 2.7 | 5.8 | 5.1 | 10.6 |
| 2006 | 1.8 | -3.6 | -1.9 | 3.6 | 1.7 | 2.9 | 6.0 | 5.2 | 10.3 |
| 2007 | 2.1 | -2.5 | -0.5 | 3.3 | 2.8 | 3.0 | 6.2 | 5.4 | 9.7 |
| 2008 | 2.1 | -1.8 | 0.3 | 3.1 | 3.3 | 3.0 | 6.3 | 5.6 | 9.1 |
| 2009 | 2.1 | -1.6 | 0.5 | 3.0 | 3.5 | 3.0 | 6.3 | 5.6 | 8.3 |
| 2010 | 2.2 | -1.5 | 0.7 | 3.0 | 3.7 | 3.0 | 6.3 | 5.6 | 7.8 |
| 2011 | 2.1 | -1.6 | 0.5 | 3.0 | 3.5 | 3.0 | 6.3 | 5.6 | 7.9 |
| 2012 | 2.1 | -1.8 | 0.3 | 3.1 | 3.3 | 3.0 | 6.4 | 5.6 | 7.9 |

[1] Medicare performance adjustment

[2] Reflects the growth in the MEI, the performance adjustment as well as any legislative impacts

[3] Equals combined increases in allowed fees and residual factors

**Table III.B3** Components of Increases in Recognized Charges and Costs Per Fee-for-Service Enrollee for Intermediary Services (in Percent)

| Calendar Year | Outpatient Hospital | Home Health Agency[1] | Outpatient Lab | Other Intermediary |
|---|---|---|---|---|
| **Aged** | | | | |
| 1998 | -1.4 | 3017.2[2,3] | 4.1 | -4.0 |
| 1999 | 9.5 | - 1.4[2,3] | 12.6 | -21.0 |
| 2000 | -2.9 | 14.7[3] | 5.1 | 22.0 |
| 2001 | 13.9 | -49.5[3] | 4.3 | 19.2 |
| 2002 | 3.9 | 10.4[3] | 14.6 | 11.6 |
| 2003 | 4.2 | - 2.3[3] | 5.0 | -0.5 |
| 2004 | 4.5 | 6.7 | 5.9 | -4.6 |
| 2005 | 8.4 | 6.7 | 5.2 | 5.5 |
| 2006 | 8.0 | 6.3 | 5.2 | 5.3 |
| 2007 | 8.1 | 6.4 | 5.4 | 5.3 |
| 2008 | 8.1 | 5.7 | 5.6 | 5.3 |
| 2009 | 8.0 | 4.9 | 5.6 | 5.3 |
| 2010 | 8.0 | 4.9 | 5.6 | 5.3 |
| 2011 | 7.4 | 4.5 | 5.6 | 5.3 |
| 2012 | 7.4 | 3.9 | 5.6 | 5.4 |
| **Disabled** (excluding ERSD) | | | | |
| 1998 | -3.6 | —[2,3] | 0.7 | -1.4 |
| 1999 | 9.2 | - 1.5[2,3] | 14.6 | -9.8 |
| 2000 | 45.3 | 14.6[3] | 8.2 | -8.2 |
| 2001 | 51.0 | -51.7[3] | 11.6 | 1.2 |
| 2002 | -16.6 | 10.4[3] | 13.0 | 11.9 |
| 2003 | -27.0 | -4.2[3] | 11.0 | 0.1 |
| 2004 | 4.5 | 6.4 | 12.0 | -0.6 |
| 2005 | 8.4 | 6.4 | 9.8 | 7.0 |
| 2006 | 7.9 | 6.4 | 5.2 | 7.0 |
| 2007 | 8.0 | 6.7 | 5.4 | 7.0 |
| 2008 | 8.1 | 6.3 | 5.6 | 7.0 |
| 2009 | 8.0 | 5.5 | 5.6 | 7.0 |
| 2010 | 8.0 | 5.5 | 5.6 | 7.0 |
| 2011 | 7.4 | 5.4 | 5.6 | 7.0 |
| 2012 | 7.4 | 5.4 | 5.6 | 7.0 |

[1] From July 1, 1981 to December 31, 1997, home health agency services were almost exclusively provided by the Medicare HI program. However, for those SMI enrollees not entitled to HI, the coverage of these services was provided by the SMI program. During that time, since all SMI disabled enrollees were entitled to HI, their coverage of these services was provided by the HI program.

[2] Effective January 1, 1998, the coverage of a majority of home health agency services for those individuals entitled to HI and enrolled in SMI was transferred from the HI program to the SMI program. As a result, as of January 1, 1998, there was a large increase in SMI expenditures for these services for the aged enrollees, and SMI coverage for these services resumed for disabled enrollees.

[3] Does not reflect the impact adjustments for monies transferred from the HI Trust Fund for HHA costs, as provided by Balanced Budget Act of 1997.