Physician charges and utilization trends

by Winston O. Edwards and Charles R. Fisher

A synopsis of charge and payment trends of Medicare physicians and other noninstitutional suppliers of goods and services is provided in this article. Included are longitudinal variations in charges for services, trends in program expenditures, and patterns in beneficiary liabilities.

Background

Services provided by physicians and other noninstitutional suppliers generate potential payment liabilities that are shared by the supplementary medical insurance (SMI) trust fund and the Medicare patients. Total liabilities are comprised of charges allowed by the Medicare program as "reasonable" charges and "balance billing" charges not allowed as reasonable on unassigned claims. Physicians who do not accept Medicare reasonable charge determinations as their full payment (i.e., do not accept assignment) may bill patients for amounts exceeding reasonable charges (balance billings). Physicians who accept Medicare reasonable charge determinations (i.e., accept assignment) may not bill patients for amounts exceeding reasonable charges. Allowed charges are comprised of amounts paid from the SMI trust fund (program payments) and patient liabilities (coinsurance and deductible amounts). Medicare coinsurance rates are generally 20 percent of allowed charges except for certain fixed-fee services that require no coinsurance or deductible payments.

All tabular data represent total fee-for-service physician and other noninstitutional supplier billings, including all the billings for services of certain hospital-based physicians prior to fiscal year 1984. Institutional billings for medical goods and services (i.e., billings by inpatient hospitals facilities, outpatient hospital facilities, nursing homes, home health agencies, etc.) are not included in this article.

With the inception of the prospective payment system (PPS) in October 1983, all claims for services rendered by fee-for-service physicians and other noninstitutional suppliers have been processed by Part B carriers. Prior to PPS, the services of certain hospital-based physicians were included in hospital bills processed by fiscal intermediaries (combined billing). A portion of the payment on the institutional bill, therefore, represented a professional component. Hence, an adjustment was necessary for such billings through fiscal year 1983.

Claims for covered Medicare services are sometimes not submitted to Part B carriers because the annual allowed charges are less than the deductible amount; therefore, no program payments are necessary. Estimates of these nonbilled charges are included in the appropriate tables.

Dollar amounts for physician and supplier services in any time period may be portrayed either on a cash-flow basis or on an accrued basis. The former reflects the period in which a payment was made, and the latter reflects the period in which a service was rendered and thus an expense was incurred. Dollar amounts in this article represent accrued amounts.

General trends

Total potential liabilities for physician and supplier services increased sixfold from 1975 to 1987 (Table 1 and Figure 1). Program payments as a percent of total potential liabilities increased steadily from 61.0 percent in 1975 to more than 70.0 percent in 1987 except for a brief interruption in 1982 when the annual SMI deductible amount was raised from $60 to $75. Balance billing as a percent of total potential liabilities steadily increased from 1975 to 1984, but subsequently has declined primarily because of the Medicare Physician Participation Program. Deductibles as a percent of total potential liabilities have decreased steadily, from 14.7 percent of total liabilities in 1975 to 4.8 percent in 1987, except for 1982 when the annual deductible amount increased. Annual deductible amounts were $50 from 1966 through 1972, $60 from 1973 through 1981, and $75 from 1982 to the present.

Annual rates of change in total potential liabilities have exceeded 10 percent in all years except 1985 and 1986 (Table 2 and Figure 2). However, rates of change were much higher prior to 1982. The average annual rate of growth in program payments from 1976 to 1987 (16.9 percent) was about 1 percentage point larger than the average annual rate of growth in allowed charges (15.7 percent). This was primarily a result of the diminishing effect of the relatively fixed annual deductible amounts in a period of increasing inflation in physician charges. The percent of enrollees exceeding the SMI deductible and receiving payments for physician and supplier services increased from 48.2 percent in 1975 to 68.8 percent in 1986 (Table 3 and Figure 3).

Preliminary data indicate that incurred approved charges billed to Part B carriers were about $33 billion in calendar year 1988, up about 10 percent from 1987. The rate of increase was well below that for 1987 over 1986, 15.8 percent. Estimated total incurred potential liabilities for physician and other

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Table 1

Estimated dollar amounts of total potential liability for Medicare physicians and other noninstitutional suppliers of Medicare-covered goods and services and components of total liability: Calendar years 1975-87

Calendar year	Total potential liabilty[1]	Balance billing	Allowed charges			
			Total	Program payments	Coinsurance amount	Deductible amount
			Dollars in millions			
1975	$5,762	$544	$5,218	$3,512	$862	$845
1976	6,805	730	6,077	4,172	1,023	883
1977	8,046	825	7,221	5,059	1,245	918
1978	9,302	941	8,361	5,942	1,464	955
1979	10,962	1,187	9,775	7,047	1,739	989
1980	13,371	1,586	11,785	8,628	2,132	1,026
1981	15,781	1,940	13,840	10,249	2,536	1,056
1982	18,922	2,323	16,599	12,250	3,030	1,319
1983	21,990	2,559	19,431	14,478	3,587	1,366
1984	24,190	2,788	21,402	15,967	3,992	1,443
1985	26,362	2,657	23,705	17,753	4,438	1,514
1986	28,892	2,947	25,945	19,500	4,875	1,570
1987	32,550	2,500	30,050	22,800	5,700	1,550
			Percent distribution			
1975	100.0	9.4	90.6	61.0	15.0	14.7
1976	100.0	10.7	89.3	61.3	15.0	13.0
1977	100.0	10.3	89.7	62.9	15.5	11.4
1978	100.0	10.1	89.9	63.9	15.7	10.3
1979	100.0	10.8	89.2	64.3	15.9	9.0
1980	100.0	11.9	88.1	64.5	15.9	7.7
1981	100.0	12.3	87.7	64.9	16.1	6.7
1982	100.0	12.3	87.7	64.7	16.0	7.0
1983	100.0	11.6	88.4	65.8	16.3	6.2
1984	100.0	11.5	88.4	66.0	16.5	6.0
1985	100.0	10.1	89.9	67.3	16.8	5.7
1986	100.0	10.2	89.8	67.5	16.9	5.4
1987	100.0	7.7	92.3	70.0	17.5	4.8

[1]Total potential liabilities are the sum of balance billings, program payments, coinsurance amounts, and deductible amounts. The amounts of potential liabilities for balance billing, coinsurance, and deductibles actually collected are unknown.

NOTE: Excludes amounts paid on Medicare secondary payer claims by private insurers. The amount of such payments on claims submitted to Part B carriers was $468 million in fiscal year 1988.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Medicare Statistical System and Bureau of Program Operations Workload Report System.

noninstitutional suppliers of services, including balance billing amounts, were approximately $35.5 billion in 1988, about 8.9 percent above 1987. Balance billing amounts continued to decline in 1988 both in absolute dollar amounts (about $2.3 billion in 1988 compared with $2.5 billion in 1987) and as a percent of total potential liabilities for physician and other noninstitutional supplier of services (about 6.5 percent in 1988 compared with 7.7 percent in 1987).

The relatively slow growth in allowed charges in 1985 and 1986 appears to be related in part to limitations on prevailing charge increases imposed by the Deficit Reduction Act of 1984 and by the Emergency Extension Act of 1985 (Table 2). Other limitations on prevailing charge increases imposed by the Omnibus Budget Reconciliation Act of 1987 appear to have limited the rate of growth in allowed charges in 1988.

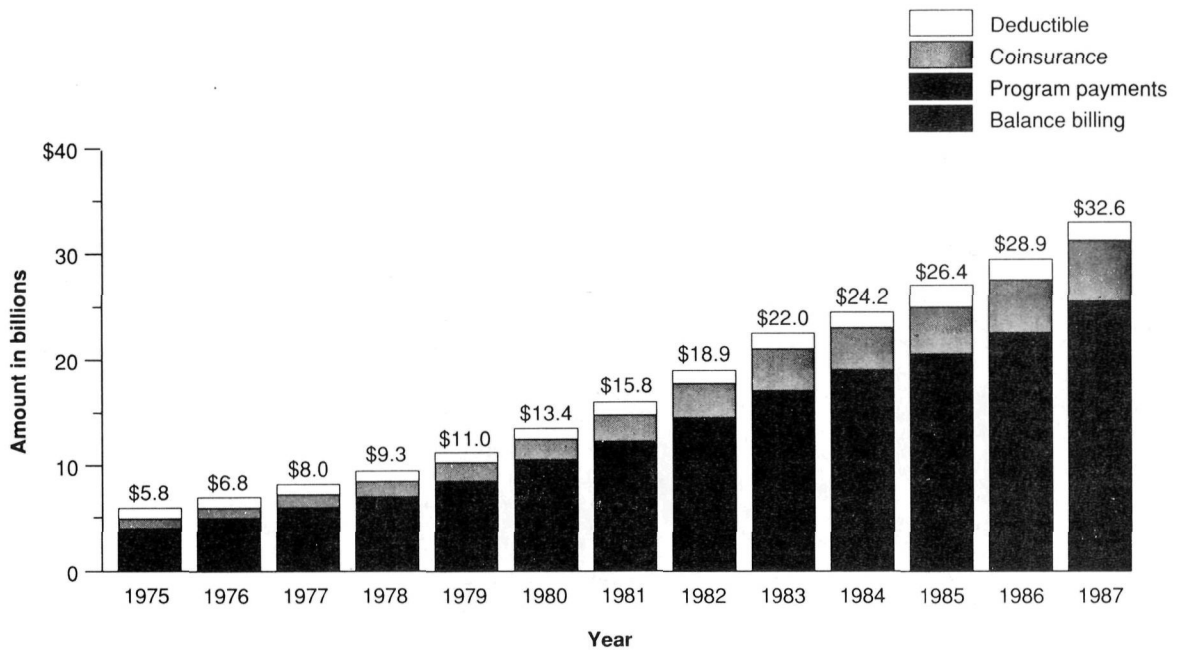
Total Medicare per capita potential liabilities in current dollars for physician and supplier services increased from $227 in 1975 to $989 in 1987 (Table 4 and Figure 4). During the period 1975-87, program expenditures increased at a faster average annual rate, 14.4 percent, than did beneficiary potential liabilities, 10.5 percent. Although the balance billing portion of beneficiary liabilities increased at a faster average annual rate during the period 1975-87, 11.3 percent, than copayments (i.e., deductibles and coinsurance), 10.5 percent, balance billing dollar amounts per capita dropped sharply in 1987.

Part of the growth in physician and supplier services as a percent of the gross national product (GNP) and national health expenditure is because of the faster annual rate of growth of the Medicare population, about 2 percent, than the general population, about 1 percent. Increases in Medicare enrollment above the general population growth accounted for only 15 percent of the increase in liabilities as a proportion of the GNP. Medicare prices and services per capita, which together rose faster than general prices and general outputs per capita, accounted for the remaining 85 percent of the increase in liabilities as a percent of the GNP.

Faster growth in the Medicare population accounted for about one-third of the increases in physician and supplier liabilities as a percent of national health

Figure 1

Estimated dollar amounts of total potential liability for physicians and other noninstitutional suppliers under Medicare: 1975-87



SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Medicare Statistical System and Bureau of Program Operations Workload Report System.

Table 2

Annual rate of change in total liabilities, allowed charges, and program payments under Medicare: Calendar years 1976-87

Calendar year	Total liabilities	Allowed charges	Program payments
1976	18.1	16.5	18.8
1977	18.2	18.8	21.3
1978	15.6	15.8	17.5
1979	17.8	16.9	18.6
1980	22.0	20.6	22.4
1981	18.0	17.4	18.8
1982	19.9	19.9	19.5
1983	16.2	17.1	18.2
1984	10.0	10.1	10.3
1985	9.0	10.2	11.2
1986	9.6	9.4	9.8
1987	12.7	15.8	16.9
	Average annual rate		
1976-87	15.5	15.7	16.9

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Medicare Statistical System and Bureau of Program Operations Workload Report System.

spending. Faster growth in Medicare prices and per capita utilization accounted for the remaining two-thirds.

No general price index is available for Medicare physician average allowed charges under Medicare.

Table 3

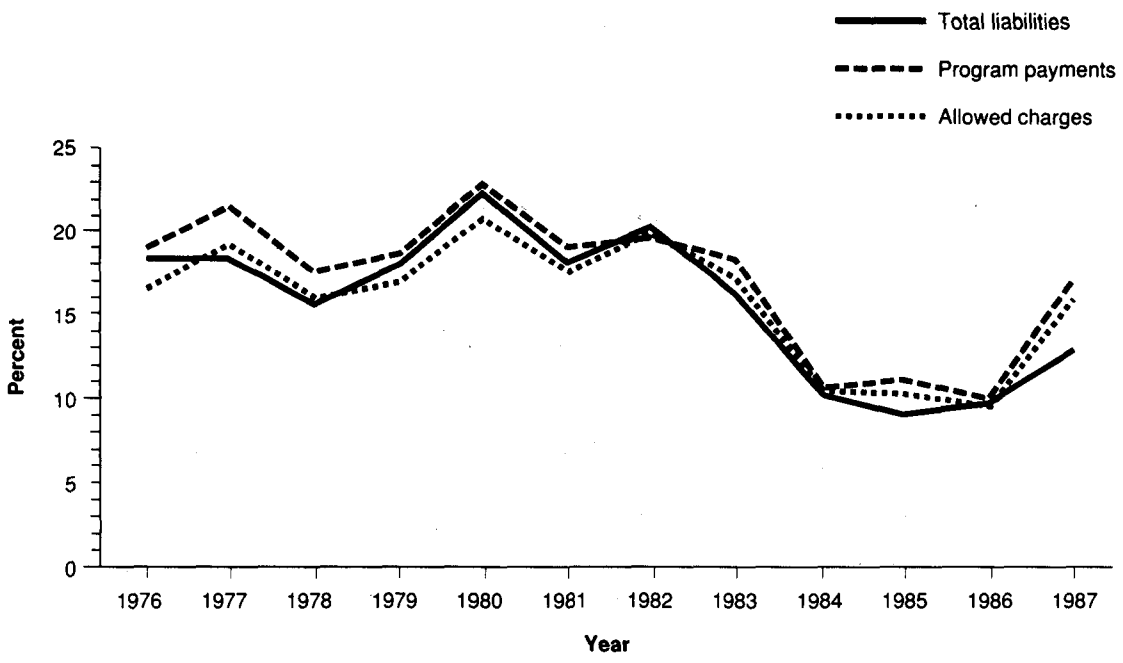
Medicare persons enrolled for supplementary medical insurance and persons receiving benefits for physician and other noninstitutional supplier goods and services: Calendar years 1975-86

Calendar year	Enrollment[1]	Persons receiving benefits[2]	
		Total	Percent of enrollment
	Number in thousands		
1975	25,369	12,261	48.2
1976	26,123	13,279	50.8
1977	26,898	14,096	52.4
1978	27,617	15,182	55.0
1979	28,292	16,105	56.9
1980	28,935	17,258	59.6
1981	29,522	18,097	61.3
1982	29,990	18,017	60.1
1983	30,557	18,923	61.9
1984	31,030	19,960	64.3
1985	31,655	21,410	67.6
1986	32,280	22,205	68.8

[1]Persons with eligibility for supplementary medical insurance at any time in the calendar year.
[2]Persons receiving services for which there were Medicare payments.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Medicare Statistical System, Person Summary File.

Figure 2
Annual rate of change in total liabilities, allowed charges, and program payments under Medicare: Calendar years 1976-87



SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Medicare Statistical System and Bureau of Program Operations Workload Report System.

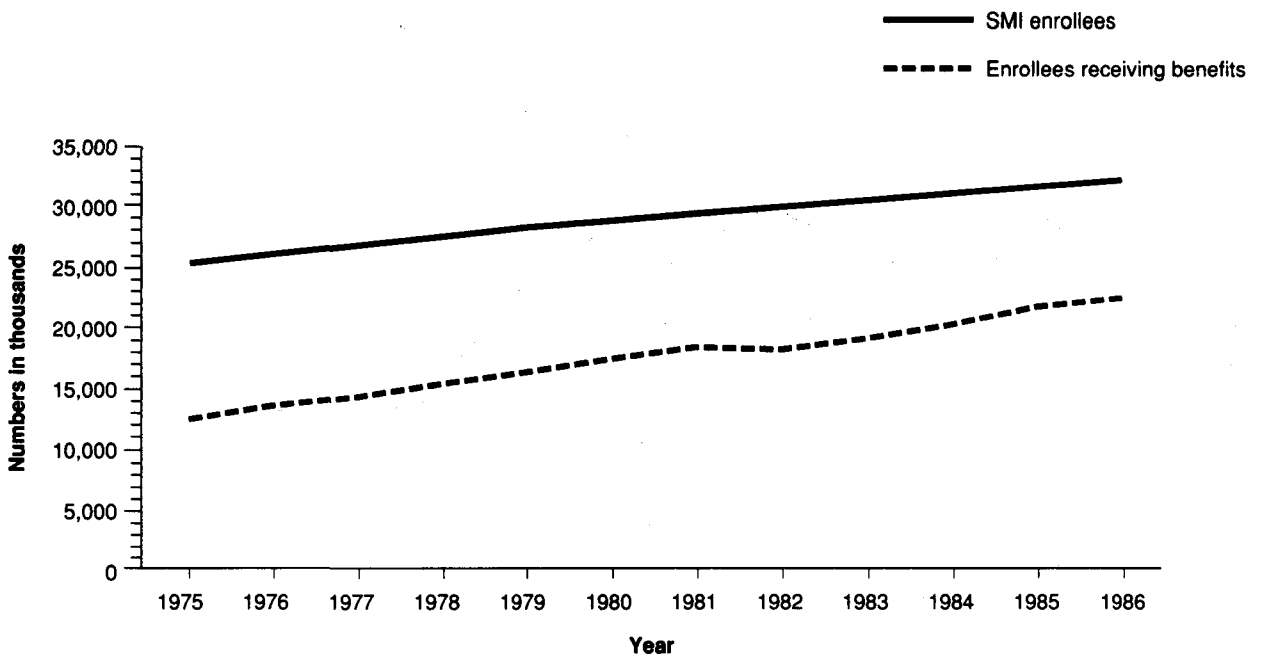
However, price trends for office and inpatient hospital visits may be inferred from Laspeyres indexes[1] that are based on 1985 relative weights for each category of visit and 1985, 1986, and 1987 charges for each category of visit. Prices for office visits increased about 3.4 percent from 1985 to 1986 and about 8.6 percent from 1986 to 1987. Prices for inpatient hospital visits increased about 3.1 percent from 1985 to 1986 and about 10.6 percent from 1986 to 1987. Weighted price increase for combined office and inpatient visits increased about 3.3 percent from 1985 to 1986 and about 9.5 percent from 1986 to 1987.

The difference between price increases and average charge per visit increases represents a measure of upcoding of services in the family groups. Upcoding accounted for about 0.8 percentage point of the 4.2 percent increase in average office visit charges from 1985 to 1986 and about 0.7 percentage point of the 9.4 percent increase in average office visit charges from 1986 to 1987. In addition, upcoding accounted for about 1.9 percentage points of the 5.0 percent increase in average inpatient hospital visit charges from 1985 to 1986 and about 0.6 percentage point of the 11.3 percent increase in average inpatient hospital visit charges from 1986 to 1987. Amounts paid by private insurers on Medicare services as secondary payer claims for physician and supplier services are not detailed in this article. The total amount of these payments in fiscal year 1988 was about $468 million.

[1] A weighted aggregative price index, using base year quantities.

Figure 3

Persons enrolled for supplementary medical insurance (SMI) and persons receiving benefits for physician and other noninstitutional suppliers of goods and services under Medicare: 1975-86



SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Medicare Statistical System, Person Summary File.

Table 4

Total potential liability, program expenditures, and potential beneficiary liability per Medicare enrollee, in current dollars: Calendar years 1975-87

Calendar year	Total potential liability[1]		Program expenditures		Potential beneficiary liability[1]					
					Total		Balance billing		Copayments	
	Amount	Percent	Amount	Percent of total liability	Amount	Percent of total liability	Amount	Percent	Amount	Percent
1975	$227	100.0	$138	61.0	$89	39.0	$21	9.4	$67	29.6
1976	260	100.0	160	61.3	100	38.7	28	10.7	73	28.1
1977	299	100.0	183	62.9	116.	37.1	31	10.3	80	26.9
1978	337	100.0	215	63.9	122	36.1	34	10.1	88	26.0
1979	387	100.0	249	64.3	138	35.7	42	10.8	96	24.9
1980	462	100.0	298	64.5	164	35.5	55	11.9	109	23.6
1981	562	100.0	374	65.0	188	35.0	66	11.7	122	21.6
1982	631	100.0	408	64.7	223	35.3	77	12.3	145	23.0
1983	720	100.0	474	65.8	246	34.2	84	11.6	162	22.5
1984	780	100.0	515	66.0	265	34.0	90	11.5	175	22.5
1985	833	100.0	561	67.3	272	32.8	84	10.1	188	22.6
1986	895	100.0	604	67.5	291	32.5	91	10.2	200	22.3
1987	989	100.0	693	70.1	296	29.9	76	7.7	221	22.3
	Average annual percentage change									
1975-87	13.0		14.4		10.5		11.3		10.5	

[1]Potential liability represents dollar amounts incurred for services of providers. Amounts of beneficiary potential liability actually collected are unknown.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Medicare Statistical System and Bureau of Program Operations Workload Report System.

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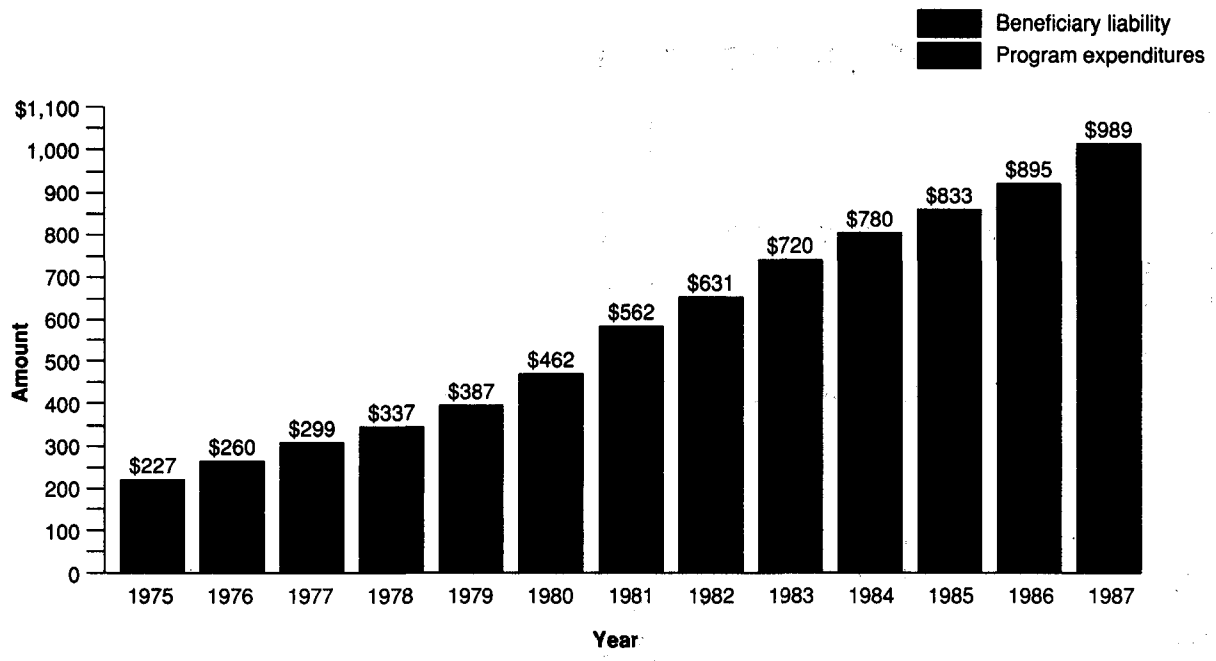
Total potential liability, program expenditures, and beneficiary liability per Medicare enrollee, in current dollars: Calendar years 1975-87



SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Medicare Statistical System and Bureau of Program Operations Workload Report System.