Data Sources and Methods Used to Adjust State of Provider Expenditures to a State of Residence Basis¹

Method:

Net flow ratios for each type of service were derived using data from Medicare National Claims History files for each year.

Medicare reimbursements from claims data by State of Residence were divided by Medicare reimbursements by State of Provider.

For Non-Medicare, Non-Medicaid expenditures, Inpatient Hospital and Physician net flow ratios were further adjusted,

using private claims data to service-mix adjust for the Non-Medicare population.

For each year, State of Provider expenditures, calculated in the context of National Health Expenditures,

were adjusted by multiplying each service's corresponding Net Flow Ratio, resulting in expenditures by State of Residence.

After all pieces were adjusted, they were then added together to create the aggregate services.

Medicare Flow Matricies ²

All Services Data Source:

National Claims History Files, 1991-1993, 1996, 1999, 2002 Net flow ratios for intervening years were interpolated. 2002 ratios were held constant for 2003-2004

Flow Matrices used by Year

1991-1993, 1996, 1999, 2002

National and State Health Expenditure

Accounts Categories:

Hospital

Inpatient Inpatient Hospital Outpatient Hospital Outpatient Hospital-based HHA's Hospital-based HH

Hospital-based SNF 1991: SNF and 1992-1993, 1996, 1999, 2002: Hospital-based SNF

Hospital-based Hospice Hospice

Physicians & Clinics

Physician Physician **ESRD Clinics ESRD** Home health care (Freestanding)

Home health care (Freestanding) Home Health Home health-based Hospice Skilled Nursing Facilities (Freestanding)

SNF (Freestanding) SNF SNF-based Hospice Hospice

Other Professionals, incl. Ambulance Other Professionals, incl. Ambulance

Not Adjusted **Durable Medical Products** Dental Not Adjusted **Drugs and Other Medical Nondurables** Not Adjusted

Non-Medicare Non-Medicaid Flow Matricies²

All services except Inpatient Hospital and Physicians use Medicare matrices 3

Inpatient Hospital Data Source:

Healthcare Cost and Utilization Project, 1991-1993, 1996, 1999, 2002 Net flow ratios for intervening years were interpolated 2002 ratios were held constant for 2003-2004

Physicians Data Source:

Medstat Market Scan Commercial Database, 1991-1993, 1996, 1999 Net flow ratios for intervening years were interpolated 1999 ratios were held constant for 2000-2004

Flow Matrices used by Year 1991-1993, 1996, 1999, 2002

National and State Health Expenditure

Accounts Categories:

Hospital 4

Inpatient 5 Inpatient hospital, service-mix adjusted

Outpatient Medicare-Outpatient Hospital Physicians & Clinics 6 Physician, service-mix adjusted 7

Other Professionals, including Ambulance Medicare-Other Professionals, incl. Ambulance Medicare-Home Health

Home health care (Freestanding)

Medicare-SNF Nursing home care (Freestanding)

Medicare-Other Professionals, incl. Ambulance Dental **Durable Medical Products** Medicare-Other Professionals, incl. Ambulance

Drugs and Other Medical Nondurables Not Adjusted Other Personal Health Care Not Adjusted

NOTES:

- Medicaid Services were not adjusted.
- ² Both Medicare & Non-Medicare Non-Medicaid, matrices were based on the U.S. only and represent the total Medicare population.

Only Medicare fee-for-service expenditures were adjusted. Spending for Medicare managed care is already on a state of residence basis.

- We assumed that expenditure patterns between the Medicare and NonMedicare population were similar for most services; however,
- for selected services (Inpatient Hospital, Physicians) we assumed that differences in expenditure patterns were due to variations in service mix.
- Non-Medicare Non-Medicaid hospital expenditures were split into Inpatient and Outpatient using revenue data from the American Hospital Association (AHA), Hospital Statistics, 1991-2004.
- For Non-Medicare Non-Medicaid inpatient hospital, the net flow ratios were calculated at the DRG level for Medicare beneficiaries and then reweighted to reflect the service mix of the non-elderly using data from the Healthcare Cost and Utilization Project 3 (HCUP-3), National Inpatient Samples.
- ⁶ For Non-Medicare Non-Medicaid physician, the net flow ratios were calculated at the 2-digit BETOS code level and then reweighted

to reflect the service mix of the non-elderly using data from Medstat's Market Scan Commercial Database.

¹⁹⁹⁹ was the last year of available data.