

Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
Massachusetts, continued				
	Southcoast Health System (Formerly St. Luke's Hospital of New Bedford and Charlton Memorial Hospital)	Massachusetts Health & Educational Facilities Authority	A1	S
	Spaulding Rehabilitation Hospital, Series A (Guaranteed by Massachusetts General Hospital)	Massachusetts Health & Educational Facilities Authority	A1	S
	The Learning Center for Deaf Children	Massachusetts Health & Educational Facilities Authority	Ba2	S
	UMass Memorial Healthcare (Formerly Memorial Hospital- Medical Center of Central Massachusetts)	Massachusetts Health & Educational Facilities Authority	Baa1	N
	Vinfin Corporation	Massachusetts Health and Educational Facilities Authority	Ba1	P
MICHIGAN				
	Bay Medical Center (Underlying rating)	Michigan State Hospital Finance Authority	A3	S
	Beaumont Properties (Guaranteed by William Beaumont Hospital)	Royal Oak Hospital Finance Authority	Aa3	S
	Bon Secours Health System (Underlying rating)	St. Clair Shores Economic Development Corporation	A3	S
	Bon Secours Health System (Underlying rating)	Michigan State Hospital Finance Authority	A3	S
	Bronson Methodist Hospital	Kalamazoo Hospital Finance Authority	A1	S
	Charity Obligated Group, Series 1997 D, E, F	Michigan State Hospital Finance Authority	Aa2/VMIG1	S
	Crittenton Hospital	Michigan State Hospital Finance Authority	A1	S
	Daughters of Charity National Health System (Providence Hospital)	Michigan State Hospital Finance Authority	Aa2	S
	Daughters of Charity National Health System (Providence Hospital), Series 1984	Michigan State Hospital Finance Authority	Aa2/VMIG1	S
	Daughters of Charity National Health System (St. Mary's Hospital)	Michigan State Hospital Finance Authority	Aa2	S
	Daughters of Charity National Health System (St. Mary's Hospital), Series 1984	Michigan State Hospital Finance Authority	Aa2/VMIG1	S
	Detroit Medical Center	Michigan State Hospital Finance Authority	Baa2	N
	Detroit Medical Center (Formerly Harper, Grace & Huron Valley Hospitals)	Michigan State Hospital Finance Authority	Baa2	N
	Dickinson County Healthcare System	Dickinson County Healthcare System	Ba1	P
	Edward Sparrow Hospital (Underlying rating)	Michigan State Hospital Finance Authority	A1	S
	Garden City Hospital	Michigan State Hospital Finance Authority	Ba3	S
	Genesys Health System	Michigan State Hospital Finance Authority	Baa2	N
	Hackley Hospital	Michigan State Hospital Finance Authority	A3	N
	Henry Ford Continuing Care Corporation (Guaranteed by Henry Ford Health System)	Michigan State Hospital Finance Authority	Aa3	N
	Henry Ford Health System	Michigan State Hospital Finance Authority	Aa3	N
	Holland Community Hospital	Michigan State Hospital Finance Authority	A2	S
	Hurley Medical Center	Flint Hospital Building Authority	Baa1	S
	Marquette General Hospital	Marquette Hospital Finance Authority	A2	S
	Mary Free Bed Hospital & Rehabilitation Center	Kent Hospital Finance Authority	A2	S
	McLaren Healthcare Corporation	Michigan State Hospital Finance Authority	A1	S
	Memorial Healthcare Center (Formerly Memorial Hospital (Owosso))	Michigan State Hospital Finance Authority	Baa1	S
	Mercy Health Services Obligated Group	Michigan State Hospital Finance Authority	Aa3	S

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
Michigan, continued				
	Mercy Mt. Clemens Corporation (Guaranteed by Henry Ford Health System)	Michigan State Hospital Finance Authority	Aa3	N
	MidMichigan Regional Health System (Underlying rating)	Michigan State Hospital Finance Authority	A1	S
	North Oakland Medical Center	Pontiac Hospital Finance Authority	Baa3	W/D
	Oakwood Hospital (Underlying rating)	Michigan State Hospital Finance Authority	A2	S
	OSF Healthcare System (Formerly Sisters of the Third Order), Series 1989 B (SBPA: Northern Trust Company)	Michigan State Hospital Finance Authority	A2/VMIG1	N
	Pontiac Osteopathic Hospital	Michigan State Hospital Finance Authority	Baa2	S
	Sinai Hospital of Greater Detroit (Now part of Detroit Medical Center)	Michigan State Hospital Finance Authority	Baa2	N
	Spectrum Health	Kent Hospital Finance Authority	Aa3	N
	Spectrum Health, Series 1998 B, C (SBPA: NBD Bank) (Underlying rating)	Kent Hospital Finance Authority	Aa3/VMIG1	N
	St. John Health System	Michigan State Hospital Finance Authority	A1	N
	St. John-Bon Secours Continuing Care Center (Guaranteed by St. John Hospital & Bon Secours Health System)	Michigan Strategic Fund	A1	N
	University of Michigan Hospitals	Regents of the University of Michigan	Aa2	S
	University of Michigan Hospitals, Series 1992 A, 1995 A and Series 1998	Regents of the University of Michigan	Aa2/VMIG1	S
	William Beaumont Hospital	Royal Oak Hospital Finance Authority	Aa3	S
	William Beaumont Hospital, Series 1996 J (SBPA: NBD Bank)	Royal Oak Hospital Finance Authority	Aa3/VMIG1	S
	William Beaumont Hospital, Series 1997 L (SBPA: Bank of America)	Royal Oak Hospital Finance Authority	Aa3/VMIG1	S
MINNESOTA				
	Catholic Health Initiatives (Formerly Catholic Health Corporation (St. Francis Medical Center))	Breckenridge	Aa2	N
	Evangelical Lutheran Good Samaritan Society	Minneapolis	A3	S
	Evangelical Lutheran Good Samaritan Society	Pine River	A3	S
	Fairview Hospital & Health Care Services	Edina	A2	N
	Fairview Hospital & Health Care Services (Underlying rating)	Princeton	A2	N
	Fairview Hospital & Health Care Services (Underlying rating)	Minneapolis	A2	N
	Fairview Hospital & Health Care Services (Underlying rating)	Minnesota Agricultural and Economic Development Board	A2	N
	Fairview Hospital & Health Care Services Series 1993B (Taxable notes) (Underlying rating)	Fairview	A2/VMIG1	N
	HealthEast	Maplewood	Ba1	N
	HealthEast	St. Paul Housing & Redevelopment Authority	Ba1	N
	HealthEast	Washington County Housing & Redevelopment Authority	Ba1	N
	HealthPartners (Formerly Group Health, Inc.)	St. Paul Housing & Redevelopment Authority and the City of Minneapolis	Baa1	N
MISSISSIPPI				
	Baptist Memorial Hospital Golden Triangle	Lowndes County	Baa2	S
	Greenwood Leflore Hospital	Leflore County	Baa2	S

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Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
Mississippi, continued				
	Magnolia Hospital	Mississippi Hospital Equipment & Facilities Authority	Baa3	S
	Medical Foundation, Inc. (Guaranteed by Rush Foundation Hospital)	Mississippi Hospital Equipment & Facilities Authority	Baa3	S
	North Mississippi Health Services (Underlying rating)	Mississippi Hospital Equipment & Facilities Authority	Aa3	S
	Rush Foundation Hospital	Mississippi Hospital Equipment & Facilities Authority	Baa3	S
MISSOURI				
	BJC Health System (Formerly Barnes-Jewish Christian Health Services, Inc.)	Missouri Health & Educational Facilities Authority	Aa2	N
	Boone Hospital Center	Boone County	A3	S
	Capital Region Medical Center (Formerly Charles Still Regional Medical Center)	Missouri Health & Educational Facilities Authority	Baa2	P
	Carondelet Health System (St. Joseph Hospital) (Underlying rating)	Jackson County Industrial Development Authority	Baa1	P
	Carondelet Health System (St. Mary's Hospital of Blue Springs) (Underlying rating)	Jackson County Industrial Development Authority	Baa1	P
	Catholic Health Initiatives	Joplin Industrial Development Authority	Aa2	N
	Daughters of Charity National Health System (DePaul Community Health Center)	St. Louis County Industrial Development Authority	Aa2	S
	Jefferson Memorial Hospital	Missouri Health & Educational Facilities Authority	Baa2	S
	National Benevolent Association (Foxwood Springs Living Center)	Cass County Industrial Development Authority	Baa2	S
	National Benevolent Association (Lenoir Retirement Community Project)	Missouri Health & Educational Facilities Authority	Baa2	S
	National Benevolent Association (Woodhaven Learning Center) health	Missouri Health & Educational Facilities Authority	Baa2	S
	Sisters of Mercy Health System (St. Anthony's Medical Center), Series 1989 A-C (SBPA: ABN AMRO; Rabobank)	Missouri Health & Educational Facilities Authority	Aa1/VMIG1	S
	Sisters of Mercy Health System (St. John's Medical Center (St. Louis))	Missouri Health & Educational Facilities Authority	Aa1	S
	Sisters of Mercy Health System (St. Louis), Series 1989 A-D (SBPA: ABN - AMRO)	Missouri Health & Educational Facilities Authority	Aa1/VMIG1	S
	Sisters of Mercy Health System (St. Louis), Series 1995 B (SBPA: ABN-AMRO ; Rabobank)	Missouri Health & Educational Facilities Authority	Aa1/VMIG1	S
	Sisters of Mercy Health System, Series 1992 B (SBPA: ABN-AMRO)	Missouri Health & Educational Facilities Authority	Aa1/VMIG1	S
	Skaggs Community Hospital	Missouri Health & Educational Facilities Authority	Baa3	S
	University of Missouri Health System (Underlying rating)	Curators of the University of Missouri	A2	S
MONTANA				
	Northern Montana Hospital	Montana Health Facilities Authority	Baa3	S
	Sisters of Charity of Leavenworth Health Services Corporation (St. James and St. Vincent Hospital)	Montana Health Facilities Authority	Aa3	S
	St. Peter's Community Hospital	Lewis and Clark Counties	A3	S

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Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
NEBRASKA				
	Catholic Health Initiatives	Nebraska Investment Finance Authority	Aa2	N
	Catholic Health Initiatives (Formerly Catholic Health Corporation (Archbishop Bergan Mercy Hospital))	Douglas County Hospital Authority No. 2	Aa2	N
	Catholic Health Initiatives (Formerly Catholic Health Corporation (New Cassel, Inc.))	Douglas County Hospital Authority No. 3	Aa2	N
	Catholic Health Initiatives (Formerly Sisters of Charity Health Care System (Cincinnati))	Buffalo County Hospital District No. 1	Aa2	N
	Catholic Health Initiatives (Formerly Sisters of Charity Health Care Systems (Cincinnati))	Lancaster County Hospital Authority No. 1	Aa2	N
	Regional West Medical Center	Scotts Bluff County Hospital Authority No. 1	A3	S
NEVADA				
	Catholic Healthcare West (St. Rose Dominican Hospital)	Henderson	Baa1	N
	Lutheran Health System	Churchill County	Aa3	S
	Washoe County Medical Center	Washoe County	A1	S
NEW HAMPSHIRE				
	Crotched Mountain Rehabilitation Center	New Hampshire Higher Educational & Health Facilities Authority	A3	S
	Elliot Hospital	New Hampshire Higher Educational & Health Facilities Authority	A2	N
	Exeter Hospital	New Hampshire Higher Educational & Health Facilities Authority	A2	S
	Frisbie Memorial Hospital	New Hampshire Higher Educational & Health Facilities Authority	Baa1	S
	St. Joseph Hospital	New Hampshire Higher Educational & Health Facilities Authority	Baa2	S
NEW JERSEY				
	Atlantic City Medical Center	New Jersey Health Care Facilities Financing Authority	A3	S
	Atlantic Health System (Underlying rating)	New Jersey Health Care Facilities Financing Authority	A1	P
	Beth Israel Hospital (Passaic)	New Jersey Health Care Facilities Financing Authority	Baa1	S
	Burdette Tomlin Memorial Hospital	New Jersey Health Care Facilities Financing Authority	A2	S
	Capital Health System (Formerly known as Mercer Medical Center)	New Jersey Health Care Facilities Financing Authority	Baa2	N
	Catholic Health East (Underlying rating)	Camden County Improvement Authority	A1	S
	CentraState Medical Center	New Jersey Health Care Facilities Financing Authority	A3	S
	Chilton Memorial Hospital	New Jersey Health Care Facilities Financing Authority	A2	S
	Clara Maass Medical Center (Underlying rating)	New Jersey Economic Development Authority	Baa2	P
	Columbus Hospital	New Jersey Health Care Facilities Financing Authority	B2	N
	Community Medical Center, Kimball Medical Center and Kensington Manor Care Center (Underlying rating)	New Jersey Health Care Facilities Financing Authority	Baa2	P

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Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
New Jersey, continued				
	Cooper Health System	Camden County Improvement Authority	B1	W/D
	Deborah Heart & Lung Center	New Jersey Health Care Facilities Financing Authority	Baa2	S
	Elizabeth General Hospital	New Jersey Health Care Facilities Financing Authority	Baa2	S
	Englewood Hospital and Medical Center	New Jersey Health Care Facilities Financing Authority	Baa2	WD
	Franciscan Health Partnership, Inc. (Formerly Franciscan Sisters of the Poor Health System) (St. Mary Hospital (Hoboken))	New Jersey Health Care Facilities Financing Authority	Baa2	S
	JFK Health System	New Jersey Health Care Facilities Financing Authority	A3	N
	Kennedy Memorial Hospital - University Medical Center (Underlying rating)	New Jersey Health Care Facilities Financing Authority	A2	S
	Mecer Medical Center	New Jersey Health Care Facilities Financing Authority	Baa2	N
	Newcomb Medical Center	New Jersey Health Care Facilities Financing Authority	Ba3	N
	Newton Memorial Hospital (Underlying rating)	New Jersey Health Care Facilities Financing Authority	Baa1	P
	Palisades Medical Center of the New York Presbyterian Health System	New Jersey Health Care Facilities Financing Authority	Baa3	S
	Princeton Medical Center (Underlying rating)	New Jersey Health Care Facilities Financing Authority	A2	S
	Rahway Hospital	New Jersey Health Care Facilities Financing Authority	Baa2	W/D
	Robert Wood Johnson University Hospital (Underlying rating)	New Jersey Health Care Facilities Financing Authority	A1	S
	Saint Barnabas Health Care System (Underlying rating)	New Jersey Health Care Facilities Financing Authority	Baa2	P
	Shoreline Behavioral Health Center (Guaranteed by Community Medical Center) (Underlying rating)	New Jersey Health Care Facilities Financing Authority	Baa2	P
	Southern Ocean County Hospital	New Jersey Health Care Facilities Financing Authority	Baa1	S
	St. Elizabeth Hospital/Elizabeth General Hospital (Trinitas Health System)	New Jersey Health Care Facilities Financing Authority	Baa2	S
	Union Hospital/Mega Care (Underlying rating)	New Jersey Health Care Facilities Financing Authority	Baa2	P
	West Hudson Hospital (Underlying rating)	New Jersey Health Care Facilities Financing Authority	Baa2	P
NEW MEXICO				
	Catholic Health Initiatives	New Mexico Hospital Equipment Loan Council	Aa2	N
	Catholic Health Initiatives, Series 1997 B (SBPA: Toronto Dominion Bank)	New Mexico Hospital Equipment Loan Council	Aa2/VMIG1	N
	Lutheran Health System	Los Alamos County	Aa3	S
	Memorial Medical Center	New Mexico Hospital Equipment Loan Council	Baa1	S
	San Juan Regional Medical Center (Underlying rating)	Farmington	A3	P

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Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
NEW YORK				
	Beth Israel Medical Center	New York State Medical Care Facilities Finance Agency	Baa2	S
	Beth Israel Medical Center (Underlying rating)	Dormitory Authority of the State of New York	Baa2	S
	Catholic Health East (Underlying rating)	Allegheny County Hospital Development Authority	A1	S
	Catholic Health Services of Long Island	Dormitory Authority of the State of New York	A2	U
	Children's Village	Westchester County Hospital Authority	Baa2	S
	Community-General Hospital of Greater Syracuse	Onondaga County Industrial Development Agency	Baa3	S
	Community-General Hospital of Greater Syracuse (Taxable)	Community-General Hospital of Greater Syracuse	Baa3	S
	Cornwall Hospital	Dormitory Authority of the State of New York	B1	S
	Cortland Memorial Hospital	Cortland County Industrial Development Agency	Baa2	S
	Cortland Memorial Hospital (Taxable)	Cortland Memorial Hospital	Baa2	S
	Franciscan Health Partnership, Inc. (Formerly Franciscan Sisters of the Poor Health System) (Frances Schiever Home & Hospital)	Dormitory Authority of the State of New York	Baa2	S
	Genesee Hospital	Monroe County Industrial Development Agency	B2	W/D
	Good Samaritan Hospital Medical Center, Master Notes Series 1 (SAVRs) (Taxable) (Underlying rating)	New York State Medical Care Facilities Finance Agency	A2	S
	Good Samaritan Hospital Medical Center, Master Notes Series 2 (SAVRs) (Taxable) (Underlying rating)	New York State Medical Care Facilities Finance Agency	A2	S
	Good Samaritan Hospital of Suffern (Guaranteed by Franciscan Health Partnership)	Dormitory Authority of the State of New York	Baa2	S
	Health Insurance Plan of Greater New York	Health Insurance Plan of Greater New York	Ba3	N
	Huntington Hospital	New York State Medical Care Facilities Finance Agency	Baa1	S
	Mercy Community Hospital (Guaranteed by Franciscan Health Partnership Obligated Group)	Port Jervis Industrial Development	Baa2	S
	New York City Health & Hospitals Corporation	New York City	Baa3	S
	Nyack Hospital	Dormitory Authority of the State of New York	Baa2	P
	St. Mary's Hospital at Amsterdam (Guaranteed by Carondelet Health System Obligated Group) (Underlying rating)	Dormitory Authority of the State of New York	Baa1	P
	Vassar Brothers Hospital (Underlying rating)	Dormitory Authority of the State of New York	Baa1	S
NORTH CAROLINA				
	Annie Penn Memorial Hospital	North Carolina Medical Care Commission	Baa3	P
	Cabarrus Memorial Hospital (dba NorthEast Medical Center)	North Carolina Medical Care Commission	A2	S
	Catholic Health East (Underlying rating)	North Carolina Medical Care Commission	A1	S
	Charlotte-Mecklenburg Hospital Authority (dba Carolinas Healthcare System)	Charlotte-Mecklenburg Hospital Authority	Aa3	S
	Charlotte-Mecklenburg Hospital Authority (dba Carolinas Healthcare System, Series 1996 B, C, D (SBPA: NationsBank, N.A.))	Charlotte-Mecklenburg Hospital Authority	Aa3/VMIG1	S

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Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
North Carolina, continued				
	Cumberland County Health System (dba Cape Fear Valley Health System)	Cumberland County	A3	S
	Duke University Hospital	North Carolina Medical Care Commission	Aa3	N
	Duke University Hospital (taxable)	Duke University	Aa3	N
	Duke University Hospital, Series 1985 B, C, D (SBPA: First National Bank of Chicago)	North Carolina Medical Care Commission	Aa3/VMIG1	N
	Duke University Hospital, Series 1993 A (SBPA: First National Bank of Chicago)	North Carolina Medical Care Commission	Aa3/VMIG1	N
	First Health of the Carolinas (Formerly Moore Regional Hospital)	North Carolina Medical Care Commission	Aa3	S
	Gaston Health Care	North Carolina Medical Care Commission	A1	S
	Grace Hospital, Inc.	North Carolina Medical Care Commission	A2	S
	Halifax Regional Medical Center (Formerly Halifax Memorial Hospital)	North Carolina Medical Care Commission	Baa1	S
	Lexington Memorial Hospital	North Carolina Medical Care Commission	Baa1	S
	Mission St. Joseph's Health System	North Carolina Medical Care Commission	Aa3	S
	Mission St. Joseph's Health System (Formerly Memorial Mission Hospital) (Underlying rating)	North Carolina Medical Care Commission	Aa3	S
	Morehead Memorial Hospital	North Carolina Medical Care Commission	Baa3	S
	New Hanover Regional Medical Center (Underlying rating)	New Hanover County	A1	S
	North Carolina Baptist Hospital	North Carolina Medical Care Commission	Aa3	S
	North Carolina Baptist Hospital, Series 1992 B (SBPA: Wachovia Bank, N.A.)	North Carolina Medical Care Commission	Aa3/VMIG1	S
	North Carolina Baptist Hospital, Series 1996 A (SBPA: Wachovia Bank, N.A.)	North Carolina Medical Care Commission	Aa3/VMIG1	S
	Northern Hospital District of Surry County	Northern Hospital District of Surry County	Ba1	S
	Novant Health (Formerly Carolina Medicorp and Presbyterian Hospital) (Underlying rating)	North Carolina Medical Care Commission	Aa3	N
	Pitt County Memorial Hospital	Pitt County	Aa3	N
	Rex Healthcare	North Carolina Medical Care Commission	A1	S
	University of North Carolina Hospitals	Board of Governors of the University of North Carolina	Aa3	S
	Valdese General Hospital, Inc. (Guaranteed by The Charlotte-Mecklenburg Hospital Authority)	North Carolina Medical Care Commission	Aa3/VMIG1	S
	Wayne Memorial Hospital (Underlying rating)	North Carolina Medical Care Commission	A2	S
NORTH DAKOTA				
	Catholic Health Initiatives	Dickinson	Aa2	N
	Catholic Health Initiatives (Formerly Catholic Health Corporation (Carrington Health Center))	Carrington	Aa2	N
	Catholic Health Initiatives (Formerly Catholic Health Corporation (Mercy Hospital))	Williston	Aa2	N
	Catholic Health Initiatives (Formerly Catholic Health Corporation (Mercy Hospital))	Devils Lake	Aa2	N
	Catholic Health Initiatives (Formerly Catholic Health Corporation (Riverview Place))	Cass County	Aa2	N
	Lutheran Health Systems	Valley City	Aa3	S

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Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
OHIO				
	Adena Health System (Formerly Medical Center Hospital) (Underlying rating)	Ross County	A2	S
	Amherst Hospital	Amherst	Caa	S
	Bethesda Hospital & Deaconess Association	Hamilton County	A3	N
	Catholic Health Initiatives	Montgomery County	Aa2	N
	Catholic Health Initiatives (Formerly Sisters of Charity Health Care System (Cincinnati)) (Good Samaritan Hospital)	Hamilton County	Aa2	N
	Catholic Health Initiatives (Formerly Sisters of Charity Health Care System (Cincinnati)) (Good Samaritan Hospital)	Montgomery County	Aa2	N
	Catholic Health Initiatives, Series 1997 B (SBPA: Morgan Guaranty Trust Company of New York)	Montgomery County	Aa2/VMIG1	N
	Catholic Healthcare Partners	Lorain County	Aa3	N
	Catholic Healthcare Partners (Formerly Mercy Health System (Cincinnati))	Lorain County	Aa3	N
	Catholic Healthcare Partners (Formerly Mercy Health System (Cincinnati)), Series 1994 B	Clermont County	Aa3/VMIG1	N
	Catholic Healthcare Partners (Formerly Mercy Health System (Cincinnati)), Series 1996 A	Clermont County	Aa3/VMIG1	N
	Catholic Healthcare Partners (Formerly Mercy Health System (Cincinnati)), Series 1997 A (SBPA: NBD Bank)	Lorain County	Aa3/VMIG1	N
	Catholic Healthcare Partners (Formerly Mercy Health System) (Underlying rating)	Clermont County	Aa3	N
	Catholic Healthcare Partners (St. Vincent Hospital and Medical Center) (Underlying rating)	Lucas County	Aa3	N
	Children's Hospital (Columbus)	Franklin County	Aa3	S
	Children's Hospital (Columbus), Series 1992 B (SBPA: Banc One)	Franklin County	Aa3/VMIG1	S
	Cleveland Clinic Health System	Cuyahoga County	Aa3	N
	Cleveland Clinic Health System, Series 1996 B	Cuyahoga County	Aa3/VMIG1	N
	Cleveland Clinic Health System, Series 1997 C, D	Cuyahoga County	Aa3/VMIG1	N
	Cleveland Clinic Health System, Series 1999	Cuyahoga County	Aa3/VMIG1	N
	Deaconess Hospital of Cincinnati	Hamilton County	A3	S
	DoctorsOhioHealth (Formerly Doctor's Hospital Columbus)	Franklin County	Baa3	S
	East Liverpool City Hospital	East Liverpool	Baa1	S
	Fairview Health System (Member of Cleveland Clinic Health System)	Cuyahoga County	Aa3	N
	Firelands Community Hospital	Erie County	A2	S
	Fort Hamilton Hospital	Butler County	Baa1	S
	Forum Health (Underlying rating)	Mahoning County	A1	S
	Franciscan Health Partnership, Inc.	Montgomery County	Baa2	S
	Franciscan Health Partnership, Inc. (Providence Hospital)	Hamilton County	Baa2	S
	Franciscan Health Partnership, Inc. (Schroder Manor) (Formerly Franciscan Sisters of the Poor, Inc.)	Butler County	Baa2	S

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Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
Ohio, continued				
	Franciscan Health Partnership, Inc. (St. Francis-St. George Hospital) (Formerly Franciscan Sisters of the Poor, Inc.)	Hamilton County	Baa2	S
	Galion Community Hospital	Galion	Ba1	N
	Grant Riverside Methodist Hospital (dba OhioHealth)	Franklin County	Aa3	N
	Greene Memorial Hospital	Greene County	A2	S
	Holy Cross Health System (Mount Carmel Health System)	Franklin County	Aa3	N
	Holy Cross Health System (Mount Carmel Health System), Series 1995 (SBPA: Morgan Guaranty Trust Company)	Franklin County	Aa3/VMIG1	N
	Marietta Area Health Care	Washington County	Baa1	P
	Miami Valley Hospital (Underlying rating)	Montgomery County	Aa3	S
	Middletown Regional Hospital (Underlying rating)	Butler County	A2	S
	Samaritan Hospital	Ashland	Baa2	S
	Southwest General Hospital (Underlying rating)	Middleburg Heights	A2	S
	St. Luke's Hospital	Maumee	A1	S
	Summa Health System (Formerly Akron City Hospital)	Akron-Bath-Copley Joint Township Hospital District	Baa1	N
	Trinity Medical Center (Formerly St. John Medical Center Hospital)	Jefferson County	Baa1	P
	Union Hospital	Tuscarawas County	Baa2	S
	University Hospitals Health System	Cuyahoga County	A1	S
	Upper Valley Medical Center Hospital	Miami County	Baa2	S
OKLAHOMA				
	Deaconess Health Care Corporation	Oklahoma Industries Authority	Baa2	S
	Hillcrest Healthcare System	Oklahoma Development Finance Authority	Baa2	P
	Integrus Obligated Group (Underlying rating)	Oklahoma Industries Authority	A1	S
	Integrus Obligated Group, Series 1990 B (SBPA: Morgan Guaranty Trust Company of New York)	Oklahoma Industries Authority	A1/VMIG1	S
	Integrus Obligated Group, Series 1995 A (SBPA: Morgan Guaranty Trust Company of New York)	Oklahoma Industries Authority	A1/VMIG1	S
	National Benevolent Association (Oklahoma Christian Home Project)	Oklahoma County Industrial Development Authority	Baa2	S
	Sisters of Mercy Health System (St. Louis) (Mercy Health Center)	Oklahoma Industries Authority	Aa1	S
	St. John Medical Center	Tulsa Industrial Development Authority	Aa3	S
	Stillwater Medical Center (Underlying rating)	Tulsa Industrial Development Authority	Baa3	P
	St. John Medical Center Physicians Building (LOC: Sanwa Bank), Series 1984	Tulsa Industrial Development Authority	Aa3/VMIG1	S
	Stillwater Medical Center	Stillwater Medical Center Authority	Baa3	P
	Valley View Regional Medical Center	Valley View Hospital Authority	Baa2	S

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Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
OREGON				
	Catholic Health Initiatives (Formerly Catholic Health Corporation (Evergreen Court for Retirement Living))	Bay Area Health District Hospital Facilities Authority	Aa2	N
	Catholic Health Initiatives (Formerly Catholic Health Corporation (Holy Rosary Hospital))	Ontario Hospital Facilities Authority	Aa2	N
	Catholic Health Initiatives (Formerly Catholic Health Corporation (Mercy Medical Center))	Douglas County Hospital Facilities Authority	Aa2	N
	Catholic Health Initiatives, Series 1997 B (SBPA: Toronto Dominion Bank)	Umatilla County Hospital Facilities Authority	Aa2/VMIG1	N
	Good Shepherd Community Hospital	Umatilla County Hospital Facilities Authority	Baa3	S
	Kaiser Foundation Hospitals (Formerly Sisters of Providence Health System)	Clackamas County Health Facilities Authority	A3	N
	McKenzie-Willamette Memorial Hospital	Springfield Hospital Facilities Authority	Baa3	S
	Providence Health System (Formerly Sisters of Providence Health System)	Clackamas County Health Facilities Authority	A1	S
	St. Charles Medical Center Hospital	Deschutes County Hospital Facility Authority	Aa3	S
	Willamette Falls Hospital	Clackamas County Health Facilities Authority	Baa1	S
PENNSYLVANIA				
	Allegheny General Hospital	Allegheny County Hospital Development Authority	Caa1	W/UD
	Allegheny General Hospital	Pennsylvania Higher Educational Facilities Authority	Caa1	W/UD
	Allegheny Valley School	Allegheny County Hospital Development Authority	Ba1	S
	Armstrong County Memorial Hospital	Armstrong County Hospital Authority	Ba1	P
	Bon Secours Health System (Underlying rating)	Blair County Hospital	A3	S
	Carlisle Hospital and Health Services	Cumberland County Municipal Authority	Baa3	N
	Catholic Health East (Underlying rating)	Delaware County Authority	A1	S
	Catholic Health Initiatives	St. Mary Hospital Authority	Aa2	N
	Catholic Health Initiatives (Formerly Franciscan Health System) (Underlying rating)	St. Mary Hospital Authority	Aa2	N
	Catholic Health Initiatives (Formerly Franciscan Health System (St. Agnes Medical Center))	Philadelphia Hospital & Higher Educational Facilities Authority	Aa2	N
	Catholic Health Initiatives (Formerly Franciscan Health System (St. Joseph Hospital of Lancaster)) (Underlying rating)	St. Mary Hospital Authority	Aa2	N
	Catholic Health Initiatives (Formerly Franciscan Health System (St. Joseph Hospital of Reading)) (Underlying rating)	St. Mary Hospital Authority	Aa2	N
	Catholic Health Initiatives (Formerly Franciscan Health System (St. Mary Hospital of Langhorne)) (Underlying rating)	St. Mary Hospital Authority	Aa2	N
	Catholic Health Initiatives, Series 1997B (SBPA: Morgan Guaranty Trust Company of New York)	St. Mary Hospital Authority	Aa2/VMIG1	N
	Catholic Healthcare Partners (Formerly Mercy Health System) (Underlying rating)	Scranton-Lackawanna Health & Welfare Authority	Aa3	N
	Catholic Healthcare Partners (Formerly Mercy Health System), Series 1996 A	Scranton-Lackawanna Health & Welfare Authority	Aa3/VMIG1	N
	Centre Community Hospital	Centre County Hospital Authority	A2	S
	Charity Obligated Group, Series 1997 F	Pottsville City Hospital Authority	Aa2/VMIG1	S
	Charity Obligated Group	Schuylkill County Industrial Development Authority	Aa2	S

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
Pennsylvania, continued				
	Chestnut Hill Hospital	Philadelphia Hospital and Higher Educational Facilities Authority	Baa2	N
	Children's Hospital of Philadelphia	Philadelphia Hospital and Higher Educational Facilities Authority	Aa3	S
	Children's Hospital of Philadelphia, Series 1992 (SBPA: Morgan Guaranty Trust Company)	Philadelphia Hospital and Higher Educational Facilities Authority	Aa3/VMIG1	S
	Children's Hospital of Philadelphia, Series 1996A (SBPA: Morgan Guaranty Trust Company)	Philadelphia Hospital and Higher Educational Facilities Authority	Aa3/VMIG1	S
	Citizen's General Hospital	Westmoreland County Industrial Development Authority	Baa3	S
	Conemaugh Valley Memorial Hospital (Underlying rating)	Cambria County Hospital Development Authority	A3	N
	Conemaugh Valley Memorial Hospital (Underlying rating)	South Fork Municipal Authority	A3	N
	Crozer-Chester Medical Center	Delaware County Authority	Baa2	S
	Daughters of Charity National Health System (Good Samaritan Hospital of Pottsville)	Pottsville City Hospital Authority	Aa2	S
	Delaware Valley Obligated Group	Pennsylvania Higher Educational Facilities Authority	Caa3	W/UD
	Doylestown Hospital	Doylestown Hospital Authority	A2	S
	Elwyn, Inc.	Delaware County Authority	Baa3	P
	Forbes Health System	Monroe Hospital Authority	Caa1	W/UD
	Friends Hospital	Philadelphia Hospital and Higher Educational Facilities Authority	Baa3	N
	Good Samaritan Medical Center of Johnstown (Guaranteed by Conemaugh Valley Memorial Hospital) (Underlying rating)	South Fork Municipal Authority	A3	N
	Graduate Health System (Allegheny Hospitals, Centennial)	Philadelphia Hospital and Higher Educational Facilities Authority	Ca	N
	Hamot Health Foundation	Erie County Hospital Authority	A2	S
	Hazleton General Hospital	Hazleton Health Services Authority	Baa2	S
	Hazleton-St. Joseph Medical Center	Hazleton Health Services Authority	Baa3	S
	Highlands at Wyomissing (Guaranteed by The Reading Hospital)	Berks County Municipal Authority	Aa3	S
	Holy Redeemer Hospital (Underlying rating)	Montgomery County Higher Education and Health Authority	Baa2	N
	Indiana County Hospital	Indiana County Hospital Authority	A3	S
	Jeanes Health System	Philadelphia Hospital and Higher Educational Facilities Authority	Baa2	S
	Jefferson Health System	Chester County Health and Education Facilities Authority	A1	N
	Jefferson Health System	Philadelphia Hospital and Higher Educational Facilities Authority	A1	N
	Lehigh Valley Health Network (Formerly Lehigh Valley Hospital) (Underlying rating)	Lehigh County General Purpose Authority	A1	N
	Lewistown Hospital	Mifflin County Hospital Authority	A3	S
	Lower Bucks Hospital	Langhorne Manor Borough Higher Educational and Health Authority	B1	N
	Main Line Health System (Member of the Jefferson Health System)	Chester County Health and Education Facilities Authority	Aa3	N
	Masonic Homes	Lancaster County Hospital Authority	A1	S

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) *(continued)*

State	Issuer	Issuing Authority	Rating	Outlook ¹
Pennsylvania, continued				
	Masonic Homes, Series 1996 (SBPA: First Union National Bank)	Lancaster County Hospital Authority	A1VMIG1	S
	Messiah Village	Dauphin County General Authority	Baa2	S
	Metro Health Center	Erie County Hospital Authority	B1	N
	Metropolitan Hospital	Philadelphia Hospitals Authority	C	-
	Monongahela Valley Hospital	Washington County Hospital Authority	A2	S
	Montgomery Hospital	Montgomery County Higher Education and Health Authority	Baa2	S
	Ohio Valley General Hospital	Allegheny County Hospital Development Authority	Baa1	N
	Penn State Geisinger Health System (Formerly Geisinger Health System)	Geisinger Authority	Aa2	S
	Penn State Geisinger Health System (Formerly Geisinger Health System), Series 1998 B	Geisinger Authority	Aa2/VMIG1	S
	Pine Run Retirement Community	Doylestown Hospital Authority	Baa1	S
	Reading Hospital & Medical Center	Berks County Municipal Authority	Aa3	S
	Sacred Heart Health System	Allentown Area Hospital Authority	Baa2	S
	Somerset Community Hospital	Somerset County Hospital Authority	Baa2	S
	South Hills Health System	Allegheny County Hospital Development Authority	A2	S
	St. Francis Health Care Services (Guaranteed by St. Francis Medical Center (Pittsburgh))	Butler County Hospital Authority	Baa1	N
	St. Francis Hospital of New Castle Hospital (Guaranteed by St. Francis Medical Center (Pittsburgh))	New Castle Area Hospital Authority	Baa1	N
	St. Francis Medical Center	Allegheny County Hospital Development Authority	Baa1	N
	Temple University Children's Hospital (Guaranteed by Temple University Hospital)	Philadelphia Hospital and Higher Educational Facilities Authority	Baa1	N
	Temple University Hospital	Philadelphia Hospital and Higher Educational Facilities Authority	Baa1	N
	University of Pennsylvania Health Services	Philadelphia Hospital and Higher Educational Facilities Authority	A2	N
	University of Pennsylvania Health Services Series 1998B (SBPA: First Union National Bank, State Street Bank, Bayerische Landesbank Girozentrale, and Morgan Guaranty Trust Company)	Philadelphia Hospital and Higher Educational Facilities Authority	A2/VMIG1	N
	University of Pennsylvania Health Services, Series 1994 B	Philadelphia Hospital and Higher Educational Facilities Authority	A2/VMIG1	N
	University of Pennsylvania Health Services, Series 1996 C (SBPA: First Union National Bank, State Street Bank, Bayerische Landesbank Girozentrale, and Morgan Guaranty Trust Company)	Pennsylvania Hospital and Higher Educational Facilities Authority	A2/VMIG1	N
	Valley Health System (Underlying rating)	Beaver County Hospital Authority	A1	S
	Wills Eye Hospital	Philadelphia Hospital and Higher Educational Facilities Authority	A2	S
	Windber Medical Center of Johnstown (Guaranteed by Conemaugh Valley Memorial Hospital) (Underlying rating)	South Fork Municipal Authority	A3	N

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) *(continued)*

State	Issuer	Issuing Authority	Rating	Outlook ¹
RHODE ISLAND				
	South County Hospital	Rhode Island Health & Educational Building Corporation	A3	S
	St. Joseph Health Services of Rhode Island	Rhode Island Health & Educational Building Corporation	Baa3	S
	Westerly Hospital	Rhode Island Health & Educational Building Corporation	Baa3	S
SOUTH CAROLINA				
	Bon Secours Health System Obligated Group (Underlying rating)	Charleston County	A3	S
	CareAlliance Health Services	Charleston County	A3	P
	Conway Hospital	Horry County	A3	S
	Franciscan Health Partnership (Formerly Franciscan Sisters of the Poor (St. Francis Hospital))	South Carolina Jobs-Economic Development Authority	Baa2	S
	Greenville Hospital	Greenville Hospital System Board of Trustees	Aa3	S
	Kershaw County Memorial Hospital	Kershaw County	Baa2	S
	Medical University Hospital	Medical University of South Carolina	A3	S
	Self Memorial Hospital (Underlying rating)	Greenwood County	A2	S
SOUTH DAKOTA				
	Evangelical Lutheran Good Samaritan Society (Taxable medium term notes)	Evangelical Lutheran Good Samaritan Society	A3	S
	Lutheran Health System	Spearfish	Aa3	S
	Prairie Lakes Health Care System	South Dakota Health & Educational Facilities Authority	Baa2	S
	Rapid City Regional Hospital (Underlying rating)	South Dakota Health & Educational Facilities Authority	A1	P
	Sioux Valley Hospital & Health System	South Dakota Health & Educational Facilities Authority	Aa3	S
	Sioux Valley Hospital & Health System, Series 1992 A	South Dakota Health & Educational Facilities Authority	Aa3/VMIG1	S
	Sioux Valley Hospital & Health System, Series 1993	South Dakota Health & Educational Facilities Authority	Aa3/VMIG1	S
	Sioux Valley Hospital & Health System, Series 1997 (SBPA: First Bank N.A)	South Dakota Health & Educational Facilities Authority	Aa3/VMIG1	S
TENNESSEE				
	Adventist Health System/Sunbelt Hospital	Metropolitan Government of Nashville & Davidson Counties Health & Educational Facilities Board	Baa1	S
	Adventist Health System/Sunbelt (Highland Hospital) (Underlying rating)	Portland Health & Educational Facilities Board	Baa1	S
	Adventist Health System/Sunbelt (Takoma Adventist Hospital) (Underlying rating)	Greenville Health & Educational Facilities Board	Baa1	S
	Adventist Health System/Sunbelt Hospital (Underlying rating)	Metropolitan Government of Nashville & Davidson Counties Health & Educational Facilities Board	Baa1	S
	Alexian Brothers Health System (Alexian Village of Tennessee)	Signal Mountain Health, Educational & Housing Facilities Board	Baa1	S
	Baptist Health System of East Tennessee	Knox County Health, Educational & Housing Facilities Board	Baa1	N
	Baptist Hospital (Nashville) (Underlying rating)	Metropolitan Government of Nashville & Davidson Counties Health & Educational Facilities Board	A2	S
	Blount Memorial Hospital	Blount County	Baa1	S

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) *(continued)*

State	Issuer	Issuing Authority	Rating	Outlook ¹
Tennessee, continued				
	Catholic Health Initiatives	Chattanooga Health, Educational & Housing Facilities Board	Aa2	N
	Catholic Healthcare Partners (Formerly Mercy Health System)	Knox County Health, Education & Housing Facilities Board	Aa3/VMIG1	N
	Catholic Healthcare Partners (Formerly Mercy Health System) (Underlying rating)	Knox County Health, Education & Housing Facilities Board	Aa3	N
	Charity Obligated Group	Metropolitan Government of Nashville & Davidson Counties Health & Educational Facilities Board	Aa2	S
	Clarksville Regional Health System	Montgomery County Higher Education & Health Authority	Baa2	S
	Cumberland Medical Center	Crossville Health & Educational Facilities Board	Baa1	S
	East Tennessee Children's Hospital	Knox County Health, Education & Housing Facilities Board	Baa1	S
	Erlanger Medical Center	Chattanooga - Hamilton County Hospital Authority	Baa1	S
	Jackson-Madison County General Hospital	Jackson City	A1	S
	Jackson-Madison County General Hospital	Madison County	A1	S
	Northcrest Medical Center	Springfield Health and Educational Facilities Board	Baa3	S
	Oak Ridge Methodist Medical Center	Anderson County Health & Educational Facilities Board	A1	S
	University Health System (Knoxville)	Knox County Health, Education & Housing Facilities Board	Baa1	S
TEXAS				
	Adventist Health System/Sunbelt (Huguley Memorial Medical Center)	Tarrant County Health Facilities Development Corporation	Baa1	S
	Adventist Health System/Sunbelt (Huguley Memorial Medical Center) (Underlying rating)	Tarrant County Health Facilities Development Corporation	Baa1	S
	Adventist Health System/Sunbelt Obligated Group (Underlying rating)	Tarrant County Health Facilities Development Corporation	Baa1	S
	Adventist Health System/Sunbelt Obligated Group (Underlying rating)	Copperas Cove Health Facilities Development Corporation	Baa1	S
	Baptist Health Care System	Jefferson County Health Facilities Development Corporation	Ba1	P
	Baylor Health Care System	North Central Texas Health Facilities Development Corporation	Aa3	S
	Baylor/Richardson Medical Center	Richardson Hospital Authority	Baa2	P
	Charity Obligated Group, Series 1997 D	Waco Health Facilities Development Corp.	Baa1	S
	Christus Health	Harris County Health Facilities Development Corporation	Aa3	N
	Christus Health (Formerly Incarnate Word Health System)	Coastal Bend Health Facilities Development Corporation	Aa3	N
	Cook Children's Medical Center (Underlying rating)	Bell County Health Facilities Development Corporation	A1	S
	Daughters of Charity National Health System (Daughters of Charity Health Services of Austin) (Underlying rating)	Travis County Health Facilities Development Corporation	Aa2	S
	Daughters of Charity National Health System (Daughters of Charity Health Services of Waco)	Waco Health Facilities Development Corporation	Aa2	S
	Daughters of Charity National Health System (Hotel Dieu & Providence Hospital)	Waco Health Facilities Development Corporation	Aa2	S

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
Texas, continued				
	Daughters of Charity National Health System (Seton Medical Center)	Travis County Health Facilities Development Corporation	Aa2	S
	East Texas Medical Center Regional Healthcare System	Tyler Health Facilities Development Corporation	B3	N
	Ector County Hospital	Ector County Hospital District	A2	S
	Evangelical Lutheran Good Samaritan Society	Odessa Health Facilities Development Corporation	A3	S
	Fort Worth Osteopathic Hospital	Tarrant County Health Facilities Development Corporation	Baa2	S
	Memorial Hermann Hospital System (Formerly Memorial Healthcare System) (Underlying rating)	Harris County Health Facilities Development Corporation	A3	S
	Mother Frances Health System	Tyler Health Facilities Development Corporation	Baa2	S
	National Benevolent Association (Patriot Heights)	Bexar County Health Facilities Development Corporation	Baa2	S
	Northeast Medical Center Hospital	Northeast Hospital Authority	Baa1	U
	Parkland Memorial Hospital	Dallas County Hospital District	A1	S
	Scott & White Memorial Hospital & Scott Sherwood & Brindley Foundation	Bell County Health Facilities Development Corporation	Aa3	N
	Sisters of Mercy Health System (St. Louis) (Mercy Regional Medical Center)	McAllen Health Facilities Development Corporation	Aa1	S
	St. Joseph Health System	Lubbock Health Facilities Development Corporation	Aa3	S
	St. Joseph Health System, Series 1985A	Lubbock Health Facilities Development Corporation	Aa3/VMIG1	S
	Texas Children's Hospital	Harris County Health Facilities Development Corporation	Aa2	S
	Texas Health Resources System (Underlying rating)	Tarrant County Health Facilities Development Corporation	A1	N
	Texas Health Resources System (Underlying rating)	North Central Texas Health Facilities Development Corporation	A1	N
	Texas Health Resources System (Underlying rating)	Plano Health Facilities Development Corporation	A1	N
	Titus County Memorial Hospital	Titus County Hospital District	Baa3	S
	Tomball Regional Hospital	Tomball Hospital Authority	Baa2	S
	United Regional Health Care System (Underlying rating)	North Texas Health Facilities Development Corporation	A2	P
	Zale Lipshy University Hospital (Underlying rating)	North Central Texas Health Facilities Development Corporation	A2	S
UTAH				
	IHC Health Services	Utah County	Aa2/VMIG1	S
	IHC Health Services	Weber County	Aa2	S
	IHC Health Services (Underlying rating)	Salt Lake City	Aa2	S
	IHC Health Services, Series 1990 Class A (Pooled Hospital Finance Program) (SBPA: Westdeutsche Landesbank Girozentrale)	Salt Lake City	Aa2/VMIG1	S
	IHC Health Services, Series 1990 Class B (Pooled Hospital Finance Program) (SBPA: Westdeutsche Landesbank Girozentrale)	Salt Lake City	Aa2/VMIG1	S
	IHC Hospitals, Inc. (Cottonwood Hospital) (Underlying rating)	Murray City	Aa2	S
	IHC Hospitals, Inc. (L.D.S. Hospital)	Salt Lake City	Aa2	S

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) *(continued)*

State	Issuer	Issuing Authority	Rating	Outlook ¹
Utah, continued				
	University of Utah Hospital (Moral Obligation of the State of Utah), Series 1998	State Board of Regents of the State of Utah	Aa3	S
	University of Utah Hospital (Underlying rating)	State Board of Regents of the State of Utah	A2	S
VIRGINIA				
	Alexandria Medical Properties (Taxable) (Guaranteed by Alexandria Hospital)	Alexandria Medical Properties	A2	S
	Bon Secours Health System (St. Mary's Hospital) (Underlying rating)	Henrico County Industrial Development Authority	A3	S
	Bon Secours Health System (Underlying rating)	Peninsula Ports Authority of Virginia	A3	S
	Bon Secours Health System (Underlying rating)	Norfolk Industrial Development Authority	A3	S
	Bon Secours Health System (Underlying rating)	Henrico County Industrial Development Authority	A3	S
	Bon Secours Health System (Underlying rating)	Hanover County Industrial Development Authority	A3	S
	Carilion Health System	Roanoke Industrial Development Authority	Aa3	S
	Carilion Health System, Series 1995 A-D	Roanoke Industrial Development Authority	Aa3/VMIG1	S
	Carilion Health System, Series 1997 A, B	Roanoke Industrial Development Authority	Aa3/VMIG1	S
	Centra Health	Lynchburg Industrial Development Authority	A1	P
	Chesapeake General Hospital	Chesapeake Hospital Authority	A2	S
	Children's Hospital of The King's Daughters	Norfolk Industrial Development Authority	A1	S
	Danville Regional Medical Center (Underlying rating)	Danville	A2	S
	Inova Health System	Fairfax County Industrial Development Authority	Aa2	S
	Inova Health System, Series 1988 A-D	Fairfax County Industrial Development Authority	Aa2/VMIG1	S
	Inova Health System, Series 1989 A	Fairfax County Industrial Development Authority	Aa2/VMIG1	S
	Johnston Memorial Hospital	Washington County Industrial Development Authority	A2	S
	Johnston Memorial Hospital	Abingdon Industrial Development Authority	A2	S
	Martha Jefferson Hospital & MJH Foundation	Charlottesville Industrial Development Authority	A2	P
	Martha Jefferson Hospital & MJH Foundation	Albemarle County Industrial Development Authority	A2	P
	Medical College of Virginia	Virginia Commonwealth University	A1	S
	MWH Mediacorp Health System (Formerly Mary Washington Hospital) (Underlying rating)	Fredericksburg Industrial Development Authority	A2	S
	Memorial Hospital of Martinsville & Henry County	Martinsville Industrial Development Authority	A2	S
	Memorial Hospital of Martinsville & Henry County	Henry County Industrial Development Authority	A2	S
	Memorial Regional Medical Center (Project at Hanover Medical Park) (Guaranteed by Bon Secours Health System Obligated Group)	Hanover County Industrial Development Authority	A3	S
	Potomac Hospital	Prince William County Industrial Development Authority	A2	P
	Prince William Hospital	Prince William County Industrial Development Authority	A2	P
	Prince William Hospital	Manassas Industrial Development Authority	A2	P
	Richmond Eye & Ear Hospital	Richmond Eye & Ear Hospital Authority	Ba1	S
	Riverside Health System	Peninsula Ports Authority of Virginia	Aa2	N

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) (continued)

State	Issuer	Issuing Authority	Rating	Outlook ¹
Virginia, continued				
	Riverside Health System, Series 1997	James City County Industrial Development Authority	Aa2/VMIG1	N
	Sentara Health System	Hampton Industrial Development Authority	Aa2	S
	Sentara Health System (Formerly Medical Center Hospital)	Norfolk Industrial Development Authority	Aa2	S
	Sentara Health System (Formerly Medical Center Hospital)	Virginia Beach Development Authority	Aa2	S
	Sentara Health System, Series 1997 B	Hampton Industrial Development Authority	Aa2/VMIG1	S
	Sentara Life Care Corporation (Sentara Health System, Subordinate guarantee)	Norfolk Industrial Development Authority	Aa2	S
	Sentara Life Care Corporation (Sentara Health System, Subordinate guarantee)	Chesapeake Industrial Development Authority	Aa2	S
	Southside Regional Medical Center	Petersburg Hospital Authority	A3	S
	Winchester Medical Center (Underlying rating)	Winchester Industrial Development Authority	A1	S
	Winchester Medical Center (Underlying rating)	Clarke County Industrial Development Authority	A1	S
WASHINGTON				
	Catholic Health Initiatives (Underlying rating)	Washington Health Care Facilities Authority	Aa2	N
	Children's Hospital (Seattle)	Washington Health Care Facilities Authority	Aa3	S
	Evergreen Community Health Care	King County Public Hospital District No. 2	A1	S
	Kadlec Medical Center (Underlying rating)	Washington Health Care Facilities Authority	A3	S
	Providence Health System (Formerly Sisters of Providence)	Washington Health Care Facilities Authority	A1	S
	Providence Health System (Formerly Sisters of Providence)	Sisters of Providence Health System	A1	S
	Providence Health System (Formerly Sisters of Providence)	Washington Health Care Facilities Authority	A1/VMIG1	S
	Skagit Valley Hospital & Health Center	Skagit County Public Hospital District	Baa2	P
	Southwest Washington Medical Center	Washington Health Care Facilities Authority	A1	S
	Stevens Memorial Hospital	Snohomish County Public Hospital District No. 2	Baa3	S
WEST VIRGINIA				
	Charleston Area Medical Center	West Virginia Hospital Finance Authority	A2	N
	Davis Health System	Philippi City	Baa1	S
	Davis Health System (Underlying rating)	Randolph County Commission	Baa1	S
	Fairmont General Hospital	West Virginia Hospital Finance Authority	Baa3	S
	General Division Medical Office Building (Guaranteed by Charleston Area Medical Center)	West Virginia Hospital Finance Authority	A2	N
	Princeton Community Hospital	Princeton City	Baa2	S
WISCONSIN				
	Catholic Health Initiatives (Formerly Catholic Health Corporation (St. Catherine's Hospital and Trinity Memorial Hospital))	Wisconsin Health and Educational Facilities Authority	Aa2	N
	Charity Obligated Group, Series 1997D	Wisconsin Health and Educational Facilities Authority	Aa2/VMIG1	S
	Charity Obligated Group, Series 1997F	Wisconsin Health and Educational Facilities Authority	Aa2/VMIG1	S
	Columbia Hospital	Wisconsin Health Facilities Authority	A3	S
	Community Memorial Hospital of Menomonee Falls	Wisconsin Health and Educational Facilities Authority	A2	S

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

Portfolio of Health Care Ratings (as of August 13, 1999) *(continued)*

State	Issuer	Issuing Authority	Rating	Outlook ¹
Wisconsin, continued				
	Mequon Care Center, Inc. (Guaranteed by Columbia Hospital)	Wisconsin Health and Educational Facilities Authority	A3	S
	Mercy Hospital of Janesville	Wisconsin Health and Educational Facilities Authority	A2	S
	Meriter Hospital	Wisconsin Health and Educational Facilities Authority	A2	S
	Monroe Clinic, Inc.	Wisconsin Health and Educational Facilities Authority	A3	S
	ProHealth Care, Inc. (Formerly Waukesha Memorial Hospital)	Wisconsin Health and Educational Facilities Authority	A1	S
	Wausau Hospital (Underlying rating)	Wisconsin Health and Educational Facilities Authority	A2	S
WYOMING				
	IHC Hospitals (Underlying rating)	Unita County	Aa2	S
	Wyoming Medical Center	Natrona County	A3	S

1. Positive (P), Negative (N), Stable (S), Uncertain (U), Watchlist for Downgrade (W/D), Watchlist for Upgrade (W/U), Watchlist with Uncertain Direction (W/UD).

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Report Number: 48205



The Balanced Budget Act and Hospitals: The Dollars and Cents of Medicare Payment Cuts

**American Hospital Association
May 10, 1999**

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Section I:

Presentation of Findings

Purpose

In order to better understand the implications of the Balanced Budget Act of 1997 (BBA), the American Hospital Association commissioned The Lewin Group to study the impact of BBA's Medicare provisions on America's hospitals and health systems.

The BBA reduced payments for most hospital services, i.e., inpatient acute care, outpatient care, home health care, skilled-nursing care, medical education, indigent care, and many other services. This study attempts to measure the aggregate impact of the BBA upon select aspects of hospitals' financial performance.

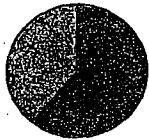
Key Findings

- ➡ Total Medicare payments to hospitals will be cut by \$71.2 billion (10.5%) from 1998 to 2002.
- ➡ These payment reductions will force total Medicare margins downward to a negative 4.4%, assuming moderately low cost growth, and even lower with a more historical rate of growth.
- ➡ Margins for outpatient, hospital-based home health, and PPS-exempt services will all be negative under the BBA.
- ➡ While inpatient margins remain positive, they will fall under the BBA -- especially if costs increase at historical rates.

Methodology

Hospitals Are More Than Inpatient Institutions

Surgeries in 1997



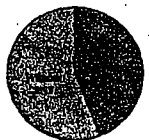
Nearly all acute care hospitals provide outpatient services and 60% of all surgeries are performed on an outpatient basis.

Hospitals with Home Health



50% of hospitals operate a hospital-based home health agency.

Hospitals with Skilled Nursing Facilities



44% of hospitals operate a hospital-based SNF or other long-term care unit.

Hospitals with an HMO



23% of hospitals have an ownership interest in an HMO, and many others have developed PPOs or other insurance plans.

Hospitals in Health Systems



44% of hospitals are now members of health systems.

BBA Provisions Included in Our Analysis

BBA Provision	Simulated Using Medicare Cost Report Data
PPS Update	✓
Disproportionate Share (DSH)	✓
Indirect Medical Education (IME)	✓
Transfers	✓
Outliers	✓
Capital	✓
Bad Debt	✓
Outpatient Formula Driven Overpayments (FDO)	✓
Outpatient PPS	✓
PPS-Exempt Units	✓
PPS-Exempt Hospitals	✓
Hospital-Based Home Health Agencies	✓
All other hospital services: BBA impact from cost report simulations imputed to total hospital payments and costs from AHA Annual Survey.	

Basic Methodology

- ➡ We first used Medicare cost report data to estimate revenue, costs, and margins for the four major hospital services over the study period. The information was then incorporated into our analysis of AHA Annual Survey data in order to estimate total hospital Medicare payments, costs, and margins. This step allowed us to impute hospital payment reductions to hospital services not explicitly included in our Medicare cost report simulations.
- ➡ This methodology assumes that payments and costs for “all other” services change at the average rate for the four simulated services.
- ➡ Our analysis projects hospital costs based upon two different assumptions: Medicare costs per case increasing at the market basket (MB) rate of inflation, and costs per case increasing at market basket minus one percentage point (MB-1) beginning in 1999. The market basket inflation rate is the rate of increase in the costs of goods and services purchased by hospitals. Throughout this report the following acronyms will be used:
 - MB = market basket rate of increase in hospital costs
 - MB-1 = market basket rate of increase in hospital costs less one percentage point

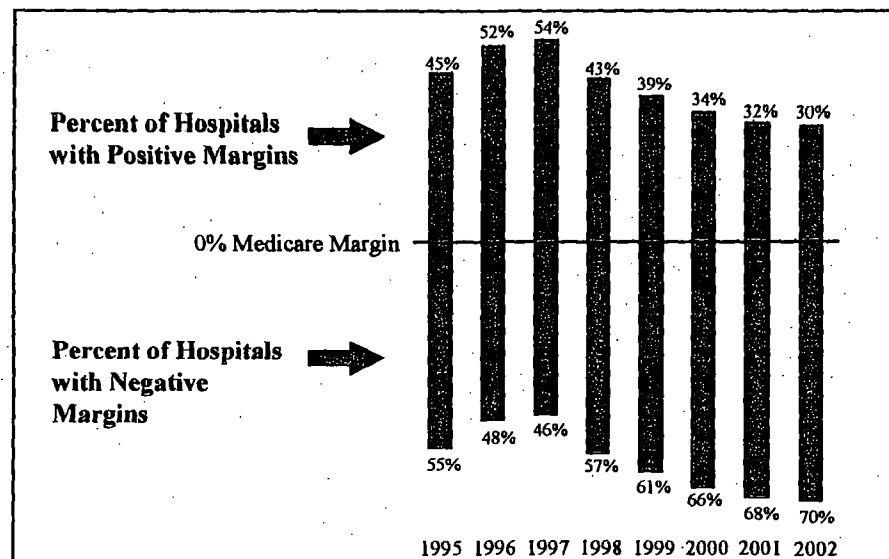
Total Medicare Payments and Margins for Hospitals

The BBA Reduces Medicare Payments to Hospitals by More than \$71 Billion from 1998 to 2002

- ➡ Payment reductions for all Medicare services are projected to grow from \$7.4 billion in 1998 to \$19.5 billion in 2002 under the BBA.
- ➡ The cumulative payment reduction for all services affected by the BBA are projected to be more than \$71 billion, a 10.5% reduction from pre-BBA estimates.
- ➡ After adjusting for inflation using the market basket rate of inflation, post-BBA payments are actually decreasing in real terms.

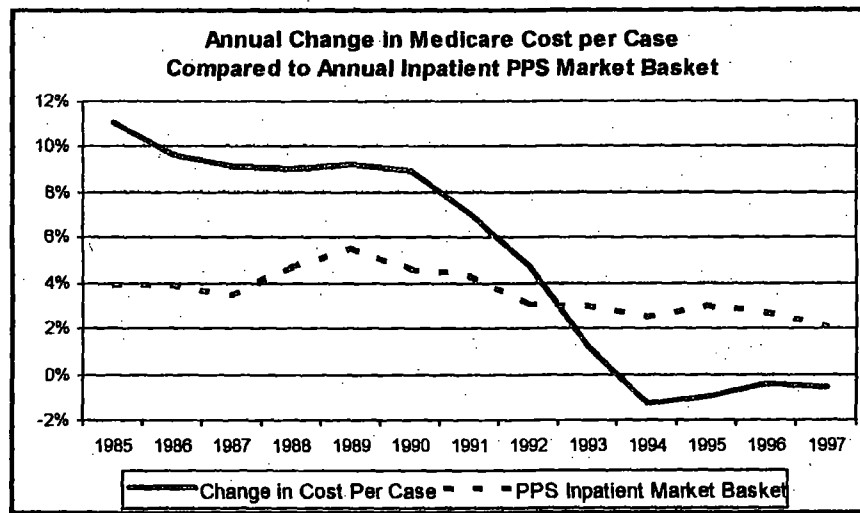
Total Medicare Margins Will Become Negative Due to Payment Reductions in the BBA (MB-1)

- ➡ Total Medicare margins are projected to fall under the BBA to negative 4.4% in 2002 as payments fail to keep pace with costs.
- ➡ Urban hospital margins become negative in 1999 and fall to negative 4.0% in 2002.
- ➡ Rural hospital margins, which are negative in 1996, fall to negative 7.1% in 2002.
- ➡ With costs increasing at market basket minus one percentage point, 70% of hospitals will have negative total Medicare margins by 2002.



If Medicare Costs Begin to Grow at Market Basket, Margins Drop an Additional 3.4 Percentage Points

- ➡ Many have questioned the hospital field's ability to keep cost increases below the market basket. Historical data, as shown below, suggest that such low rates of increase may not be sustainable for many more years.



- ➡ If costs increase at the market basket rate, total Medicare margins are projected to fall to negative 7.8% by 2002 and will continue to decline.
- ➡ 77% of hospitals will have negative total Medicare margins by 2002 if costs increase at market basket.

Medicare Payments and Margins for Hospitals by Type of Service

The BBA Significantly Reduces Medicare Payments for Inpatient PPS, Outpatient, Home Health and PPS-Exempt Services

- ➔ Medicare payments to hospitals for inpatient PPS (including operating, capital and bad debt), outpatient, home health, and PPS-exempt services are reduced by an estimated 10.5% over the full five years of the BBA.
- ➔ Annual payment reductions for these four services rise from \$6.3 billion in 1998 to \$16.5 billion in 2002.
- ➔ This represents a cumulative payment reduction of over \$60 billion for these four services included in the analysis.
- ☐ In all years except 2002, post-BBA payments for the four services will be less than the 1997 payments for those same services.
- ➔ After adjusting for inflation using the hospital market basket, post-BBA payments are actually decreasing in real terms.

The BBA Reduces Inpatient PPS Payments by More Than \$40 Billion from 1998 to 2002

- ➡ Payment reductions rise from 4.8% in 1998 to 12.6% in 2002 (or from \$3.9 billion to \$11.4 billion) as a result of the BBA.
- ➡ Aggregate payment reductions total \$40.7 billion, or 9.5%, from 1998 to 2002.

The BBA Reduces Inpatient Margins from 1998 to 2002

- ➡ The post-BBA inpatient margin falls from 12.6% in 1998 to 7.5% in 2002, if costs increase at market basket minus one percentage point.
- ➡ Inpatient margins fall even lower to 4.2% in 2002 if costs increase at the market basket.
- ➡ If costs increase at the market basket, inpatient margins fall sharply for:
 - ❑ Teaching hospitals whose margins fall 5.8 percentage points from 1998 to 2002; and
 - ❑ Hospitals located in New England, East North Central, and West South Central regions, whose margins fall 6.5, 6.2 and 6.4 percentage points respectively.

The BBA Reduces Outpatient Payments by \$11.2 Billion (14.4 %) from 1998 to 2002

- ➡ Outpatient payment reductions grow from 7.9% in 1998 to 17.7% in 2002, assuming costs increase at market basket minus one percentage point.
- ➡ Aggregate payment reductions over the five year period were particularly large for:
 - ❑ Hospitals in the Mid-Atlantic (16.1% reduction) and Pacific (15.6% reduction) regions
 - ❑ Rural hospitals (15.4% reduction); and
 - ❑ Hospitals with fewer than 50 beds (16.2% reduction), 50-99 beds (15.5% reduction), or 100-199 beds (15.9% reduction).

Outpatient Margins That Were Already Negative Prior to the BBA Become Even More Negative

- ➡ The post-BBA margins reflect the reduction of Medicare payments for ambulatory surgery, radiology and other diagnostic services in 1998 due to elimination of the formula driven overpayment, and an additional reduction in 2000 due to the outpatient PPS.
- ➡ Outpatient policy changes, especially the outpatient PPS, are projected to impact rural hospitals more significantly than urban hospitals.

Of the Services Simulated, the Largest BBA Payment Reduction Is 22% for Hospital-Based Home Health Services

- ➡ Payments are estimated to significantly decrease under the BBA's interim payment system and the planned 15% payment reduction for home health.
- ➡ Payment reductions grow from 16% in 1998 to 28% in 2002.

The BBA Dramatically Reduces Hospital-Based Home Health Margins in 2001 and 2002

- ➡ The BBA imposes a payment reduction for home health payments of 15% in 2001.
- ➡ As a result, home health margins fall by 7 percentage points to negative 11%.

The BBA Reduces PPS-Exempt Hospital Payments by at Least 7%, from 1998 to 2002

- ➡ Psychiatric, rehabilitation, long-term care, children's, and cancer hospitals and distinct-part psychiatric and rehabilitation units are exempt from PPS and paid on a cost basis.
- ➡ The majority of PPS-exempt payments are made to rehabilitation, long-term and psychiatric facilities.
- ➡ PPS-exempt payment reductions were primarily due to the update freeze in 1998, caps on hospital target amounts, a 15% reduction in capital payments, and a change in the bonus payment policy.

PPS-Exempt Margins Are Projected to Increase Slightly but Remain Consistently Negative

- ➡ PPS-exempt services were profitable pre-BBA but lose money post-BBA.
- ➡ Psychiatric hospitals and units experience the greatest reductions in payments and margins.

Section II:

Type of Service Comparisons and National Estimates Calculation with
Costs Increasing at Market Basket Minus One Percent (MB-1)

Analysis of Medicare Payments and Margins Under the BBA: 1998 to 2002

Medicare Payments in Total and by Type of Service

PROJECTIONS WITH MEDICARE COSTS INCREASING AT MARKET BASKET MINUS ONE PERCENTAGE POINT

Total Medicare Payments and Margins* (in billions)						
	1998	1999	2000	2001	2002	5 Year Total
Pre-BBA Payments	\$126.50	\$132.14	\$135.80	\$139.59	\$143.59	677.62
Post-BBA Payments	\$119.12	\$120.40	\$120.83	\$121.97	\$124.13	606.46
Dollar Impact	(7.38)	(11.74)	(14.97)	(17.62)	(19.46)	(71.16)
Percent Impact	-5.84%	-8.88%	-11.02%	-12.62%	-13.55%	-10.50%
Post-BBA Costs	118.71	121.84	124.18	126.73	129.61	
Post-BBA Margin	0.34%	-1.20%	-2.77%	-3.90%	-4.41%	

Medicare Payments and Margins for Inpatient PPS Services (in billions)						
	1998	1999	2000	2001	2002	5 Year Total
Pre-BBA Payments	80.80	83.90	86.16	88.51	90.99	430.16
Post-BBA Payments	76.74	77.29	77.53	78.30	79.59	389.44
Dollar Impact	(3.87)	(6.61)	(8.62)	(10.22)	(11.40)	(40.72)
Percent Impact	-4.80%	-7.88%	-10.01%	-11.54%	-12.53%	-9.47%
Post-BBA Costs	67.10	69.12	70.46	71.94	73.65	
Post-BBA Margin	12.57%	10.57%	9.13%	8.12%	7.48%	

Medicare Payments and Margins for Outpatient Services (in billions)						
	1998	1999	2000	2001	2002	5 Year Total
Pre-BBA Payments	14.22	15.30	15.68	16.09	16.54	77.82
Post-BBA Payments	13.10	13.34	13.16	13.37	13.61	66.58
Dollar Impact	(1.12)	(1.96)	(2.52)	(2.72)	(2.93)	(11.24)
Percent Impact	-7.85%	-12.81%	-16.08%	-16.89%	-17.70%	-14.45%
Post-BBA Costs	15.38	15.60	15.83	16.08	16.37	
Post-BBA Margin	-17.42%	-16.93%	-20.29%	-20.29%	-20.29%	

Medicare Payments and Margins for Hospital-Based Home Health Services (in billions)						
	1998	1999	2000	2001	2002	5 Year Total
Pre-BBA Payments	4.53	4.80	5.11	5.40	5.69	25.54
Post-BBA Payments	3.79	3.98	4.14	3.98	4.11	20.01
Dollar Impact	(0.74)	(0.82)	(0.97)	(1.42)	(1.58)	(5.53)
Percent Impact	-16.30%	-17.04%	-19.01%	-26.29%	-27.71%	-21.64%
Post-BBA Costs	4.01	4.15	4.30	4.45	4.58	
Post-BBA Margin	-5.79%	-4.06%	-4.01%	-11.64%	-11.36%	

Medicare Payments and Margins for PPS-Exempt Services (in billions)						
	1998	1999	2000	2001	2002	5 Year Total
Pre-BBA Payments	7.85	7.97	8.13	8.29	8.46	40.70
Post-BBA Payments	7.31	7.42	7.56	7.71	7.88	37.89
Dollar Impact	(0.53)	(0.56)	(0.57)	(0.57)	(0.58)	(2.81)
Percent Impact	-6.81%	-6.97%	-6.95%	-6.93%	-6.90%	-6.92%
Post-BBA Costs	7.71	7.82	7.95	8.09	8.25	
Post-BBA Margin	-5.43%	-5.39%	-5.16%	-4.93%	-4.70%	

*Total Medicare payments and margins on projections of AHA Annual Survey data.

The sum of the four t of service will not equal the due to the cross between report and AHA survey data.

Crosswalk of Medicare PPS 12 and AHA Annual Survey BBA Payment Simulations

Market Basket Minus One Percentage Point Analysis

The Lewin Group has simulated the BBA's impact on payments using Medicare PPS12 data for inpatient PPS, outpatient, hospital-based home health, and PPS-exempt services. The resulting rates of change from this analysis were then applied to AHA Annual Survey data to simulate total payments. AHA data include the following services that are not reflected in the Medicare cost report simulations: direct graduate medical education, skilled nursing care, dialysis, outpatient rehabilitation, lab, durable medical equipment, oxygen, ambulance, and non-covered services and costs.

1. Calculate the percent impact of the BBA on payments and costs from the Medicare PPS12 (FFY 1995) payment microsimulations. Four types of service were simulated: inpatient PPS, outpatient, hospital-based home health, and PPS-exempt services.

PPS12 Simulated Payments and Costs (\$ billions)	1998	1999	2002	2001	2002
Pre-BBA Medicare payments for the four services simulated	107.20	111.98	115.08	118.29	121.68
Post-BBA Medicare payments for the four services simulated	100.95	102.03	102.39	103.36	105.19
Percent Impact of BBA on Medicare payments for the four services simulated	-5.84%	-8.88%	-11.02%	-12.62%	-13.55%
Pre-BBA Medicare costs for the four services simulated	94.90	97.53	99.56	101.75	104.21
Post-BBA Medicare costs for the four services simulated	94.20	96.68	98.54	100.56	102.85
Percent Impact of BBA on Medicare costs for the four services simulated	-0.74%	-0.87%	-1.02%	-1.16%	-1.31%

2. Calculate the rate of change to payments and costs from the Medicare PPS12 payment microsimulations of the four types of service.

Rate of Change in Simulated Payments and Costs (from PPS 12)	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002
Pre-BBA Medicare payments for the four services simulated	4.5%	2.8%	2.8%	2.9%
Post-BBA Medicare payments for the four services simulated	1.1%	0.4%	0.9%	1.8%
Pre-BBA Medicare costs for the four services simulated	2.8%	2.1%	2.2%	2.4%
Post-BBA Medicare costs for the four services simulated	2.6%	1.9%	2.1%	2.3%

3. Use AHA data from 1995 to 1997 to calculate Medicare payment and costs rates of change. Payments increased at an annual rate of 5.1 percent and costs at annual rate of 2.9 percent from 1995 to 1997.

4. Apply average 1995 to 1997 AHA Medicare payment and cost rates of change to 1997 AHA Medicare payments and costs to estimate 1998 Medicare payments and costs.

5. Apply simulated payment and cost rates of change from Medicare PPS12 analysis to 1998 Medicare payments and costs estimated from AHA data to project AHA payments and costs: (1) pre-BBA; and (2) post-BBA. This methodology assumes that payments and costs for services not modeled in the Medicare cost report simulations will experience the same aggregate rates of change as the four simulated services.

Medicare Payments and Costs Projected from AHA Data (in billions)	AHA Annual Survey Data			Projected Medicare Payments and Costs Calculated by Applying Lewin Payment and Cost Rates of Change Based On Medicare PPS12 Data to 1998 Medicare Payments and Costs Estimated from AHA Data				
	1995	1996	1997	1998	1999	2000	2001	2002
Pre-BBA Medicare Payments	\$108.94	\$114.89	\$120.35	\$126.50	\$132.14	\$135.80	\$139.59	\$143.59
Post-BBA Medicare Payments				119.12	120.40	120.83	121.97	124.13
Pre-BBA Medicare Costs	109.89	112.34	116.26	119.59	122.91	125.46	128.22	131.33
Post-BBA Medicare Costs				118.71	121.84	124.18	126.73	129.61

6. Total Medicare Margins, actual and projected, from 1995 to 2002.

Simulated Margins	1995	1996	1997	1998	1999	2000	2001	2002
Margins Based On AHA Survey Data								
Actual	-0.9%	2.2%	3.4%					
Post-BBA Projections				0.3%	-1.2%	-2.8%	-3.9%	-4.4%

Proportion of Revenues and Costs Attributed to Each Type of Service

	1998	1999	2000	2001	2002
Pre-BBA Payments					
Inpatient PPS	75.19%	74.93%	74.87%	74.82%	74.78%
Outpatient	13.26%	13.66%	13.63%	13.60%	13.59%
Home Health	4.23%	4.29%	4.44%	4.57%	4.68%
TEFRA	7.32%	7.12%	7.06%	7.01%	6.95%
Total	100.00%	100.00%	100.00%	100.00%	100.00%
Post-BBA Payments					
Inpatient PPS	76.02%	75.75%	75.72%	75.75%	75.66%
Outpatient	12.98%	13.07%	12.85%	12.94%	12.94%
Home Health	3.76%	3.90%	4.04%	3.85%	3.91%
TEFRA	7.25%	7.27%	7.38%	7.46%	7.49%
Total	100.00%	100.00%	100.00%	100.00%	100.00%
Pre-BBA Costs					
Inpatient PPS	70.70%	70.87%	70.77%	70.70%	70.67%
Outpatient	16.21%	15.99%	15.90%	15.81%	15.71%
Home Health	4.97%	5.12%	5.34%	5.53%	5.70%
TEFRA	8.13%	8.02%	7.99%	7.96%	7.92%
Total	100.00%	100.00%	100.00%	100.00%	100.00%
Post-BBA Costs					
Inpatient PPS	71.23%	71.49%	71.50%	71.54%	71.61%
Outpatient	16.33%	16.13%	16.07%	15.99%	15.92%
Home Health	4.26%	4.29%	4.37%	4.42%	4.45%
TEFRA	8.19%	8.09%	8.07%	8.05%	8.02%
Total	100.00%	100.00%	100.00%	100.00%	100.00%

Section III:

**Data Tables by Hospital Category with Costs Increasing
at Market Basket Minus One Percent (MB-1)**

Comparison of Total Medicare Payments to Hospitals* (in millions)

Section III: Data Tables by Hospital Category with Costs Increasing at Market Basket Minus One Percentage Point

	1998			1999			2000			2001			2002			6 Year Total Impact to Payments	5 Year Total Percent Impact
	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact		
Total	128,503	116,122	(12,382)	132,138	120,400	(11,738)	135,788	124,590	(11,198)	139,591	121,974	(17,617)	143,593	124,130	(19,463)	(71,162)	-10.5%
Non-DSH	19,748	18,521	(1,227)	20,810	19,115	(1,695)	21,410	19,215	(2,195)	22,026	19,387	(2,640)	22,888	19,738	(3,150)	(10,889)	-10.0%
DSH	108,755	100,601	(8,155)	111,328	101,285	(10,043)	114,378	105,375	(9,003)	117,564	102,588	(14,977)	120,705	104,400	(16,305)	(60,473)	-10.6%
Teaching	61,053	57,243	(3,810)	63,873	58,113	(5,760)	66,656	59,534	(7,122)	67,510	59,177	(8,333)	69,489	60,240	(9,249)	(34,252)	-10.5%
Non-Teaching	58,451	51,879	(6,572)	68,265	62,287	(5,978)	70,146	62,558	(7,588)	72,081	62,797	(9,284)	74,121	64,160	(9,961)	(38,910)	-10.5%
For-Profit	92,718	87,359	(5,359)	97,084	88,550	(8,534)	99,719	88,789	(10,930)	102,459	89,619	(12,839)	105,289	91,189	(14,100)	(51,808)	-10.4%
Not-For-Profit	17,270	16,141	(1,129)	17,884	16,165	(1,719)	16,408	16,340	(68)	18,954	16,522	(2,432)	19,659	16,959	(2,700)	(10,045)	-10.9%
Public	16,515	15,622	(893)	17,190	15,685	(1,505)	17,672	16,696	(976)	18,178	15,833	(2,345)	18,653	16,105	(2,548)	(9,310)	-10.5%
New England	7,377	6,869	(508)	7,725	6,981	(744)	7,943	6,997	(946)	8,173	7,078	(1,095)	8,406	7,207	(1,199)	(4,368)	-11.0%
Middle Atlantic	22,029	20,641	(1,388)	22,656	20,778	(1,878)	23,273	20,690	(2,583)	23,890	20,848	(3,043)	24,507	21,208	(3,299)	(12,240)	-10.5%
South Atlantic	21,721	20,256	(1,465)	22,746	20,723	(2,023)	23,366	20,831	(2,535)	24,073	21,028	(3,045)	24,789	21,411	(3,378)	(12,375)	-10.6%
West North Central	21,772	20,602	(1,170)	22,884	20,778	(2,107)	23,510	20,862	(2,648)	24,167	21,099	(3,068)	24,844	21,468	(3,376)	(12,348)	-10.5%
West South Central	9,814	8,992	(822)	10,040	9,200	(840)	10,332	9,274	(1,058)	10,638	9,380	(1,258)	10,922	9,520	(1,402)	(5,088)	-9.9%
East North Central	8,993	8,454	(539)	10,548	9,750	(798)	10,666	9,754	(912)	11,162	9,908	(1,254)	11,677	10,105	(1,572)	(5,097)	-8.4%
West North Central	13,495	12,681	(814)	14,159	12,826	(1,332)	14,580	12,903	(1,677)	14,977	12,992	(1,985)	15,438	13,229	(2,209)	(7,992)	-11.0%
Mountain	5,563	5,243	(320)	5,778	5,262	(517)	5,835	5,289	(546)	6,100	5,352	(748)	6,272	5,444	(827)	(3,048)	-10.3%
Pacific	15,039	14,372	(667)	15,603	14,095	(1,508)	15,989	14,166	(1,823)	16,393	14,292	(2,101)	16,814	14,507	(2,307)	(8,605)	-10.8%
Non-DSH	48,695	45,588	(3,106)	51,041	46,475	(4,566)	52,504	46,773	(5,731)	54,030	47,291	(6,738)	55,645	48,188	(7,457)	(27,600)	-10.5%
DSH	61,088	58,487	(2,601)	64,778	58,832	(5,946)	68,548	58,811	(9,737)	68,373	59,388	(8,985)	70,287	60,360	(9,927)	(35,959)	-10.8%
Unknown	15,845	15,046	(799)	16,319	15,094	(1,225)	16,745	15,147	(1,598)	17,189	15,295	(1,894)	17,349	15,581	(1,768)	(7,603)	-9.1%
Less than 50 Beds	4,476	4,170	(306)	4,634	4,207	(427)	4,770	4,305	(465)	4,911	4,231	(680)	5,054	4,306	(748)	(2,729)	-11.4%
50 to 99 Beds	9,468	8,882	(586)	9,893	9,055	(838)	10,188	9,112	(1,076)	10,450	9,201	(1,249)	10,743	9,373	(1,370)	(5,102)	-10.1%
100 to 199 Beds	23,885	22,447	(1,437)	24,908	22,660	(2,248)	25,603	22,795	(2,808)	26,319	23,021	(3,298)	27,083	23,448	(3,635)	(13,438)	-10.5%
200 to 499 Beds	57,606	54,278	(3,328)	60,269	54,873	(5,395)	61,820	55,168	(6,652)	63,656	55,759	(7,897)	65,489	56,721	(8,768)	(32,125)	-10.4%
500 Beds or More	31,089	29,345	(1,744)	32,435	29,606	(2,829)	33,333	29,880	(3,453)	34,254	29,763	(4,491)	35,227	30,284	(4,943)	(17,768)	-10.7%

* Total Medicare payments based on projections of AHA Annual Survey Data.

Post-BBA Total Medicare Margins for Hospitals

	1998	1999	2000	2001	2002
	Post-BBA Margin	Post-BBA Margin	Post-BBA Margin	Post-BBA Margin	Post-BBA Margin
Total	0.34%	-1.20%	-2.77%	-3.90%	-4.41%
Non-DSH	-3.90%	-4.05%	-5.52%	-6.66%	-7.04%
DSH	1.13%	-0.66%	-2.26%	-3.38%	-3.92%
Teaching	-0.49%	-1.81%	-2.98%	-3.88%	-4.28%
Non-Teaching	1.12%	-0.62%	-2.58%	-3.91%	-4.54%
For-Profit	-1.89%	-3.27%	-4.84%	-6.06%	-6.59%
Not-For-Profit	12.78%	10.83%	9.91%	8.82%	8.36%
Public	-0.01%	-1.85%	-3.73%	-4.93%	-5.49%
New England	-1.02%	-3.44%	-5.44%	-6.34%	-6.84%
Middle Atlantic	-1.39%	-1.56%	-3.95%	-5.29%	-5.83%
South Atlantic	5.58%	4.31%	2.88%	1.73%	1.22%
West North Central	-3.97%	-6.18%	-7.66%	-8.73%	-9.29%
West South Central	7.66%	6.79%	5.65%	4.73%	4.26%
East North Central	-5.41%	-5.62%	-7.30%	-8.39%	-8.87%
Mountain	0.52%	-1.75%	-3.21%	-4.74%	-5.34%
Pacific	2.41%	0.34%	-0.79%	-1.75%	-2.22%
Non-DSH	0.57%	-2.52%	-3.57%	-4.40%	-4.84%
DSH	-3.14%	-4.05%	-5.43%	-6.47%	-6.92%
Unknown	2.88%	0.79%	-0.97%	-2.20%	-2.79%
Less than 50 Beds	1.04%	-0.14%	-1.60%	-2.57%	-2.97%
50 to 99 Beds	-7.01%	-8.88%	-11.01%	-12.52%	-12.94%
100 to 199 Beds	-1.39%	-1.85%	-3.20%	-4.28%	-4.84%
200 to 499 Beds	0.99%	-0.50%	-1.85%	-2.94%	-3.39%
500 Beds or More	0.77%	-0.92%	-2.29%	-3.23%	-3.76%
	0.63%	-0.95%	-3.10%	-4.55%	-5.15%

Notes:

- 1) Aggregation by category may not equal the total due to rounding.
- 2) Unknown in the DSH/ Non-DSH category represents hospitals where DSH status cannot be determined and where data between the AHA annual survey and Medicare cost reports cannot be linked.
- 3) Unknown in the Ownership category represents hospitals without an ownership/ control status in the Medicare cost report data.

Comparison of Medicare Payments to Hospitals for Inpatient PPS Services (in millions)

Section III: Data Tables by Hospital Category with Costs Increasing at Market Basket Minus One Percentage Point

	1998			1999			2000			2001			2002			5 Year Total	5 Year Total
	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Impact on Payments	Percent Impact
Total	80,604	76,738	(3,865)	83,901	77,289	(6,611)	86,158	77,534	(8,625)	88,512	78,296	(10,216)	90,989	79,587	(11,402)	(40,720)	-9.5%
Rural	11,503	10,988	(517)	12,096	11,380	(716)	12,428	11,481	(947)	12,768	11,588	(1,181)	13,125	11,783	(1,343)	(4,720)	-7.6%
Urban	69,100	65,752	(3,349)	71,805	65,909	(5,895)	73,733	66,072	(7,660)	75,744	66,709	(9,035)	77,863	67,804	(10,059)	(35,999)	-9.8%
Non-Teaching	36,687	34,921	(1,766)	38,252	35,356	(2,896)	39,267	35,593	(3,674)	40,334	36,051	(4,283)	41,462	36,650	(4,812)	(17,431)	-8.9%
Teaching	43,917	41,818	(2,099)	45,649	41,934	(3,715)	46,891	41,941	(4,950)	48,179	42,246	(5,933)	49,527	42,937	(6,590)	(23,288)	-9.9%
Not-for-Profit	59,270	56,376	(2,894)	61,774	58,903	(2,871)	63,443	57,075	(6,368)	65,181	57,634	(7,547)	67,005	58,588	(8,417)	(30,086)	-9.5%
For Profit	8,936	8,549	(387)	9,161	8,451	(711)	9,393	8,494	(899)	9,632	8,585	(1,047)	9,901	8,728	(1,173)	(4,220)	-9.0%
Public	10,689	10,200	(489)	11,033	10,170	(863)	11,337	10,195	(1,143)	11,660	10,292	(1,368)	11,966	10,459	(1,507)	(5,390)	-9.5%
Unknown	1,709	1,614	(95)	1,933	1,766	(167)	1,985	1,770	(215)	2,039	1,784	(255)	2,096	1,814	(282)	(1,013)	-10.4%
New England	4,638	4,428	(210)	4,845	4,395	(450)	4,962	4,400	(562)	5,127	4,443	(685)	5,271	4,517	(753)	(2,680)	-10.8%
Middle Atlantic	14,811	13,955	(856)	15,129	13,992	(1,137)	15,538	14,003	(1,535)	15,946	14,094	(1,853)	16,383	14,325	(2,057)	(7,449)	-9.6%
South Atlantic	14,222	13,509	(712)	14,835	13,716	(1,120)	15,228	13,775	(1,452)	15,641	13,937	(1,704)	16,078	14,166	(1,912)	(6,900)	-9.1%
East North Central	14,352	13,733	(619)	15,066	13,796	(1,270)	15,478	13,830	(1,648)	15,915	13,965	(1,950)	16,360	14,198	(2,162)	(7,650)	-9.9%
East South Central	5,780	5,518	(261)	6,070	5,651	(418)	6,230	5,679	(551)	6,400	5,747	(654)	6,579	5,841	(738)	(2,603)	-8.4%
West North Central	5,406	5,174	(231)	5,690	5,344	(345)	5,843	5,364	(479)	6,004	5,416	(588)	6,172	5,507	(665)	(2,309)	-7.9%
West South Central	8,088	7,707	(381)	8,466	7,762	(705)	8,864	7,791	(1,073)	9,100	7,854	(1,246)	9,159	7,983	(1,177)	(4,212)	-9.7%
Mountain	3,204	3,055	(149)	3,311	3,049	(262)	3,400	3,084	(316)	3,495	3,102	(393)	3,592	3,153	(439)	(1,579)	-9.3%
Pacific	10,123	9,659	(464)	10,489	9,585	(904)	10,774	9,628	(1,146)	11,074	9,739	(1,335)	11,384	9,896	(1,488)	(5,337)	-9.9%
Non-DSH	32,437	30,744	(1,693)	33,835	31,251	(2,584)	34,748	31,418	(3,330)	35,700	31,782	(3,917)	36,699	32,323	(4,376)	(15,900)	-9.2%
DSH	45,134	43,111	(2,023)	46,967	43,174	(3,793)	48,227	43,250	(4,977)	49,540	43,628	(5,914)	50,926	44,329	(6,597)	(23,304)	-9.7%
Unknown	3,033	2,883	(150)	3,099	2,864	(234)	3,183	2,866	(318)	3,272	2,888	(385)	3,364	2,935	(429)	(1,516)	-9.5%
Less than 50 Beds	1,198	1,150	(47)	1,219	1,152	(67)	1,253	1,162	(92)	1,290	1,174	(116)	1,326	1,194	(132)	(454)	-7.2%
50 to 99 Beds	3,906	3,742	(165)	4,078	3,816	(261)	4,181	3,845	(336)	4,306	3,884	(422)	4,428	3,960	(467)	(1,670)	-8.0%
100 to 199 Beds	12,486	11,914	(572)	12,928	11,964	(964)	13,288	12,035	(1,253)	13,618	12,167	(1,451)	13,999	12,368	(1,630)	(5,829)	-8.8%
200 to 499 Beds	39,530	37,588	(1,942)	41,229	37,890	(3,339)	42,339	38,047	(4,292)	43,516	38,488	(5,028)	44,733	39,122	(5,611)	(20,214)	-9.6%
500 Beds or More	23,504	22,348	(1,157)	24,447	22,466	(1,981)	25,107	22,445	(2,662)	25,783	22,583	(3,200)	26,504	22,852	(3,652)	(12,552)	-10.0%

Post-BBA Medicare Margins for Inpatient PPS Services

	1998 Post-BBA Margin	1999 Post-BBA Margin	2000 Post-BBA Margin	2001 Post-BBA Margin	2002 Post-BBA Margin
Total	12.57%	10.57%	9.13%	8.12%	7.46%
Rural	11.01%	10.44%	9.39%	8.54%	7.99%
Urban	12.63%	10.59%	9.08%	8.05%	7.37%
Non-Teaching	9.69%	7.78%	6.72%	6.06%	5.52%
Teaching	14.97%	12.92%	11.17%	9.87%	9.12%
Not-for-Profit	11.82%	9.97%	8.51%	7.50%	6.85%
For Profit	15.83%	12.87%	11.68%	10.82%	10.20%
Public	14.88%	12.52%	11.01%	9.94%	9.22%
Unknown	6.58%	7.44%	5.89%	4.73%	4.10%
New England	12.30%	9.21%	7.52%	6.45%	5.78%
Middle Atlantic	12.58%	12.35%	10.71%	9.39%	8.71%
South Atlantic	11.76%	9.98%	8.67%	7.86%	7.23%
East North Central	9.64%	6.84%	5.24%	4.14%	3.43%
East South Central	13.56%	12.36%	11.14%	10.37%	9.77%
West North Central	9.21%	8.67%	7.24%	6.19%	5.55%
West South Central	13.45%	10.39%	8.98%	7.77%	7.06%
Mountain	15.97%	13.29%	12.06%	11.29%	10.68%
Pacific	17.41%	14.05%	12.87%	12.13%	11.57%
Non-DSH	7.89%	6.52%	5.25%	4.40%	3.80%
DSH	15.98%	13.56%	12.03%	10.93%	10.23%
Unknown	11.41%	9.59%	7.88%	6.63%	5.92%
Less than 50 Beds	15.14%	12.16%	11.16%	10.17%	9.55%
50 to 99 Beds	9.28%	8.28%	7.14%	6.07%	5.38%
100 to 199 Beds	11.00%	8.89%	7.70%	6.81%	6.18%
200 to 499 Beds	11.43%	9.31%	7.96%	7.11%	6.47%
500 Beds or More	15.72%	13.89%	12.12%	10.78%	10.11%

Notes:

- 1) Aggregation by category may not equal the total due to rounding.
- 2) Unknown in the DSH/ Non-DSH category represents hospitals where DSH status cannot be determined and where data between the AHA annual survey and Medicare cost reports cannot be linked.
- 3) Unknown in the Ownership category represents hospitals without an ownership/ control status in the Medicare cost report data.

Comparison of Medicare Payments to Hospitals for Outpatient Services (in millions)

Section III: Data Tables by Hospital Category with Costs Increasing at Market Basket Minus One Percentage Point

	1998			1999			2000			2001			2002			5 Year Total	5 Year Total
	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Impact on Payments	Percent Impact
Total	14,216	13,100	(1,116)	15,299	13,338	(1,960)	15,681	13,160	(2,521)	16,089	13,371	(2,718)	16,540	13,612	(2,928)	(11,244)	-14.4%
Rural	2,848	2,608	(240)	3,067	2,659	(408)	3,144	2,599	(545)	3,225	2,641	(585)	3,316	2,688	(627)	(2,408)	-15.4%
Urban	11,368	10,492	(875)	12,232	10,680	(1,552)	12,538	10,561	(1,977)	12,864	10,730	(2,134)	13,224	10,923	(2,301)	(8,838)	-14.2%
Non-Teaching	7,528	6,888	(640)	8,100	7,010	(1,090)	8,303	6,948	(1,355)	8,519	7,059	(1,460)	8,757	7,188	(1,571)	(6,115)	-14.8%
Teaching	6,688	6,212	(476)	7,189	6,328	(871)	7,379	6,212	(1,166)	7,571	6,312	(1,259)	7,782	6,426	(1,357)	(5,128)	-14.0%
Not-for-Profit	10,045	9,223	(822)	10,801	9,401	(1,400)	11,071	9,277	(1,794)	11,358	9,426	(1,933)	11,677	9,595	(2,081)	(8,030)	-14.6%
For Profit	1,478	1,346	(132)	1,592	1,363	(229)	1,632	1,378	(257)	1,675	1,398	(277)	1,722	1,423	(299)	(1,193)	-14.7%
Public	2,243	2,111	(132)	2,420	2,147	(273)	2,480	2,098	(382)	2,545	2,132	(412)	2,616	2,170	(445)	(1,644)	-13.4%
Unknown	451	421	(30)	486	428	(58)	498	409	(89)	511	416	(96)	526	423	(103)	(376)	-15.2%
New England	940	875	(65)	1,012	894	(118)	1,037	870	(167)	1,064	884	(180)	1,094	900	(194)	(725)	-14.1%
Middle Atlantic	2,219	2,065	(154)	2,388	2,108	(280)	2,447	1,974	(474)	2,511	2,005	(506)	2,581	2,041	(540)	(1,953)	-16.1%
South Atlantic	2,425	2,229	(196)	2,610	2,270	(340)	2,675	2,235	(440)	2,745	2,271	(474)	2,822	2,312	(510)	(1,960)	-14.8%
East North Central	2,932	2,882	(50)	3,150	2,736	(414)	3,229	2,752	(476)	3,313	2,796	(516)	3,405	2,847	(558)	(2,215)	-13.8%
East South Central	897	816	(81)	965	828	(137)	989	829	(160)	1,015	842	(173)	1,043	857	(186)	(737)	-15.0%
West North Central	1,182	1,092	(91)	1,274	1,116	(158)	1,305	1,099	(206)	1,339	1,117	(222)	1,377	1,137	(240)	(917)	-14.2%
West South Central	1,497	1,415	(83)	1,614	1,440	(174)	1,654	1,429	(226)	1,698	1,452	(246)	1,745	1,478	(267)	(996)	-12.1%
Mountain	591	546	(45)	637	556	(81)	653	559	(93)	670	568	(101)	688	579	(110)	(431)	-13.3%
Pacific	1,530	1,381	(149)	1,650	1,391	(259)	1,691	1,412	(279)	1,735	1,435	(300)	1,784	1,461	(323)	(1,310)	-15.6%
Non-DSH	6,569	6,065	(504)	7,096	6,189	(907)	7,273	6,129	(1,144)	7,463	6,227	(1,235)	7,672	6,339	(1,332)	(5,154)	-14.3%
DSH	7,030	6,440	(590)	7,568	6,544	(1,024)	7,757	6,431	(1,326)	7,958	6,534	(1,425)	8,181	6,651	(1,530)	(5,894)	-15.3%
Unknown	587	595	8	635	606	(29)	651	600	(51)	668	610	(58)	687	621	(66)	(196)	-8.1%
Less than 50 Beds	458	423	(35)	494	431	(64)	507	411	(96)	520	417	(103)	535	425	(110)	(408)	-16.2%
50 to 99 Beds	1,155	1,082	(74)	1,246	1,081	(166)	1,278	1,053	(225)	1,311	1,069	(241)	1,347	1,089	(259)	(984)	-15.5%
100 to 199 Beds	2,760	2,505	(255)	2,970	2,548	(422)	3,044	2,510	(534)	3,123	2,550	(573)	3,211	2,596	(615)	(2,400)	-15.9%
200 to 499 Beds	6,568	6,082	(506)	7,061	6,171	(889)	7,237	6,164	(1,073)	7,428	6,263	(1,163)	7,633	6,376	(1,258)	(4,889)	-13.6%
500 Beds or More	3,275	3,049	(226)	3,527	3,108	(419)	3,615	3,023	(592)	3,709	3,071	(638)	3,813	3,128	(687)	(2,562)	-14.3%

Post-BBA Medicare Margins for Outpatient Hospital Services

	1998 Post-BBA Margin	1999 Post-BBA Margin	2000 Post-BBA Margin	2001 Post-BBA Margin	2002 Post-BBA Margin
Total	-17.42%	-16.93%	-20.29%	-20.29%	-20.29%
Rural	-17.62%	-16.99%	-21.47%	-21.47%	-21.47%
Urban	-17.37%	-16.92%	-20.01%	-20.01%	-20.01%
Non-Teaching	-16.85%	-16.42%	-19.23%	-19.23%	-19.23%
Teaching	-18.04%	-17.50%	-21.49%	-21.49%	-21.49%
Not-for-Profit	-16.39%	-15.78%	-19.08%	-19.08%	-19.08%
For Profit	-18.10%	-18.27%	-18.94%	-18.94%	-18.94%
Public	-21.61%	-21.26%	-25.90%	-25.90%	-25.90%
Unknown	-16.75%	-16.35%	-23.55%	-23.55%	-23.55%
New England	-14.00%	-13.13%	-17.97%	-17.97%	-17.97%
Middle Atlantic	-17.29%	-16.52%	-26.33%	-26.33%	-26.33%
South Atlantic	-14.95%	-14.46%	-17.98%	-17.98%	-17.98%
North Central	-16.41%	-15.69%	-16.74%	-16.74%	-16.74%
East South Central	-15.88%	-15.78%	-17.38%	-17.38%	-17.38%
West North Central	-15.96%	-15.03%	-18.50%	-18.50%	-18.50%
West South Central	-26.49%	-26.00%	-28.90%	-28.90%	-28.90%
Mountain	-16.97%	-16.50%	-17.42%	-17.42%	-17.42%
Pacific	-16.63%	-16.47%	-19.43%	-19.43%	-19.43%
Non-DSH	-16.36%	-15.64%	-18.51%	-18.51%	-18.51%
DSH	-16.67%	-16.44%	-20.25%	-20.25%	-20.25%
Unknown	-36.19%	-35.55%	-38.91%	-38.91%	-38.91%
Less than 50 Beds	-18.63%	-18.00%	-25.81%	-25.81%	-25.81%
50 to 99 Beds	-19.32%	-18.84%	-23.85%	-23.85%	-23.85%
100 to 199 Beds	-18.93%	-18.57%	-22.17%	-22.17%	-22.17%
200 to 499 Beds	-16.15%	-15.68%	-17.55%	-17.55%	-17.55%
500 Beds or More	-17.86%	-17.26%	-22.36%	-22.36%	-22.36%

Notes:

- 1) Aggregation by category may not equal the total due to rounding.
- 2) Unknown in the DSH/ Non-DSH category represents hospitals where DSH status cannot be determined and where data between the AHA annual survey and Medicare cost reports cannot be linked.
- 3) Unknown in the Ownership category represents hospitals without an ownership control status in the Medicare cost report data.

Comparison of Medicare Payments to Hospitals for Home Health Services (in millions)

Section III: Data Tables by Hospital Category with Costs Increasing at Market Basket Minus One Percentage Point

	1998			1999			2000			2001			2002			5 Year Total	5 Year Total
	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Impact on Payments	Percent Impact
Total	4,534	3,794	(739)	4,802	3,984	(819)	5,110	4,139	(971)	5,403	3,982	(1,420)	5,691	4,114	(1,577)	(5,527)	-21.8%
Rural	1,288	1,065	(201)	1,339	1,110	(229)	1,422	1,150	(272)	1,466	1,107	(389)	1,565	1,137	(428)	(1,519)	-21.4%
Urban	3,268	2,729	(539)	3,463	2,874	(589)	3,689	2,989	(700)	3,907	2,875	(1,031)	4,126	2,977	(1,148)	(4,008)	-21.7%
Non-Teaching	3,008	2,495	(513)	3,189	2,615	(574)	3,397	2,717	(680)	3,594	2,606	(988)	3,789	2,689	(1,100)	(3,854)	-22.7%
Teaching	1,525	1,299	(226)	1,613	1,369	(244)	1,714	1,422	(291)	1,809	1,378	(433)	1,903	1,425	(478)	(1,672)	-19.5%
Not-for-Profit	2,966	2,545	(421)	3,117	2,657	(460)	3,288	2,739	(549)	3,443	2,631	(812)	3,589	2,695	(893)	(3,135)	-19.1%
For Profit	795	598	(196)	873	655	(217)	964	707	(257)	1,059	692	(367)	1,162	742	(420)	(1,458)	-30.0%
Public	627	528	(99)	660	545	(115)	699	562	(136)	735	533	(202)	770	547	(223)	(775)	-22.2%
Unknown	146	123	(23)	153	127	(26)	160	131	(29)	165	126	(39)	170	129	(41)	(158)	-19.9%
New England	154	128	(26)	166	136	(30)	180	145	(35)	194	149	(45)	208	167	(50)	(185)	-20.8%
Middle Atlantic	559	487	(72)	593	512	(82)	630	532	(98)	661	516	(145)	687	529	(158)	(555)	-17.7%
South Atlantic	1,031	826	(205)	1,106	884	(221)	1,190	933	(257)	1,272	884	(388)	1,353	923	(430)	(1,502)	-25.2%
East North Central	618	538	(80)	651	562	(89)	688	581	(107)	721	568	(154)	752	583	(169)	(598)	-17.4%
East South Central	521	442	(79)	558	467	(91)	599	491	(108)	638	486	(151)	674	504	(170)	(600)	-20.0%
West North Central	353	304	(50)	383	324	(58)	418	346	(72)	454	352	(103)	494	377	(117)	(400)	-19.0%
West South Central	685	531	(135)	717	560	(157)	778	587	(191)	840	554	(286)	905	576	(329)	(1,097)	-28.1%
Mountain	216	180	(36)	225	188	(37)	236	193	(44)	246	182	(64)	256	186	(70)	(251)	-21.3%
Pacific	417	359	(57)	403	349	(54)	391	332	(59)	377	292	(85)	362	277	(85)	(339)	-17.4%
Non-DSH	2,270	1,883	(387)	2,428	1,995	(433)	2,614	2,094	(520)	2,799	2,039	(760)	2,995	2,138	(857)	(2,957)	-22.6%
DSH	2,131	1,797	(334)	2,235	1,869	(366)	2,352	1,923	(429)	2,453	1,827	(626)	2,543	1,859	(683)	(2,438)	-20.8%
Unknown	133	115	(18)	139	119	(20)	145	122	(23)	150	116	(34)	154	117	(37)	(132)	-18.3%
Less than 50 Beds	232	188	(43)	244	192	(52)	258	197	(61)	271	185	(85)	283	189	(95)	(336)	-28.1%
50 to 99 Beds	515	435	(80)	546	451	(95)	581	468	(113)	613	451	(162)	643	485	(179)	(628)	-21.7%
100 to 199 Beds	982	821	(160)	1,047	867	(180)	1,122	908	(214)	1,195	871	(324)	1,271	909	(362)	(1,240)	-22.1%
200 to 499 Beds	1,914	1,588	(326)	2,015	1,664	(352)	2,133	1,720	(413)	2,242	1,655	(587)	2,350	1,701	(649)	(2,327)	-21.8%
500 Beds or More	891	781	(130)	950	810	(141)	1,017	848	(171)	1,081	819	(262)	1,144	852	(292)	(996)	-19.6%

Post-BBA Medicare Margins for Hospital-Based Home Health Services

	1998 Post-BBA Margin	1999 Post-BBA Margin	2000 Post-BBA Margin	2001 Post-BBA Margin	2002 Post-BBA Margin
Total	-5.79%	-4.06%	-4.01%	-11.64%	-11.36%
Rural	-4.71%	-3.60%	-3.52%	-10.48%	-10.00%
Urban	-6.21%	-4.24%	-4.19%	-12.09%	-11.88%
Non-Teaching	-5.83%	-4.32%	-4.28%	-12.27%	-12.11%
Teaching	-5.71%	-3.58%	-3.48%	-10.47%	-9.95%
Not-for-Profit	-4.75%	-2.91%	-2.84%	-9.65%	-9.28%
For Profit	-11.41%	-8.88%	-8.78%	-19.19%	-18.17%
Public	-4.83%	-4.22%	-4.22%	-12.84%	-12.62%
Unknown	-4.12%	-2.59%	-1.69%	-6.73%	-4.97%
New England	-3.70%	-3.03%	-2.59%	-4.92%	-4.34%
Middle Atlantic	-3.36%	-2.06%	-1.92%	-8.01%	-7.29%
South Atlantic	-9.19%	-6.95%	-6.85%	-18.07%	-18.10%
East North Central	-2.91%	-1.32%	-1.19%	-6.28%	-5.66%
East South Central	-3.86%	-2.77%	-2.68%	-7.90%	-7.77%
West North Central	-3.90%	-2.53%	-2.26%	-6.60%	-5.58%
West South Central	-8.27%	-7.30%	-7.94%	-19.94%	-20.76%
Mountain	-7.29%	-3.73%	-3.36%	-10.90%	-10.13%
Pacific	-5.89%	-2.67%	-2.14%	-9.49%	-8.31%
Non-DSH	-5.75%	-4.02%	-3.97%	-11.60%	-11.25%
DSH	-5.81%	-4.14%	-4.10%	-11.83%	-11.65%
Unknown	-6.14%	-3.58%	-3.21%	-9.49%	-8.82%
Less than 50 Beds	-6.26%	-6.68%	-7.04%	-16.39%	-16.75%
50 to 99 Beds	-4.19%	-3.77%	-3.80%	-10.92%	-10.42%
100 to 199 Beds	-5.51%	-3.83%	-3.63%	-12.30%	-11.90%
200 to 499 Beds	-6.60%	-4.52%	-4.43%	-11.52%	-11.32%
500 Beds or More	-5.20%	-2.92%	-2.96%	-10.51%	-10.19%

Notes:

- 1) Aggregation by category may not equal the total due to rounding.
- 2) Unknown in the DSH/ Non-DSH category represents hospitals where DSH status cannot be determined and where data between the AHA annual survey and Medicare cost reports cannot be linked.
- 3) Unknown in the Ownership category represents hospitals without an ownership/ control status in the Medicare cost report data.

Comparison of Medicare Payments to Hospitals for PPS-Exempt Services (in millions)

Section III: Data Tables by Hospital Category with Costs Increasing at Market Basket Minus One Percentage Point

	1998			1999			2000			2001			2002			5 Year Total Impact on Payments	5 Year Total Percent Impact
	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact		
Total	7,849	7,314	(535)	7,975	7,419	(556)	8,127	7,562	(565)	8,289	7,715	(574)	8,482	7,878	(604)	(2,815)	-6.9%
Rural	1,176	1,091	(85)	1,195	1,107	(88)	1,218	1,129	(89)	1,242	1,151	(91)	1,268	1,175	(93)	(446)	-7.3%
Urban	6,672	6,223	(450)	6,780	6,311	(468)	6,909	6,433	(476)	7,047	6,563	(483)	7,194	6,703	(491)	(2,369)	-8.8%
Non-Teaching	4,515	4,208	(310)	4,587	4,268	(320)	4,672	4,347	(326)	4,764	4,433	(332)	4,883	4,525	(358)	(1,625)	-6.9%
Teaching	3,333	3,108	(225)	3,388	3,152	(236)	3,454	3,215	(239)	3,525	3,282	(243)	3,600	3,353	(246)	(1,189)	-6.9%
Not-for-Profit	4,112	3,843	(269)	4,179	3,897	(282)	4,259	3,973	(286)	4,345	4,055	(290)	4,436	4,142	(295)	(1,421)	-6.7%
For Profit	1,803	1,670	(133)	1,831	1,694	(137)	1,864	1,725	(139)	1,900	1,758	(142)	1,938	1,793	(144)	(696)	-7.5%
Public	846	768	(78)	861	800	(61)	879	817	(62)	898	834	(64)	918	853	(65)	(310)	-7.0%
Unknown	1,087	1,013	(75)	1,104	1,028	(76)	1,125	1,047	(78)	1,146	1,068	(78)	1,170	1,090	(80)	(387)	-6.9%
New England	653	619	(35)	664	628	(37)	677	640	(38)	691	653	(38)	706	667	(39)	(188)	-5.5%
Middle Atlantic	1,467	1,349	(118)	1,491	1,368	(123)	1,520	1,396	(124)	1,550	1,425	(125)	1,584	1,457	(126)	(618)	-8.1%
South Atlantic	1,167	1,100	(68)	1,186	1,115	(71)	1,208	1,136	(72)	1,232	1,159	(74)	1,258	1,183	(75)	(360)	-5.9%
East North Central	1,370	1,285	(85)	1,392	1,303	(89)	1,418	1,328	(91)	1,447	1,354	(93)	1,477	1,383	(95)	(452)	-6.4%
East South Central	438	414	(24)	445	420	(25)	453	428	(25)	462	436	(26)	472	445	(27)	(127)	-5.6%
West North Central	452	425	(26)	459	432	(28)	468	440	(28)	478	449	(28)	488	459	(29)	(140)	-6.0%
West South Central	1,230	1,137	(93)	1,249	1,153	(96)	1,272	1,175	(97)	1,296	1,198	(99)	1,323	1,222	(100)	(485)	-7.6%
Mountain	290	272	(17)	294	276	(18)	300	281	(18)	308	287	(19)	312	293	(19)	(92)	-6.1%
Pacific	782	713	(69)	795	724	(71)	810	738	(72)	826	754	(73)	844	770	(74)	(358)	-8.8%
Non-DSH	3,857	3,623	(234)	3,918	3,673	(245)	3,992	3,743	(249)	4,070	3,817	(253)	4,154	3,897	(257)	(1,239)	-8.2%
DSH	3,038	2,810	(229)	3,088	2,851	(236)	3,147	2,907	(240)	3,211	2,967	(243)	3,279	3,031	(247)	(1,106)	-7.6%
Unknown	953	881	(72)	969	895	(74)	988	912	(76)	1,008	930	(77)	1,029	950	(79)	(379)	-7.7%
Less than 50 Beds	287	262	(24)	291	268	(25)	297	271	(26)	303	277	(26)	309	283	(26)	(127)	-8.6%
50 to 99 Beds	1,523	1,419	(104)	1,547	1,440	(107)	1,575	1,466	(109)	1,606	1,495	(111)	1,638	1,525	(114)	(545)	-6.9%
100 to 199 Beds	1,685	1,570	(115)	1,712	1,592	(120)	1,744	1,622	(121)	1,778	1,655	(123)	1,814	1,688	(125)	(604)	-6.9%
200 to 499 Beds	2,815	2,636	(178)	2,861	2,677	(184)	2,916	2,729	(187)	2,975	2,784	(191)	3,037	2,843	(195)	(933)	-8.4%
500 Beds or More	1,538	1,423	(115)	1,564	1,444	(120)	1,595	1,473	(122)	1,628	1,505	(123)	1,663	1,539	(125)	(605)	-7.6%

Post-BBA Medicare Margins for PPS-Exempt Services

	1998	1999	2000	2001	2002
	Post-BBA Margin	Post-BBA Margin	Post-BBA Margin	Post-BBA Margin	Post-BBA Margin
Total	-5.43%	-5.39%	-5.16%	-4.93%	-4.70%
Rural	-8.55%	-6.46%	-6.23%	-6.02%	-5.83%
Urban	-5.23%	-5.21%	-4.97%	-4.74%	-4.51%
Non-Teaching	-4.75%	-4.70%	-4.51%	-4.33%	-4.15%
Teaching	-6.35%	-6.33%	-6.03%	-5.74%	-5.45%
Not-for-Profit	-5.10%	-5.09%	-4.83%	-4.57%	-4.31%
For Profit	-2.06%	-2.05%	-1.92%	-1.80%	-1.68%
Public	-16.01%	-15.86%	-15.43%	-15.04%	-14.64%
Unknown	-4.00%	-3.92%	-3.73%	-3.56%	-3.39%
New England	-7.80%	-7.74%	-7.49%	-7.24%	-7.00%
Middle Atlantic	-6.95%	-6.94%	-6.60%	-6.25%	-5.91%
South Atlantic	-4.24%	-4.22%	-4.04%	-3.86%	-3.68%
East North Central	-5.03%	-5.03%	-4.80%	-4.58%	-4.37%
East South Central	-2.95%	-2.94%	-2.79%	-2.63%	-2.49%
West North Central	-6.57%	-6.48%	-6.22%	-5.95%	-5.71%
West South Central	-4.12%	-4.08%	-3.91%	-3.75%	-3.59%
Mountain	-2.89%	-2.85%	-2.70%	-2.54%	-2.39%
Pacific	-6.85%	-6.74%	-6.46%	-6.20%	-5.94%
Non-DSH	-3.01%	-3.03%	-2.84%	-2.65%	-2.46%
DSH	-6.62%	-6.54%	-6.26%	-5.99%	-5.72%
Unknown	-11.55%	-11.42%	-11.16%	-10.91%	-10.68%
Less than 50 Beds	-6.50%	-6.40%	-6.17%	-5.95%	-5.72%
50 to 99 Beds	-2.52%	-2.48%	-2.33%	-2.20%	-2.08%
100 to 199 Beds	-4.34%	-4.33%	-4.13%	-3.93%	-3.75%
200 to 499 Beds	-5.86%	-5.82%	-5.59%	-5.36%	-5.14%
500 Beds or More	-8.54%	-8.49%	-8.13%	-7.75%	-7.37%

Notes:

- 1) Aggregation by category may not equal the total due to rounding.
- 2) Unknown in the DSH/ Non-DSH category represents hospitals where DSH status cannot be determined and where data between the AHA annual survey and Medicare cost reports cannot be linked.
- 3) Unknown in the Ownership category represents hospitals without an ownership/ control status in the Medicare cost report data.

Section IV:

Type of Service Comparisons and National Estimates Calculation with
Costs Increasing at Market Basket (MB)

Analysis of Medicare Payments and Margins Under the BBA: 1998 to 2002
Medicare Payments in Total and by Type of Service

PROJECTIONS WITH MEDICARE COSTS INCREASING AT MARKET BASKET

Total Medicare Payments and Margins* (in billions)						
	1998	1999	2000	2001	2002	5 Year Total
Pre-BBA Payments	\$126.50	\$132.21	\$135.94	\$139.82	\$143.90	678.37
Post-BBA Payments	\$119.08	\$120.43	\$120.93	\$122.15	\$124.39	606.98
Dollar Impact	(7.42)	(11.78)	(15.01)	(17.67)	(19.52)	(71.39)
Percent Impact	-5.86%	-8.91%	-11.04%	-12.64%	-13.56%	-10.52%
Post-BBA Costs	118.72	122.89	126.32	130.00	134.07	
Post-BBA Margin	0.31%	-2.04%	-4.46%	-6.43%	-7.79%	

Medicare Payments and Margins for Inpatient PPS Services (in billions)						
	1998	1999	2000	2001	2002	5 Year Total
Pre-BBA Payments	80.60	83.90	86.16	88.51	90.99	430.16
Post-BBA Payments	76.74	77.29	77.53	78.30	79.59	389.44
Dollar Impact	(3.87)	(6.61)	(8.62)	(10.22)	(11.40)	(40.72)
Percent Impact	-4.80%	-7.88%	-10.01%	-11.54%	-12.53%	-9.47%
Post-BBA Costs	67.10	69.73	71.69	73.82	76.21	
Post-BBA Margin	12.57%	9.79%	7.54%	5.71%	4.24%	

Medicare Payments and Margins for Outpatient Services (in billions)						
	1998	1999	2000	2001	2002	5 Year Total
Pre-BBA Payments	14.22	15.30	15.68	16.09	16.54	77.82
Post-BBA Payments	13.10	13.34	13.16	13.37	13.61	66.58
Dollar Impact	(1.12)	(1.96)	(2.52)	(2.72)	(2.93)	(11.24)
Percent Impact	-7.85%	-12.81%	-16.08%	-16.89%	-17.70%	-14.45%
Post-BBA Costs	15.84	16.22	16.63	17.06	17.54	
Post-BBA Margin	-20.92%	-21.61%	-26.34%	-27.59%	-28.84%	

Medicare Payments and Margins for Hospital-Based Home Health Services (in billions)						
	1998	1999	2000	2001	2002	5 Year Total
Pre-BBA Payments	4.53	4.80	5.11	5.40	5.69	25.54
Post-BBA Payments	3.79	3.98	4.14	3.98	4.11	20.01
Dollar Impact	(0.74)	(0.82)	(0.97)	(1.42)	(1.58)	(5.53)
Percent Impact	-16.30%	-17.04%	-19.01%	-26.29%	-27.71%	-21.64%
Post-BBA Costs	4.01	4.15	4.30	4.45	4.58	
Post-BBA Margin	-5.79%	-4.06%	-4.01%	-11.64%	-11.36%	

Medicare Payments and Margins for PPS-Exempt Services (in billions)						
	1998	1999	2000	2001	2002	5 Year Total
Pre-BBA Payments	8.03	8.22	8.45	8.68	8.93	42.31
Post-BBA Payments	7.45	7.62	7.82	8.04	8.27	39.20
Dollar Impact	(0.58)	(0.61)	(0.62)	(0.64)	(0.66)	(3.11)
Percent Impact	-7.19%	-7.38%	-7.39%	-7.39%	-7.39%	-7.35%
Post-BBA Costs	7.94	8.13	8.35	8.58	8.83	
Post-BBA Margin	-6.54%	-6.76%	-6.76%	-6.76%	-6.76%	

*Total Medicare payments and margins based on projections of AHA Annual Survey data.

The sum of the four types of service will not equal the total due to the cross between cost report and AHA survey data.

Crosswalk of Medicare PPS 12 and AHA Annual Survey BBA Payment Simulations

Market Basket Analysis

The Lewin Group has simulated the BBA's impact on payments using Medicare PPS12 data for inpatient PPS, outpatient, hospital-based home health, and PPS-exempt services. The resulting rates of change from this analysis were then applied to AHA Annual Survey data to simulate total payments. AHA data include the following services that are not reflected in the Medicare cost report simulations: direct graduate medical education, skilled nursing care, dialysis, outpatient rehabilitation, lab, durable medical equipment, oxygen, ambulance, and non-covered services and costs.

1. Calculate the percent impact of the BBA on payments and costs from the Medicare PPS12 (FFY 1995) payment microsimulations. Four types of service were simulated: inpatient PPS, outpatient, hospital-based home health, and PPS-exempt services.

PPS12 Simulated Payments and Costs (\$ billions)	1998	1999	2002	2001	2002
Pre-BBA Medicare payments for the four services simulated	107.38	112.22	115.39	118.69	122.15
Post-BBA Medicare payments for the four services simulated	101.09	102.23	102.65	103.69	105.59
Percent Impact of BBA on Medicare payments for the four services simulated	-5.86%	-8.91%	-11.04%	-12.64%	-13.56%
Pre-BBA Medicare costs for the four services simulated	95.59	99.07	101.98	105.10	108.53
Post-BBA Medicare costs for the four services simulated	94.89	98.22	100.97	103.91	107.16
Percent Impact of BBA on Medicare costs for the four services simulated	-0.73%	-0.86%	-0.99%	-1.13%	-1.26%

2. Calculate the rate of change to payments and costs from the Medicare PPS12 payment microsimulations of the four types of service.

Rate of Change in Simulated Payments and Costs (from PPS 12)	1998 to 1999	1999 to 2000	2000 to 2001	2001 to 2002
Pre-BBA Medicare payments for the four services simulated	4.5%	2.8%	2.9%	2.9%
Post-BBA Medicare payments for the four services simulated	1.1%	0.4%	1.0%	1.8%
Pre-BBA Medicare costs for the four services simulated	3.6%	2.9%	3.1%	3.3%
Post-BBA Medicare costs for the four services simulated	3.5%	2.8%	2.9%	3.1%

3. Use AHA data from 1995 to 1997 to calculate Medicare payment and costs rates of change. Payments increased at an annual rate of 5.1 percent and costs at annual rate of 2.9 percent from 1995 to 1997.

4. Apply average 1995 to 1997 AHA Medicare payment and cost rates of change to 1997 AHA Medicare payments and costs to estimate 1998 Medicare payments and costs.

5. Apply simulated payment and cost rates of change from Medicare PPS12 analysis to 1998 Medicare payments and costs estimated from AHA data to project AHA payments and costs: (1) pre-BBA; and (2) post-BBA. This methodology assumes that payments and costs for services not modeled in the Medicare cost report simulations will experience the same aggregate rates of change as the four simulated services.

Medicare Payments and Costs Projected from AHA Data (in billions)	AHA Annual Survey Data			Projected Medicare Payments and Costs Calculated by Applying Lewin Payment and Cost Rates of Change Based On Medicare PPS12 Data to 1998 Medicare Payments and Costs Estimated from AHA Data				
	1995	1996	1997	1998	1999	2000	2001	2002
Pre-BBA Medicare Payments	\$108.94	\$114.89	\$120.35	\$126.50	\$132.21	\$135.94	\$139.82	\$143.90
Post-BBA Medicare Payments				119.08	120.43	120.93	122.15	124.39
Pre-BBA Medicare Costs	109.89	112.34	116.26	119.59	123.95	127.59	131.48	135.78
Post-BBA Medicare Costs				118.72	122.89	126.32	130.00	134.07

6. Total Medicare Margins, actual and projected, from 1995 to 2002.

Simulated Margins	1995	1996	1997	1998	1999	2000	2001	2002
Margins Based On AHA Survey Data								
Actual	-0.9%	2.2%	3.4%					
Post-BBA Projections				0.3%	-2.0%	-4.5%	-6.4%	-7.8%

Proportion of Revenues and Costs Attributed to Each Type of Service

	1998	1999	2000	2001	2002
Pre-BBA Payments					
Inpatient PPS	75.06%	74.76%	74.66%	74.58%	74.49%
Outpatient	13.24%	13.63%	13.59%	13.56%	13.54%
Home Health	4.22%	4.28%	4.43%	4.55%	4.66%
TEFRA	7.48%	7.33%	7.32%	7.31%	7.31%
Total	100.00%	100.00%	100.00%	100.00%	100.00%
Post-BBA Payments					
Inpatient PPS	75.91%	75.61%	75.53%	75.51%	75.38%
Outpatient	12.96%	13.05%	12.82%	12.90%	12.89%
Home Health	3.75%	3.90%	4.03%	3.84%	3.90%
TEFRA	7.37%	7.45%	7.62%	7.75%	7.84%
Total	100.00%	100.00%	100.00%	100.00%	100.00%
Pre-BBA Costs					
Inpatient PPS	70.19%	70.38%	70.29%	70.24%	70.22%
Outpatient	16.57%	16.37%	16.30%	16.23%	16.16%
Home Health	4.93%	5.04%	5.21%	5.36%	5.48%
TEFRA	8.31%	8.21%	8.19%	8.17%	8.14%
Total	100.00%	100.00%	100.00%	100.00%	100.00%
Post-BBA Costs					
Inpatient PPS	70.71%	70.99%	71.00%	71.04%	71.12%
Outpatient	16.69%	16.51%	16.47%	16.42%	16.36%
Home Health	4.23%	4.22%	4.26%	4.28%	4.28%
TEFRA	8.37%	8.28%	8.27%	8.26%	8.24%
Total	100.00%	100.00%	100.00%	100.00%	100.00%

Section V:

Data Tables by Hospital Category with Costs Increasing
at Market Basket (MB)

Comparison of Total Medicare Payments to Hospitals* (in millions)

Section V: Data Tables by Hospital Category with Costs Increasing at Market Basket

	1998			1999			2000			2001			2002			5 Year Total Impact to Payments	5 Year Total Percent Impact
	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact		
Total	126,503	119,084	(7,419)	132,206	120,429	(11,778)	135,841	120,931	(16,008)	139,817	122,151	(17,666)	143,902	124,388	(19,517)	(71,389)	-10.5%
Rural	19,748	18,515	(1,233)	20,820	19,118	(1,703)	21,433	19,228	(2,207)	22,060	19,412	(2,649)	22,711	19,773	(2,938)	(10,730)	-10.0%
Urban	106,756	100,569	(6,186)	111,386	101,311	(10,075)	114,408	101,703	(12,802)	117,757	102,740	(15,017)	121,191	104,612	(16,579)	(60,659)	-10.6%
Non-Teaching	61,063	57,221	(3,842)	63,914	58,131	(5,783)	65,742	58,596	(7,147)	67,645	59,284	(8,361)	69,655	60,395	(9,259)	(34,381)	-10.5%
Teaching	65,451	61,863	(3,588)	68,293	62,298	(5,995)	70,199	62,336	(7,863)	72,173	62,867	(9,305)	74,247	63,980	(10,268)	(37,008)	-10.6%
Not-for-Profit	62,718	57,335	(5,383)	67,105	58,567	(8,538)	69,803	58,849	(10,953)	72,595	59,725	(12,870)	75,524	61,320	(14,203)	(51,947)	-10.4%
For Profit	17,270	16,130	(1,139)	17,905	16,174	(1,731)	18,452	16,377	(2,075)	19,022	16,576	(2,447)	19,652	16,834	(2,719)	(10,111)	-11.0%
Public	16,515	15,818	(697)	17,197	15,688	(1,509)	17,880	15,705	(2,175)	18,200	15,851	(2,350)	18,726	16,131	(2,595)	(9,332)	-10.6%
New England	7,377	6,987	(390)	7,730	6,994	(736)	7,954	7,002	(952)	8,191	7,093	(1,097)	8,430	7,230	(1,201)	(4,376)	-11.0%
Middle Atlantic	22,029	20,831	(1,198)	22,668	20,780	(1,889)	23,299	20,703	(2,596)	23,930	20,872	(3,058)	24,609	21,245	(3,364)	(12,305)	-10.6%
South Atlantic	21,721	20,353	(1,368)	22,756	20,729	(2,027)	23,417	20,848	(2,570)	24,107	21,056	(3,050)	24,835	21,452	(3,383)	(12,398)	-10.6%
East North Central	21,772	20,598	(1,175)	22,895	20,782	(2,113)	23,534	20,900	(2,634)	24,204	21,130	(3,075)	24,886	21,813	(3,073)	(12,379)	-10.6%
East South Central	9,514	8,980	(534)	10,044	9,202	(842)	10,341	9,281	(1,060)	10,649	9,392	(1,258)	10,971	9,567	(1,404)	(5,097)	-9.9%
West North Central	9,993	9,451	(542)	10,553	9,751	(802)	10,887	9,789	(1,097)	11,197	9,918	(1,278)	11,546	10,120	(1,426)	(5,116)	-9.4%
West South Central	13,495	12,675	(820)	14,170	12,831	(1,339)	14,584	12,920	(1,664)	15,015	13,022	(1,993)	15,485	13,271	(2,214)	(8,030)	-11.0%
Mountain	5,563	5,242	(321)	5,781	5,264	(518)	5,941	5,304	(638)	6,110	5,360	(749)	6,295	5,456	(839)	(3,055)	-10.3%
Pacific	15,039	14,188	(851)	15,610	14,097	(1,513)	16,003	14,175	(1,828)	16,415	14,308	(2,108)	16,845	14,531	(2,314)	(8,534)	-10.8%
Non-DSH	48,695	45,576	(3,119)	51,068	46,489	(4,579)	52,583	46,817	(5,766)	54,121	47,367	(6,754)	55,771	48,298	(7,473)	(27,672)	-10.6%
DSH	61,965	58,475	(3,489)	64,797	58,838	(5,959)	66,585	58,938	(7,647)	68,435	59,433	(9,001)	70,382	60,447	(9,935)	(36,034)	-10.8%
Unknown	15,844	15,033	(811)	16,342	15,102	(1,240)	16,792	15,178	(1,614)	17,262	15,351	(1,911)	17,748	15,642	(2,106)	(7,683)	-9.1%
Less than 50 Beds	4,478	4,167	(311)	4,638	4,208	(430)	4,779	4,211	(568)	4,926	4,241	(684)	5,074	4,321	(753)	(2,746)	-11.5%
50 to 99 Beds	9,408	8,873	(535)	9,909	9,061	(848)	10,203	9,135	(1,068)	10,503	9,242	(1,260)	10,816	9,433	(1,383)	(5,154)	-10.1%
100 to 199 Beds	23,885	22,437	(1,447)	24,925	22,666	(2,259)	25,839	22,819	(3,020)	26,374	23,063	(3,312)	27,169	23,507	(3,662)	(13,499)	-10.5%
200 to 499 Beds	57,806	54,288	(3,518)	60,290	54,885	(5,405)	61,965	55,193	(6,772)	63,727	55,818	(7,909)	65,561	56,806	(8,755)	(32,179)	-10.4%
500 Beds or More	31,066	29,338	(1,728)	32,445	29,608	(2,836)	33,354	29,573	(3,781)	34,287	29,786	(4,501)	35,282	30,317	(4,965)	(17,811)	-10.7%

* Total Medicare payments based on projections of AHA Annual Survey Data.

Post-BBA Total Medicare Margins for Hospitals

	1998	1999	2000	2001	2002
	Post-BBA Margin	Post-BBA Margin	Post-BBA Margin	Post-BBA Margin	Post-BBA Margin
Total	0.31%	-2.04%	-4.46%	-6.43%	-7.79%
Rural	-3.95%	-4.91%	-7.21%	-9.20%	-10.42%
Urban	1.09%	-1.50%	-3.94%	-5.90%	-7.29%
Non-Teaching	-0.54%	-2.65%	-4.62%	-6.34%	-7.56%
Teaching	1.09%	-1.48%	-4.30%	-6.51%	-8.00%
Not-for-Profit	-1.92%	-4.14%	-6.68%	-8.68%	-10.09%
For Profit	12.73%	10.13%	8.58%	6.84%	5.75%
Public	-0.04%	-2.71%	-5.46%	-7.54%	-9.98%
New England	-1.05%	-4.30%	-7.16%	-8.94%	-10.30%
Middle Atlantic	-1.43%	-2.44%	-5.71%	-7.93%	-9.35%
South Atlantic	5.55%	3.53%	1.33%	-0.61%	-1.91%
East North Central	-4.00%	-7.08%	-9.45%	-11.43%	-12.88%
East South Central	7.83%	6.05%	4.17%	2.50%	1.29%
West North Central	-5.45%	-6.51%	-9.07%	-11.05%	-12.41%
West South Central	0.47%	-2.56%	-4.81%	-7.13%	-8.51%
Mountain	2.38%	-0.48%	-2.42%	-4.21%	-5.50%
Pacific	0.53%	-3.39%	-5.31%	-7.02%	-8.35%
Non-DSH	-3.18%	-4.91%	-7.13%	-9.02%	-10.33%
DSH	2.86%	-0.05%	-2.65%	-4.74%	-6.19%
Unknown	0.94%	-0.98%	-3.21%	-4.94%	-6.11%
Less than 50 Beds	-7.09%	-9.76%	-12.70%	-15.05%	-16.29%
50 to 99 Beds	-1.50%	-2.66%	-4.70%	-6.49%	-7.54%
100 to 199 Beds	0.93%	-1.33%	-3.48%	-5.38%	-6.64%
200 to 499 Beds	0.75%	-1.76%	-3.99%	-5.79%	-7.19%
500 Beds or More	0.61%	-1.82%	-4.84%	-7.18%	-8.67%

Notes:

- 1) Aggregation by category may not equal the total due to rounding.
- 2) Unknown in the DSH/ Non-DSH category represents hospitals where DSH status cannot be determined and where data between the AHA annual survey and Medicare cost reports cannot be linked.
- 3) Unknown in the Ownership category represents hospitals without an ownership/ control status in the Medicare cost report data.

Comparison of Medicare Payments to Hospitals for Inpatient PPS Services (in millions)

Section V: Data Tables by Hospital Category with Costs Increasing at Market Basket

	1998			1999			2000			2001			2002			5 Year Total	5 Year Total
	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Impact on Payments	Percent Impact
Total	80,604	78,738	(3,865)	83,901	77,269	(6,611)	86,158	77,534	(8,625)	88,512	78,296	(10,216)	90,989	79,587	(11,402)	(40,720)	-9.5%
Rural	11,503	10,986	(517)	12,096	11,380	(716)	12,426	11,481	(944)	12,768	11,568	(1,181)	13,125	11,783	(1,343)	(4,720)	-7.6%
Urban	69,100	65,752	(3,349)	71,805	65,909	(5,895)	73,733	66,072	(7,660)	75,744	66,709	(9,035)	77,863	67,804	(10,059)	(35,999)	-9.8%
Non-Teaching	36,687	34,921	(1,766)	38,252	35,356	(2,896)	39,267	35,593	(3,674)	40,334	36,051	(4,283)	41,462	36,950	(4,512)	(17,431)	-8.9%
Teaching	43,917	41,818	(2,099)	45,649	41,934	(3,715)	46,891	41,941	(4,950)	48,179	42,246	(5,933)	49,527	42,637	(6,590)	(23,288)	-9.9%
Not-for-Profit	59,270	56,376	(2,894)	61,774	56,903	(4,871)	63,443	57,075	(6,368)	65,181	57,634	(7,547)	67,005	58,588	(8,417)	(30,096)	-9.5%
For Profit	8,936	8,549	(387)	9,161	8,451	(711)	9,393	8,494	(899)	9,632	8,585	(1,047)	9,901	8,726	(1,176)	(4,220)	-9.0%
Public	10,689	10,200	(489)	11,033	10,170	(863)	11,337	10,185	(1,143)	11,680	10,292	(1,388)	11,988	10,459	(1,529)	(5,390)	-9.5%
Unknown	1,709	1,614	(95)	1,933	1,768	(167)	1,985	1,770	(215)	2,039	1,784	(255)	2,096	1,814	(282)	(1,013)	-10.4%
New England	4,638	4,428	(210)	4,845	4,395	(450)	4,982	4,400	(582)	5,127	4,443	(685)	5,271	4,517	(753)	(2,680)	-10.8%
Middle Atlantic	14,811	13,955	(856)	15,129	13,992	(1,137)	15,538	14,003	(1,535)	15,948	14,084	(1,853)	16,383	14,325	(2,067)	(7,448)	-9.6%
South Atlantic	14,222	13,509	(712)	14,835	13,718	(1,117)	15,228	13,775	(1,452)	15,641	13,937	(1,704)	16,078	14,166	(1,912)	(6,900)	-9.1%
East North Central	14,352	13,733	(619)	15,066	13,796	(1,270)	15,478	13,830	(1,648)	15,915	13,965	(1,950)	16,380	14,198	(2,162)	(7,650)	-9.9%
East South Central	5,780	5,518	(261)	6,070	5,651	(418)	6,230	5,679	(551)	6,400	5,747	(653)	6,579	5,841	(738)	(2,603)	-8.4%
West North Central	5,408	5,174	(231)	5,690	5,344	(345)	5,843	5,384	(479)	6,004	5,418	(586)	6,172	5,507	(665)	(2,309)	-7.9%
West South Central	8,088	7,707	(382)	8,466	7,762	(705)	8,684	7,791	(893)	8,910	7,854	(1,056)	9,159	7,983	(1,177)	(4,212)	-9.7%
Mountain	3,204	3,055	(148)	3,311	3,049	(262)	3,400	3,064	(336)	3,495	3,102	(393)	3,582	3,153	(439)	(1,578)	-9.3%
Pacific	10,123	9,659	(464)	10,489	9,585	(904)	10,774	9,628	(1,146)	11,074	9,739	(1,335)	11,384	9,896	(1,488)	(5,337)	-9.9%
Non-DSH	32,437	30,744	(1,693)	33,835	31,251	(2,584)	34,748	31,418	(3,330)	35,700	31,782	(3,917)	36,899	32,323	(4,376)	(15,900)	-9.2%
DSH	45,134	43,111	(2,023)	46,967	43,174	(3,793)	48,227	43,250	(4,977)	49,540	43,826	(5,714)	50,826	44,329	(6,507)	(23,304)	-9.7%
Unknown	3,033	2,883	(150)	3,099	2,864	(234)	3,183	2,868	(318)	3,272	2,888	(385)	3,384	2,835	(429)	(1,518)	-9.5%
Less than 50 Beds	1,198	1,150	(47)	1,219	1,152	(67)	1,253	1,162	(92)	1,290	1,174	(116)	1,326	1,194	(132)	(454)	-7.2%
50 to 99 Beds	3,906	3,742	(165)	4,078	3,818	(261)	4,191	3,845	(346)	4,306	3,884	(422)	4,426	3,950	(477)	(1,870)	-8.0%
100 to 199 Beds	12,466	11,914	(552)	12,928	11,984	(964)	13,288	12,035	(1,234)	13,618	12,167	(1,451)	13,999	12,389	(1,630)	(5,829)	-8.8%
200 to 499 Beds	39,530	37,586	(1,945)	41,229	37,890	(3,339)	42,339	38,047	(4,292)	43,516	38,488	(5,028)	44,733	39,122	(5,611)	(20,214)	-9.8%
500 Beds or More	23,504	22,348	(1,157)	24,447	22,468	(1,981)	25,107	22,445	(2,662)	25,783	22,583	(3,200)	26,504	22,852	(3,552)	(12,552)	-10.0%

Post-BBA Medicare Margins for Inpatient PPS Services

	1998 Post-BBA Margin	1999 Post-BBA Margin	2000 Post-BBA Margin	2001 Post-BBA Margin	2002 Post-BBA Margin
Total	12.57%	9.79%	7.54%	5.71%	4.24%
Rural	11.01%	9.68%	7.81%	6.14%	4.78%
Urban	12.83%	9.81%	7.50%	5.64%	4.15%
Non-Teaching	9.69%	6.98%	5.09%	3.60%	2.22%
Teaching	14.97%	12.15%	9.62%	7.52%	5.97%
Not-for-Profit	11.82%	9.18%	6.91%	5.07%	3.59%
For Profit	15.83%	12.13%	10.18%	8.54%	7.15%
Public	14.88%	11.76%	9.45%	7.58%	6.04%
Unknown	6.58%	6.63%	4.25%	2.24%	0.75%
New England	12.30%	8.41%	5.88%	3.97%	2.45%
Middle Atlantic	12.58%	11.58%	9.14%	7.00%	5.51%
South Atlantic	11.76%	9.20%	7.08%	5.46%	4.01%
East North Central	9.64%	6.02%	3.57%	1.81%	0.04%
East South Central	13.56%	11.61%	9.80%	8.05%	6.67%
West North Central	9.21%	7.87%	5.62%	3.74%	2.26%
West South Central	13.45%	9.63%	7.42%	5.41%	3.89%
Mountain	15.97%	12.53%	10.53%	8.96%	7.55%
Pacific	17.41%	13.30%	11.34%	9.83%	8.48%
Non-DSH	7.89%	5.70%	3.59%	1.88%	0.44%
DSH	15.98%	12.81%	10.50%	8.61%	7.12%
Unknown	11.41%	8.80%	6.27%	4.19%	2.64%
Less than 50 Beds	15.14%	11.39%	9.60%	7.81%	6.38%
50 to 99 Beds	9.28%	7.48%	5.52%	3.61%	2.09%
100 to 199 Beds	11.00%	8.10%	6.10%	4.38%	2.93%
200 to 499 Beds	11.43%	8.51%	6.35%	4.68%	3.21%
500 Beds or More	15.72%	13.13%	10.58%	8.44%	6.97%

Notes:

- 1) Aggregation by category may not equal the total due to rounding.
- 2) Unknown in the DSH/ Non-DSH category represents hospitals where DSH status cannot be determined and where data between the AHA annual survey and Medicare cost reports cannot be linked.
- 3) Unknown in the Ownership category represents hospitals without an ownership/ control status in the Medicare cost report data.

Comparison of Medicare Payments to Hospitals for Outpatient Services (in millions)

Section V: Data Tables by Hospital Category with Costs Increasing at Market Basket

	1998			1999			2000			2001			2002			5 Year Total Impact on Payments	5 Year Total Percent Impact
	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact		
Total	14,216	13,100	(1,116)	15,299	13,338	(1,960)	15,681	13,180	(2,521)	16,089	13,371	(2,718)	16,540	13,812	(2,928)	(11,244)	-14.4%
Rural	2,848	2,608	(240)	3,067	2,659	(408)	3,144	2,599	(545)	3,225	2,641	(585)	3,316	2,888	(427)	(2,408)	-15.4%
Urban	11,368	10,492	(876)	12,232	10,680	(1,552)	12,538	10,581	(1,957)	12,864	10,730	(2,134)	13,224	10,923	(2,301)	(8,838)	-14.2%
Non-Teaching	7,528	6,888	(640)	8,100	7,010	(1,090)	8,303	6,948	(1,355)	8,519	7,059	(1,460)	8,757	7,186	(1,571)	(6,115)	-14.8%
Teaching	6,688	6,212	(476)	7,199	6,328	(871)	7,379	6,212	(1,166)	7,571	6,312	(1,259)	7,782	6,426	(1,357)	(5,128)	-14.0%
Not-for-Profit	10,045	9,223	(822)	10,801	9,401	(1,400)	11,071	9,277	(1,794)	11,358	9,428	(1,933)	11,877	9,696	(2,081)	(8,030)	-14.6%
For Profit	1,478	1,346	(132)	1,592	1,363	(229)	1,632	1,376	(257)	1,675	1,398	(277)	1,722	1,423	(299)	(1,193)	-14.7%
Public	2,243	2,111	(132)	2,420	2,147	(273)	2,480	2,098	(382)	2,545	2,132	(412)	2,618	2,170	(448)	(1,644)	-13.4%
Unknown	451	421	(30)	488	428	(60)	498	409	(89)	511	418	(93)	528	423	(105)	(375)	-15.2%
New England	940	875	(65)	1,012	894	(118)	1,037	870	(167)	1,064	884	(180)	1,094	900	(194)	(725)	-14.1%
Middle Atlantic	2,219	2,065	(154)	2,388	2,108	(280)	2,447	1,974	(474)	2,511	2,005	(506)	2,581	2,041	(540)	(1,953)	-16.1%
South Atlantic	2,425	2,229	(196)	2,610	2,270	(340)	2,675	2,235	(440)	2,745	2,271	(474)	2,822	2,312	(510)	(1,960)	-14.8%
East North Central	2,932	2,682	(250)	3,150	2,736	(414)	3,229	2,752	(476)	3,313	2,796	(516)	3,405	2,847	(558)	(2,215)	-13.8%
East South Central	887	818	(69)	965	828	(137)	989	829	(160)	1,015	842	(173)	1,043	857	(186)	(737)	-15.0%
West North Central	1,182	1,092	(91)	1,274	1,116	(158)	1,305	1,099	(206)	1,339	1,117	(222)	1,377	1,137	(240)	(917)	-14.2%
West South Central	1,497	1,415	(83)	1,614	1,440	(174)	1,654	1,429	(226)	1,698	1,452	(246)	1,745	1,478	(267)	(996)	-12.1%
Mountain	591	546	(45)	637	556	(81)	653	559	(93)	670	568	(101)	688	578	(110)	(431)	-13.3%
Pacific	1,530	1,381	(149)	1,650	1,391	(259)	1,691	1,412	(279)	1,735	1,435	(300)	1,784	1,481	(303)	(1,310)	-15.6%
Non-DSH	6,599	6,065	(534)	7,096	6,189	(907)	7,273	6,129	(1,144)	7,463	6,227	(1,235)	7,672	6,339	(1,332)	(5,154)	-14.3%
DSH	7,030	6,440	(590)	7,568	6,544	(1,024)	7,757	6,431	(1,326)	7,958	6,534	(1,425)	8,181	6,651	(1,530)	(5,894)	-15.3%
Unknown	587	595	8	635	606	(29)	651	600	(51)	668	610	(58)	687	621	(66)	(196)	-6.1%
Less than 50 Beds	458	423	(35)	494	431	(64)	507	411	(96)	520	417	(103)	535	425	(110)	(408)	-16.2%
50 to 99 Beds	1,155	1,082	(73)	1,248	1,081	(166)	1,278	1,053	(225)	1,311	1,069	(241)	1,347	1,089	(259)	(984)	-15.5%
100 to 199 Beds	2,780	2,505	(275)	2,970	2,548	(422)	3,044	2,510	(534)	3,123	2,550	(573)	3,211	2,596	(615)	(2,400)	-15.9%
200 to 499 Beds	6,568	6,062	(506)	7,081	6,171	(889)	7,237	6,164	(1,073)	7,428	6,263	(1,163)	7,633	6,378	(1,255)	(4,889)	-13.6%
500 Beds or More	3,275	3,049	(226)	3,527	3,108	(419)	3,615	3,023	(592)	3,709	3,071	(638)	3,813	3,126	(687)	(2,562)	-14.3%

Post-BBA Medicare Margins for Outpatient Services

	1998 Post-BBA Margin	1999 Post-BBA Margin	2000 Post-BBA Margin	2001 Post-BBA Margin	2002 Post-BBA Margin
Total	-20.92%	-21.61%	-26.34%	-27.59%	-28.84%
Rural	-21.13%	-21.68%	-27.57%	-28.83%	-30.09%
Urban	-20.87%	-21.60%	-26.04%	-27.28%	-28.53%
Non-Teaching	-20.35%	-21.08%	-25.22%	-26.48%	-27.70%
Teaching	-21.57%	-22.21%	-27.59%	-28.85%	-30.12%
Not-for-Profit	-19.87%	-20.41%	-25.07%	-26.30%	-27.54%
For Profit	-21.63%	-23.00%	-24.92%	-26.15%	-27.39%
Public	-25.24%	-26.11%	-32.23%	-33.53%	-34.84%
Unknown	-20.24%	-21.01%	-29.76%	-31.04%	-32.33%
New England	-17.41%	-17.66%	-23.91%	-25.12%	-26.35%
Middle Atlantic	-20.79%	-21.19%	-32.68%	-33.99%	-35.30%
South Atlantic	-18.38%	-19.04%	-23.91%	-25.13%	-26.36%
East North Central	-19.89%	-20.33%	-22.61%	-23.81%	-25.03%
East South Central	-19.35%	-20.42%	-23.28%	-24.49%	-25.71%
West North Central	-19.43%	-19.64%	-24.45%	-25.68%	-26.91%
West South Central	-30.27%	-31.04%	-35.38%	-36.72%	-38.06%
Mountain	-20.47%	-21.17%	-23.33%	-24.54%	-25.77%
Pacific	-22.18%	-24.25%	-25.43%	-26.67%	-27.91%
Non-DSH	-19.84%	-20.27%	-24.47%	-25.70%	-26.93%
DSH	-20.16%	-21.10%	-26.30%	-27.54%	-28.80%
Unknown	-40.26%	-40.97%	-45.90%	-47.33%	-48.78%
Less than 50 Beds	-22.18%	-22.73%	-31.93%	-33.23%	-34.53%
50 to 99 Beds	-22.88%	-23.60%	-30.08%	-31.36%	-32.65%
100 to 199 Beds	-22.49%	-23.32%	-28.31%	-29.58%	-30.85%
200 to 499 Beds	-19.62%	-20.31%	-23.46%	-24.68%	-25.90%
500 Beds or More	-21.38%	-21.96%	-28.51%	-29.78%	-31.05%

Notes:

- 1) Aggregation by category may not equal the total due to rounding.
- 2) Unknown in the DSH/ Non-DSH category represents hospitals where DSH status cannot be determined and where data between the AHA annual survey and Medicare cost reports cannot be linked.
- 3) Unknown in the Ownership category represents hospitals without an ownership/ control status in the Medicare cost report data.

Comparison of Medicare Payments to Hospitals for Home Health Services (in millions)

Section V: Data Tables by Hospital Category with Costs Increasing at Market Basket

	1998			1999			2000			2001			2002			5 Year Total	5 Year Total
	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Impact on Payments	Percent Impact
Total	4,534	3,784	(739)	4,802	3,984	(819)	5,110	4,139	(971)	5,403	3,982	(1,420)	5,581	4,114	(1,577)	(5,527)	-21.6%
Rural	1,266	1,065	(201)	1,339	1,110	(229)	1,422	1,150	(272)	1,496	1,107	(389)	1,565	1,137	(428)	(1,519)	-21.4%
Urban	3,268	2,729	(539)	3,463	2,874	(589)	3,688	2,989	(700)	3,907	2,875	(1,031)	4,126	2,977	(1,149)	(4,008)	-21.7%
Non-Teaching	3,008	2,465	(513)	3,189	2,615	(574)	3,397	2,717	(680)	3,594	2,606	(988)	3,789	2,689	(1,100)	(3,854)	-22.7%
Teaching	1,525	1,299	(226)	1,613	1,369	(244)	1,714	1,422	(291)	1,809	1,376	(433)	1,903	1,425	(478)	(1,672)	-19.5%
Not-for-Profit	2,966	2,545	(421)	3,117	2,657	(460)	3,288	2,739	(549)	3,443	2,631	(812)	3,589	2,695	(893)	(3,135)	-19.1%
For Profit	795	598	(196)	873	655	(217)	964	707	(257)	1,059	692	(367)	1,162	742	(420)	(1,458)	-30.0%
Public	627	528	(99)	660	545	(115)	699	562	(136)	735	533	(202)	770	547	(223)	(775)	-22.2%
Unknown	146	123	(23)	153	127	(26)	160	131	(29)	165	128	(39)	170	129	(41)	(158)	-19.9%
New England	154	128	(26)	166	138	(30)	180	145	(35)	194	149	(45)	206	157	(50)	(185)	-20.6%
Middle Atlantic	559	487	(72)	593	512	(82)	630	532	(98)	661	516	(145)	687	529	(158)	(555)	-17.7%
South Atlantic	1,031	826	(205)	1,106	884	(221)	1,190	933	(257)	1,272	884	(388)	1,353	923	(430)	(1,502)	-25.2%
East North Central	618	538	(80)	651	562	(89)	688	581	(107)	721	568	(154)	752	583	(169)	(598)	-17.4%
East South Central	521	442	(79)	558	467	(91)	599	491	(108)	638	486	(151)	674	504	(170)	(600)	-20.0%
West North Central	353	304	(50)	383	324	(58)	418	346	(72)	454	352	(103)	484	377	(107)	(400)	-19.0%
West South Central	665	531	(135)	717	560	(157)	778	587	(191)	840	554	(286)	905	576	(329)	(1,097)	-28.1%
Mountain	216	180	(36)	225	188	(37)	236	193	(44)	246	182	(64)	256	188	(70)	(251)	-21.3%
Pacific	417	359	(57)	403	349	(54)	391	332	(59)	377	292	(85)	362	277	(85)	(339)	-17.4%
Non-DSH	2,270	1,883	(387)	2,428	1,995	(433)	2,614	2,094	(520)	2,799	2,039	(760)	2,995	2,138	(857)	(2,957)	-22.6%
DSH	2,131	1,797	(334)	2,235	1,889	(346)	2,352	1,823	(429)	2,453	1,827	(626)	2,543	1,859	(683)	(2,438)	-20.8%
Unknown	133	115	(19)	139	119	(20)	145	122	(23)	150	116	(34)	154	117	(37)	(132)	-18.3%
Less than 50 Beds	232	188	(43)	244	192	(52)	258	197	(61)	271	185	(85)	283	189	(95)	(336)	-26.1%
50 to 99 Beds	515	435	(80)	546	451	(95)	581	488	(113)	613	451	(162)	643	465	(179)	(628)	-21.7%
100 to 199 Beds	982	821	(160)	1,047	867	(180)	1,122	906	(214)	1,195	871	(324)	1,271	909	(362)	(1,240)	-22.1%
200 to 499 Beds	1,914	1,588	(326)	2,015	1,664	(352)	2,133	1,720	(413)	2,242	1,655	(587)	2,350	1,701	(649)	(2,327)	-21.8%
500 Beds or More	691	781	(130)	950	810	(141)	1,017	846	(171)	1,081	819	(262)	1,144	852	(292)	(998)	-19.6%

Post-BBA Medicare Margins for Hospital-Based Home Health Services

	1998 Post-BBA Margin	1999 Post-BBA Margin	2000 Post-BBA Margin	2001 Post-BBA Margin	2002 Post-BBA Margin
Total	-5.79%	-4.06%	-4.01%	-11.64%	-11.38%
Rural	-4.71%	-3.60%	-3.52%	-10.48%	-10.00%
Urban	-6.21%	-4.24%	-4.18%	-12.09%	-11.88%
Non-Teaching	-5.83%	-4.32%	-4.28%	-12.27%	-12.11%
Teaching	-5.71%	-3.58%	-3.48%	-10.47%	-9.95%
Not-for-Profit	-4.75%	-2.91%	-2.84%	-9.65%	-9.26%
For Profit	-11.41%	-8.88%	-8.78%	-19.19%	-19.17%
Public	-4.83%	-4.22%	-4.22%	-12.84%	-12.62%
Unknown	-4.12%	-2.59%	-1.69%	-6.73%	-4.97%
New England	-3.70%	-3.03%	-2.59%	-4.92%	-4.34%
Middle Atlantic	-3.36%	-2.06%	-1.92%	-8.01%	-7.29%
South Atlantic	-9.19%	-6.95%	-6.85%	-18.07%	-18.10%
East North Central	-2.91%	-1.32%	-1.19%	-6.28%	-5.66%
East South Central	-3.86%	-2.77%	-2.68%	-7.90%	-7.77%
West North Central	-3.90%	-2.53%	-2.26%	-8.80%	-5.58%
West South Central	-8.27%	-7.30%	-7.94%	-19.94%	-20.76%
Mountain	-7.29%	-3.73%	-3.36%	-10.90%	-10.13%
Pacific	-5.89%	-2.67%	-2.14%	-9.49%	-8.31%
Non-DSH	-5.75%	-4.02%	-3.97%	-11.60%	-11.25%
DSH	-5.81%	-4.14%	-4.10%	-11.83%	-11.65%
Unknown	-6.14%	-3.58%	-3.21%	-9.49%	-8.82%
Less than 50 Beds	-6.26%	-6.68%	-7.04%	-16.39%	-16.75%
50 to 99 Beds	-4.19%	-3.77%	-3.80%	-10.92%	-10.42%
100 to 199 Beds	-5.51%	-3.83%	-3.63%	-12.30%	-11.90%
200 to 499 Beds	-8.80%	-4.52%	-4.43%	-11.52%	-11.32%
500 Beds or More	-5.20%	-2.92%	-2.96%	-10.51%	-10.19%

Notes:

- 1) Aggregation by category may not equal the total due to rounding.
- 2) Unknown in the DSH/ Non-DSH category represents hospitals where DSH status cannot be determined and where data between the AHA annual survey and Medicare cost reports cannot be linked.
- 3) Unknown in the Ownership category represents hospitals without an ownership/ control status in the Medicare cost report data.

Comparison of Medicare Payments to Hospitals for PPS-Exempt Services (in millions)

	1998			1999			2000			2001			2002			6 Year Total	6 Year Total
	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Pre-BBA Payment	Post-BBA Payment	Payment Impact	Impact on Payments	Percent Impact
Total	8,030	7,453	(677)	8,223	7,618	(607)	8,445	7,821	(624)	8,682	8,040	(641)	8,933	8,273	(660)	(3,110)	-7.3%
Rural	1,204	1,112	(92)	1,233	1,137	(97)	1,267	1,167	(99)	1,302	1,200	(102)	1,340	1,235	(105)	(496)	-7.8%
Urban	6,826	6,341	(485)	6,990	6,479	(510)	7,178	6,654	(525)	7,379	6,840	(539)	7,594	7,038	(555)	(2,614)	-7.3%
Non-Teaching	4,625	4,290	(335)	4,736	4,386	(350)	4,864	4,504	(360)	5,000	4,630	(370)	5,146	4,765	(381)	(1,796)	-7.4%
Teaching	3,405	3,163	(242)	3,487	3,230	(257)	3,581	3,317	(264)	3,681	3,410	(271)	3,788	3,509	(279)	(1,313)	-7.3%
Not-for-Profit	4,204	3,914	(291)	4,305	3,998	(307)	4,422	4,106	(316)	4,545	4,221	(324)	4,677	4,343	(334)	(1,572)	-7.1%
For Profit	1,850	1,706	(144)	1,894	1,744	(150)	1,946	1,791	(154)	2,000	1,842	(159)	2,058	1,895	(163)	(770)	-7.9%
Public	862	800	(62)	882	817	(65)	906	839	(67)	931	862	(69)	959	887	(71)	(335)	-7.4%
Unknown	1,114	1,033	(81)	1,141	1,057	(84)	1,172	1,085	(87)	1,205	1,115	(89)	1,240	1,148	(92)	(433)	-7.4%
New England	667	630	(37)	683	644	(39)	702	661	(40)	721	680	(41)	742	700	(43)	(200)	-5.7%
Middle Atlantic	1,490	1,371	(119)	1,535	1,400	(135)	1,576	1,436	(139)	1,621	1,478	(142)	1,666	1,521	(147)	(690)	-8.7%
South Atlantic	1,196	1,122	(73)	1,224	1,147	(77)	1,257	1,178	(79)	1,292	1,211	(82)	1,330	1,246	(84)	(396)	-6.3%
East North Central	1,401	1,309	(92)	1,435	1,337	(97)	1,473	1,373	(100)	1,515	1,412	(103)	1,559	1,453	(106)	(497)	-6.7%
East South Central	449	423	(26)	460	432	(27)	472	444	(28)	485	456	(29)	499	470	(30)	(140)	-5.9%
West North Central	462	433	(29)	473	442	(31)	486	454	(32)	500	467	(33)	514	480	(34)	(159)	-6.5%
West South Central	1,260	1,160	(100)	1,290	1,186	(104)	1,325	1,218	(107)	1,362	1,252	(110)	1,402	1,288	(113)	(535)	-8.1%
Mountain	297	278	(19)	304	284	(20)	312	292	(20)	321	300	(21)	330	309	(21)	(101)	-6.4%
Pacific	800	729	(73)	819	743	(76)	841	763	(79)	865	784	(81)	890	807	(83)	(392)	-9.3%
Non-DSH	3,949	3,695	(254)	4,043	3,775	(268)	4,153	3,877	(276)	4,269	3,986	(283)	4,393	4,101	(292)	(1,372)	-6.6%
DSH	3,107	2,860	(246)	3,181	2,923	(258)	3,267	3,002	(265)	3,359	3,086	(273)	3,456	3,175	(281)	(1,323)	-8.1%
Unknown	975	897	(78)	998	918	(81)	1,025	942	(83)	1,054	969	(85)	1,085	997	(88)	(415)	-8.1%
Less than 50 Beds	294	267	(27)	301	273	(27)	309	281	(28)	317	289	(29)	327	297	(30)	(140)	-9.0%
50 to 99 Beds	1,562	1,449	(113)	1,600	1,481	(118)	1,643	1,521	(122)	1,689	1,564	(125)	1,738	1,609	(129)	(606)	-7.4%
100 to 199 Beds	1,727	1,601	(126)	1,768	1,636	(132)	1,816	1,680	(135)	1,867	1,727	(139)	1,921	1,777	(143)	(675)	-7.4%
200 to 499 Beds	2,879	2,690	(189)	2,948	2,748	(199)	3,027	2,822	(205)	3,112	2,901	(211)	3,202	2,988	(217)	(1,021)	-6.7%
500 Beds or More	1,560	1,446	(113)	1,607	1,477	(130)	1,650	1,516	(134)	1,696	1,559	(138)	1,746	1,604	(142)	(667)	-8.1%

Post-BBA Medicare Margins for PPS-Exempt Services

	1998 Post-BBA Margin	1999 Post-BBA Margin	2000 Post-BBA Margin	2001 Post-BBA Margin	2002 Post-BBA Margin
Total	-8.54%	-8.76%	-8.76%	-8.76%	-8.76%
Rural	-7.67%	-7.86%	-7.86%	-7.86%	-7.86%
Urban	-8.34%	-8.57%	-8.57%	-8.57%	-8.57%
Non-Teaching	-5.73%	-5.91%	-5.91%	-5.91%	-5.91%
Teaching	-7.63%	-7.91%	-7.92%	-7.92%	-7.92%
Not-for-Profit	-6.26%	-6.51%	-6.52%	-6.52%	-6.52%
For Profit	-2.88%	-3.04%	-3.04%	-3.04%	-3.04%
Public	-17.73%	-18.04%	-18.05%	-18.05%	-18.05%
Unknown	-4.97%	-5.11%	-5.11%	-5.11%	-5.11%
New England	-8.96%	-9.18%	-9.19%	-9.19%	-9.19%
Middle Atlantic	-8.34%	-8.64%	-8.65%	-8.65%	-8.65%
South Atlantic	-5.21%	-5.40%	-5.40%	-5.40%	-5.40%
East North Central	-6.10%	-6.37%	-6.38%	-6.38%	-6.38%
East South Central	-3.83%	-3.98%	-3.99%	-3.99%	-3.99%
West North Central	-7.90%	-8.12%	-8.12%	-8.12%	-8.12%
West South Central	-5.05%	-5.21%	-5.22%	-5.22%	-5.22%
Mountain	-3.80%	-3.95%	-3.96%	-3.96%	-3.96%
Pacific	-8.07%	-8.24%	-8.25%	-8.25%	-8.25%
Non-DSH	-4.01%	-4.24%	-4.25%	-4.25%	-4.25%
DSH	-7.84%	-8.06%	-8.07%	-8.07%	-8.07%
Unknown	-12.78%	-12.95%	-12.96%	-12.96%	-12.96%
Less than 50 Beds	-7.55%	-7.73%	-7.74%	-7.74%	-7.74%
50 to 99 Beds	-3.40%	-3.58%	-3.57%	-3.57%	-3.57%
100 to 199 Beds	-5.36%	-5.57%	-5.57%	-5.57%	-5.57%
200 to 499 Beds	-6.96%	-7.19%	-7.20%	-7.20%	-7.20%
500 Beds or More	-10.00%	-10.29%	-10.30%	-10.30%	-10.30%

Notes:

- 1) Aggregation by category may not equal the total due to rounding.
- 2) Unknown in the DSH/ Non-DSH category represents hospitals where DSH status cannot be determined and where data between the AHA annual survey and Medicare cost reports cannot be linked.
- 3) Unknown in the Ownership category represents hospitals without an ownership/ control status in the Medicare cost report data.

Section VI:

Methodologies for the Four Types of Service Simulated in the Study

INPATIENT OPERATING PAYMENTS AND COSTS: METHODOLOGY AND ASSUMPTIONS

I. OVERVIEW

This study analyzes the financial impact of the 1997 Balanced Budget Act (BBA) on hospital inpatient operating payments from 1998 to 2002. The analysis:

- Simulates inpatient operating payments assuming the BBA was not in effect ("pre-BBA" scenario); and
- Simulates inpatient operating payments and margins assuming the BBA is in effect ("post-BBA" scenario).

We then simulated operating payments, costs, and margins pre-BBA and post-BBA for five years, from 1998 to 2002. We relied on the PPS hospital market basket reported in the *Federal Register* when projecting payments and costs; the market basket rates of change are presented below:

- 1997: 2.1 percent;
- 1998: 2.7 percent;
- 1999: 2.4 percent;
- 2000: 2.5 percent;
- 2001: 2.6 percent; and
- 2002: 2.8 percent.

In these simulations we did not model any changes in hospital behavior, the number of Medicare inpatient discharges, or patient case mix beyond FY99.

II. COST PER CASE PROJECTIONS

The Hospital Cost Report Information System (HCRIS) Minimum Data Set for PPS12 (FY95) provided Medicare cost per case data. We assumed that cost per case decreased by 0.46 percent in 1996, decreased by 0.6 percent in 1997, remained constant from 1997 to 1998, and then increased at the market basket rate minus one percentage point each year from 1999 to 2002. The Medicare Payment Assessment Commission (MedPAC) provided the cost inflation data for 1996 to 1998. In addition, in its March, 1998 *Report to Congress*, MedPAC assumed that cost per case would increase at the market basket less one percentage point. We also performed a sensitivity analysis with the assumption that inpatient operating cost per case would increase at the market basket rate from 1999 to 2002.

We assumed costs remained the same pre-BBA and post-BBA.

III. PRE-BBA PAYMENT PER CASE

For the pre-BBA simulations, we projected payments to be equal to the rates specified in the FY97 payment rule from 1998 to 2002, except for the payment update. For 1997, we modeled the payment update to be the market basket minus one-half a percentage point, and from 1998 to 2002, we assumed the payment update factor to be the full market basket. This is consistent with Medicare statute prior to the enactment of the BBA.

We used other PPS payment variables as they were reported in the HCFA's FY97 Impact File. Finally, discharges and case mix variables reflect the pre-transfer payment policy scenario (see BBA transfer provisions in the post-BBA payment per case simulations below).

IV. POST-BBA PAYMENT PER CASE

Under the BBA, the payment update is frozen in 1998 and then increases at the market basket less 1.9 percentage points in 1999, market basket less 1.8 percentage points in 2000, and market basket less 1.1 percentage points in both 2001 and 2002.

Other BBA provisions that were simulated included the following:

- The Medicare Dependent Hospital payment rule for 1998 to 2000, which was similar to the 1993 payment formula;
- Transfers – if a patient's diagnosis belongs in one of 10 DRGs (numbers 14, 113, 209, 210, 211, 236, 263, 264, 429, and 483) and is discharged from a PPS hospital to another Medicare recognized care setting (e.g., a PPS exempt hospital, home health agency, or SNF) before the geometric mean length of stay for the DRG is reached, that discharge is treated as a transfer. The hospital that discharges a transfer case is paid on a per diem basis up to the full PPS payment amount for that DRG. HCFA provided the AHA with a file that the AHA provided to us that included a case mix index and number of discharges for each PPS hospital before and after the transfer policy is enacted.¹ We used the pre-transfer case mix and discharge data to estimate payments pre-BBA and the post-transfer case mix and discharge data to estimate post-BBA payments;
- Sole Community Hospital payments (which were similar to pre-BBA payments);
- Puerto Rico: the national percentage in the payment blend for PPS hospitals increases from 25 to 50 percent;

¹ Under the transfer policy, a transfer case is considered to be a single discharge across all care settings. Pro-rated discharge shares of each transfer case are then assigned to each care setting. This reduces the total number of discharges at each PPS hospital. Under the transfer policy, each PPS hospital's case mix index also changes slightly, because transfer cases are weighted as less than a full discharge in the case mix calculations.

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- Temporary Relief Provision – this was simulated for 1998 and 1999. These are special payments for hospitals that are not Medicare-dependent hospitals, do not receive indirect medical education payments (IME) or disproportionate share hospital payments (DSH), are located in states where these types of hospitals had negative margins in 1995, and that these hospitals are projected to have negative margins in 1998 and 1999. There were 17 states that HCFA identified. The payment updates for these hospitals were increased by 0.5 percent in 1998, and 0.8 percent (as opposed to 0.5 percent) in 1999; and
 - IME and DSH payment factors were reduced as specified by the BBA.

We selected PPS payment variables from the FY98 Impact File for FY98, and from the FY99 Impact File for 1999 to 2002.

V. INPATIENT CAPITAL METHODOLOGY

This note summarizes the methodology used in simulating the financial impact of the 1997 Balanced Budget Act (BBA) on hospital inpatient capital payments during 1998 to 2002. The impact study comprises:

- (1) comparing payments under the BBA to the baseline payments (i.e., payments that would have been had the BBA not been in place); and
- (2) comparing BBA margins to the baseline margins.

This requires that we simulate three items: (1) capital cost per case for each year from 1998 to 2002, (2) baseline (pre-BBA) capital payment per case, and (3) BBA capital payment per case.

This study does not simulate hospital behavioral changes, annual changes in Medicare discharges, and case mix changes beyond FY 1999.

A. Cost Per Case Projection

Since payments for capital (specifically under the hold harmless provision) depend on costs (which have to be broken down into old and new capital), the first step is to forecast old and new capital costs to 2002.

Data on costs are provided by the HCRIS Cost Report for PPS12. PPS12 provides data on total capital cost for 4,806 hospitals, and on new capital and old capital costs for about 3,000 hospitals. Missing data for new capital costs are imputed using regression analyses on state binaries, urban/rural, teaching status, DSH status, and bed size. Then old capital costs are constrained by total capital costs and the imputed new capital costs.

New capital and old capital costs from PPS12 are then forecasted based partly (fifty percent) on the predicted annual rates of change derived from the Provider Specific Files 1997, 1998, and 1999 (these changes are called hospital specific rates of change) and the expected national rate of change (the other fifty percent).

The hospital specific predicted annual rates of change of both new and old capital are computed using regression equations that include state, urban/rural, teaching status, DSH status, and bed size as explanatory variables.

The National Rate of Change of Capital Costs for PPS Hospitals

Year	1997	1998	1999	2000	2001	2002
Change (%)	4.46	4.5	5.0*	5.0*	5.0*	5.0*

Sources: 1997-1998 from *Federal Register* 08/29/1997 p. 46129

* 1999-2002 are estimates (trended forward from 1997-1998).

B. Payment Per Case Under the Baseline

The baseline scenario is simulated by projecting the payment rule applied in FY 1997 (the year before the BBA) forward to 2002. Under the baseline scenario, the update was the full market basket.

Exception payments are put back into the system by readjusting the standardized amount and the hospital specific amounts by the exception payment budget neutrality factor for 1997.

To be consistent with the operating side, the payment variables are taken from HCFA's Impact File FY 1997 and the Provider Specific File 1997. In addition, for 1999 to 2002, discharges and case mix variables reflect the pre-transfer payment policy scenario.

C. Payment Per Case Under the BBA

The BBA scenario is simulated by applying the BBA payment rules for each year from FY 1998 to 2002.

Exception payments are put back into the system by readjusting the standardized amount and the hospital specific amounts by the exception payment budget neutrality factor. For FY1998, we used the exception payment budget neutrality factor for 1998 and the standardized amounts for 1998. For FY1999 to 2002, we used the exception payment budget neutrality factor for 1999 and the standardized amounts for 1999.

For FY 1998, we used the payment variables from the Impact File 1998 and the Provider Specific File 1998. For FY 1999 to 2002, we used the payment variables from the Impact File and the Provider Specific File 1999. Discharges and case mix variables, however, reflect the post-transfer payment policy scenario.

OUTPATIENT PAYMENTS AND COSTS: METHODOLOGY AND ASSUMPTIONS

I. OVERVIEW

The 1997 Balanced Budget Act (BBA) changed hospital outpatient payments in four ways:

- Elimination of formula driven overpayment (FDO) – ambulatory surgery, radiology, and other diagnostic are reimbursed using payment blend formulas. Prior to the BBA, these formulas assumed part of the beneficiary copayments were equal to 20 percent of the ambulatory surgical center (ASC) rate or 20 percent of the physician fee schedule amount instead of actual beneficiary copayments, which were equal to 20 percent of billed charges. The BBA eliminates FDO by using actual beneficiary copayments in the payment blend calculations starting in FY98;
- Establishment of a prospective payment system for outpatient services (OPPS) – the proposed OPPS establishes new payments for a large portion of outpatient hospital services;
- Extension of hospital outpatient and operating cost reductions – the BBA extends through December 31, 1999, operating cost reductions of 5.8 percent and capital cost reductions of 10.0 percent that were scheduled to expire at the end of FY98; and
- Reductions in the payments for enrollee bad debt for hospitals. The provisions in the BBA reduce the amount of bad debt treated as allowable costs by 25 percent for FY98, 40 percent for FY99, and 45 percent for subsequent fiscal years.

II. PAYMENT AND COST SIMULATIONS

The outpatient cost and payment simulations relied on three data sources:

- The Outpatient Impact File – HCFA has released a file that includes estimates of pre-OPPS and post-OPPS payments for those services covered under the proposed OPPS for each hospital. These payments have been FDO-adjusted;
- The PPS12 Hospital Cost Report Information System (HCRIS) Minimum Data Set; and
- The PPS13 HCRIS.

Our analytic approach consisted of six phases:

- We used the PPS13 HCRIS file to estimate outpatient payments adjusted for FDO and for changes in the treatment of bad debt. With this information, we calculated the percent impact of eliminating FDO and reducing the payments for bad debt on PPS13 pre-BBA payments for each hospital. Three percentages were calculated. The first percentage was based on a 25 percent reduction in payments for bad debt, which we used to simulate payments for FY98. The other two percentages were based on a 40 percent and 45 percent reduction in payments for bad debt and were used to simulate payments for FY99 and FY00 through FY02,

respectively. Karen Heller of the Greater New York Hospital Association provided us with the logic required to calculate outpatient costs, pre-BBA payments, and FDO-adjusted payments using PPS13;

- We used the Outpatient Impact File to estimate the percent impact of the OPPI on outpatient payments relative to PPS13 FDO-adjusted payments for each hospital. We linked the information from the Outpatient Impact File to PPS13 because the Outpatient Impact File is based on calendar year 1996 and therefore more directly related to payments in PPS13 than in PPS12;
- We used the PPS13 file to estimate the percent impact of the capital and operating cost reductions on payments for each hospital. To do this, we estimated payments in PPS13 without the cost reductions and then compared these payments to PPS13 payments with the cost reductions.
- We then calculated pre-BBA payments and costs using PPS12;
- Merging the combined effects of the BBA provisions (FDO, OPPI, and bad debt) together and linking them to PPS12 to calculate post-BBA payments—To adjust payments for provisions in the BBA, we applied the estimated total percent change in payments for each hospital due to OPPI, the elimination of FDO, and the reduction in payments for bad debt to pre-BBA payments calculated from PPS12.

The elimination of the cost reductions starting in January 2000, as called for in the BBA, is assumed to have no effect on post-BBA payments, because under OPPI payments are no longer linked to costs. However, we did adjust pre-BBA payments for the elimination of the cost reductions beginning in FY99, since prior to the BBA the law requiring the cost reductions was due to expire at the end of FY98.

- Projecting payments and costs forward from 1998 through 2002 – After calculating post-BBA payments for 1998 as specified in the previous bullet, we trended post-BBA payments forward at the market basket from 1998 to 2000 and then at the market basket less one percentage point from 2000 to 2002.

We trended pre-BBA payments based on PPS12 using the PPS market basket for 1998-2002. In addition, we applied the estimated percent change in payments for each hospital due to the elimination of the capital and operating cost reductions to pre-BBA payments starting in FY99.

To check the sensitivity of our estimated hospital outpatient margins to our assumptions about the growth rate of costs, we performed two cost projections. For the first simulation, we projected costs at market basket from 1998 to 2002. We then projected costs at market basket minus one percent and compared the findings from the two simulations.

In certain instances, we needed to make one or more of the following special adjustments to our calculations:

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- Hospitals that were in PPS12 but not in PPS13 or the Outpatient Impact File – if a hospital was not in the PPS13 file, we applied the average combined impact of the elimination of FDO and the reduction in payments for bad debt to a hospital's PPS12 payments to calculate post-BBA payments. These average percent impacts were based on our analysis and equaled 7.8 percent for FY98 (based on the elimination of FDO and a 25 percent reduction in payments for bad debt), 8.3 percent for FY99 (based on the elimination of FDO and a 40 percent reduction in payments for bad debt), and 8.5 percent for FY00 through FY02 (based on the elimination of FDO and a 45 percent reduction in payments for bad debt). If the hospital was not in the Outpatient Impact File, we applied the average OPSS impact based on our analysis (2.6 percent of total outpatient payments) to its PPS12 outpatient payments.
 - Because the OPSS only affects a subset of outpatient services, payments (FDO adjusted) for OPSS services pre-OPSS should be less than total (FDO adjusted) outpatient payments. There were some hospitals where total pre-OPSS payments for OPSS services from the Outpatient Impact File exceeded FDO-adjusted total outpatient payments from PPS13. For these hospitals, we scaled down pre-OPSS payments for OPSS services to be 64.7 percent of total outpatient payments. This reduction is based on the average ratio of payments for OPSS services pre-OPSS (from the Impact File) to total (FDO adjusted) outpatient payments (from PPS13).
 - For PPS12 it was not possible to calculate total outpatient payments as reported on the cost report without over-stating these payments because ASC, Radiology, and Diagnostic payments excluded deductibles and coinsurance while payments for cost-based services included these payments. In addition, deductibles and coinsurance for all four service types were grouped under a single PPS12 HCRIS variable and thus were not reported separately. To avoid double-counting deductibles and coinsurance payments received for cost-based services, we obtained the payments net of deductibles to total payments ratio for cost-based services from PPS13 for each hospital. We then reduced total payments for cost-based services in PPS12 by multiplying the total payments for these services by this ratio. This method will be accurate when the share of payments for cost-based services accounted for by deductibles and coinsurance is stable through time for each hospital.
 - If a hospital was in PPS12 but not in PPS13, we used the overall average ratio of deductibles and coinsurance payments (38.1 percent) to reduce total payments for cost-based services.
 - If a hospital was not in PPS13, we could not eliminate the impact of the capital and operating cost reductions for calculating pre-BBA payments. For these hospitals, we applied the average percentage increase in payments (7.7 percent) due to the elimination of the cost reductions to adjust projected pre-BBA payments starting in FY99.

HOME HEALTH PAYMENTS AND COSTS: METHODOLOGY AND ASSUMPTIONS

This part of the analysis explores the potential impact of changes in Medicare home health reimbursement on Home Health Agencies (HHAs). The Balanced Budget Act (BBA) of 1997 included significant changes to the reimbursement methods for Medicare services provided by home health agencies. For fiscal years 1998 and 1999, the interim payment system (IPS) reduces the limits for reimbursement, including the establishment of a new per beneficiary cost limit. The Act also calls for the implementation of a home health prospective payment system (HHPPS) beginning in fiscal year 2000. The interim payment system for Medicare home health services reduces the per-visit cost limits and institutes a per-beneficiary annual limit.

To investigate the Interim Payment System's (IPS) impact, we compiled a database from a variety of different HCFA data sources. Cost report data for individual agencies from the 1994 and 1995 Home Health Agency Practical Data Sets was used to obtain Medicare costs and visits. Trend data from HCFA's Health Care Information Systems (HCIS) database were used to develop assumptions for projecting individual Medicare-certified home health agency costs to 1998. Information on provider characteristics was selected from the 1996 Provider of Service File.

Estimates were made of the impact of the IPS compared to pre-BBA where neither the IPS nor HHPPS were enacted. Because the structure of the PPS is not yet known, we did not model HHPPS separately, but rather assumed the trends during the IPS continue under the HHPPS; however, we did include the 15 percent reduction in payment limits imposed concurrent with PPS. The estimates are:

- Pre-BBA: the baseline measurement, assumes the IPS was not enacted, and agencies would not change their practices; and
- Post-BBA: assumes home health agencies would reduce their cost and service intensity and increase the number of beneficiaries served sufficiently so that the impact on home health agency revenue matches actuals for 1998 and uses lower growth assumptions than pre-BBA.

The key components of expenditure growth necessary for modeling the impact of the Medicare IPS reimbursement changes are: (1) the number of beneficiaries using fee-for-service (FFS) home health; (2) the number of visits per beneficiary using FFS home health; and (3) the average cost per visit. Individual agency characteristics, including the number of Medicare visits, the Medicare certification date, ownership, affiliation, and region were included in developing growth trends for all three components. Trending assumptions from 1997 to 1998 reflect the agency behavior required to meet 1998 aggregate payments as described above. Aggregate trending assumptions from 1998 to 2007 appear below.

While individual agencies were trended forward using historical growth rates, the growth assumptions below were used as a benchmark for growth in the aggregate. This approach preserves variation across agencies while remaining consistent with our aggregate modeling assumptions.

Assumptions used for 1998-2007 Trending

	Pre-BBA			Post-BBA		
	Beneficiaries	Visits/ Beneficiary	Reimbursement/ Visit	Beneficiaries	Visits/ Beneficiary	Reimbursement/ Visit
1998-1999	1.0181	1.02	1.0317	1.0181	1	1.022
1999-2000	1.0283	1.02	1.0300	1.0283	1	1.020
2000-2001	1.0258	1.02	1.0300	1.0258	1	1.020
2001-2002	1.0270	1.02	1.0300	1.0270	1	1.020
2002-2003	1.0250	1.02	1.0300	1.0250	1	1.020
2003-2004	1.0200	1.02	1.0300	1.0200	1	1.020
2004-2005	1.0150	1.02	1.0300	1.0150	1	1.020
2005-2006	1.0100	1.02	1.0300	1.0100	1	1.020
2006-2007	1.0100	1.02	1.0300	1.0100	1	1.020

The modeling sample of 6,728 included agencies that had sufficient information to project cost and utilization (visits and beneficiaries), and of these there are 2,137 hospital-based home health agencies included in our simulations. The modeling sample could not include any newly created agencies between 1995 and 1998 or any agencies in existence in 1996 that did not have a Medicare cost report in the Practical Data Set.

PPS-EXEMPT PAYMENTS AND COSTS: METHODOLOGY AND ASSUMPTIONS

I. OVERVIEW

This part of the analysis considers the impact of the 1997 Balanced Budget Act (BBA) on PPS-exempt provider payments from 1998 to 2002. The analysis:

- Compares simulated payments assuming the BBA was not in effect ("pre-BBA" payments) with simulated payments under the BBA ("post-BBA" payments); and
- Simulates operating margins under the BBA (post-BBA).

We then simulated operating payments, costs, and margins pre-BBA and post-BBA for five years, from 1998 to 2002. We relied on the PPS Hospital Market basket reported in the *Federal Register* when projecting payments and costs; the market basket rates of change of presented below:

- 1997: 2.5 percent;
- 1998: 2.7 percent;
- 1999: 2.4 percent;
- 2000: 2.7 percent;
- 2001: 2.8 percent; and

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- 2002: 2.9 percent.

In these simulations we did not model any changes in hospital behavior, the number of Medicare inpatient discharges, or patient case mix beyond FY99.

II. COST PER CASE PROJECTIONS

The PPS-Exempt Cost Report for PPS12 provided our cost data. We then assumed that cost per case would increase at the market basket less one percentage point from 1998 to 2002. We also performed a sensitivity analysis with the assumption that cost per case would increase at the full market basket from 1998 to 2002.

III. PRE-BBA PAYMENT PER CASE

We calculated pre-BBA payments by projecting FY97 payment rules forward from 1998 to 2002. The following terms are used in several payment formula calculations below:

- C – cost per case (updated to the current year). PPS-exempt/TEFRA facilities are paid on a per discharge basis, where payments per case depend in part upon the facility's cost per case.
- TA – target amount. Each PPS-exempt provider must establish a target amount using three years of historic cost data. This target amount is then updated each year.

The TA is updated each year based on the update adjustment percentage (UA) determined in FY90:

$UA = (C - TA) / TA$, and is then multiplied by 100 to express this amount in percentage terms. For FY94 to FY97, the update factor applicable to each provider's TA is:²

If $UA < 10$ percent, the update factor is equal to the market basket less the minimum of one percentage point and $(10 - UA)$ percentage points; and

If $UA \geq 10$ percent, the update factor is equal to the market basket.

For FY98 and beyond, the update factor is the market basket. We need to simulate a 1997 TA and update this TA to 1998 to simulate pre-BBA payments from 1998 to 2002.

IV. BBA PAYMENT PER CASE

Our simulations of payment per case from 1998 to 2002 under the BBA include the following steps:

- BBA TA = minimum (pre-BBA 1997 TA, CTA), where CTA is the TA cap set at the 75th percentile as specified in the BBA;³

² In theory, the UA percentage is increased each FFY by the sum of the hospital's applicable reductions applied to the market basket percentage increase for previous years. Because we do not include this add-on in our pre-BBA calculations, our pre-BBA payment calculations are conservative.

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- 1998 Payments = minimum(operating costs excluding pass-throughs, BBA TA) + relief payments + bonus payments + improvement payments; where:
 - Relief payments = \$0 if $BBA\ TA < C < 1.10*BBA\ TA$, or $minimum(0.50*(BBA\ TA - C), 0.1*BBA\ TA)$, if $C > 1.10*BBA\ TA$;
 - Bonus payments = $minimum(0.18*(BBA\ TA - C), 0.02*BBA\ TA)$ if $BBA\ TA > C$, or \$0, if $C \geq BBA\ TA$; and
 - Improvement payments – a provider is eligible for improvement payments if (1) the provider has been PPS-exempt for at least three full years; and (2) $C < minimum(TA, trended\ cost, expected\ cost)$; where: trended costs = $minimum(C\ and\ TA\ in\ 1996)$, updated to FY98 by the market basket increase for a hospital with its third or subsequent cost reporting period ending in FY96. For all other hospitals, trended $C = C$ for its third full cost reporting period increased at a compounded rate until FY98. We did not consider trended cost in our simulations. Finally, $expected\ C = minimum(C\ or\ TA\ from\ the\ previous\ year)*(1 + market\ basket\ rate\ of\ increase)$.

The improvement payment then equals $minimum(maximum(0, 0.5*(Expected\ C - C), 0.01*BBA\ TA)$;

- We then calculated Medicare margins = (payments less costs)/payments;
- We updated the percentile cost cap at the market basket;
- We calculated 1999 C from the pre-BBA;
- We computed the 1999 update factor to be:
 - If $1998\ C \geq 1.10*TA$, then 1999 update factor = 1999 market basket;
 - If $BBA\ TA < 1998\ C < 1.10*BBA\ TA$, then 1999 update factor = $maximum(1999\ Market\ basket - 0.25*(1.10*BBA\ TA - 1998\ C)/(1998\ C), 0)$;
 - If $2/3*BBA\ TA \leq 1998\ C < BBA\ TA$, then 1999 update factor = $maximum(0, 1999\ market\ basket - 2.5\ percentage\ points)$; and
 - If $1998\ C < 2/3*BBA\ TA$, 1999 update factor = 0.
- Compute the new $TA = minimum(TA\ from\ previous\ year*(1 + update\ factor), capped\ TA)$;
- Payments for 1999 = $minimum(C, TA) + relief + bonus + improvement$; where

³ The formula below implies that the TA has been frozen at its 1997 level – i.e., the update is zero.

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- Relief = \$0 if $TA < C < 1.10 \cdot TA$, and relief = $\text{minimum}(0.5 \cdot (TA - C), 0.1 \cdot TA)$ if $C \geq 1.10 \cdot TA$;
 - Bonus = $\text{minimum}(0.15 \cdot (TA - C), 0.02 \cdot TA)$, if $TA > C$, or \$0 if $C \geq TA$;
 - Continuous improvement payments are as above.

We then continue to iterate these steps each year to calculate payments from 2000-2002.