

## **Chartbook Number 4**

### **Analysis of Expenditures for Dually Eligible Participants in HCBS and Institutional Settings Using Both Medicaid and Medicare Data**

**(4<sup>th</sup> in a series of 6 special quantitative reports)**

**Submitted to the  
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The overall Rebalancing Research is being conducted through a Task Order under a CMS Master Contract between CMS and the CNA Corporation, Arlington, VA, and subcontracts and consultant agreements between CNAC and the various researchers. Rosalie A. Kane is the principal investigator from the University of Minnesota and Elizabeth Williams is the CNAC project director. The special quantitative studies are under the direction of Robert L. Kane. The statements and opinions in the report are those of the writers and do not necessarily reflect the views of CMS or any of its staff, or the State liaisons to the project, or any other state staff or persons who spoke to us from participating states. We thank our CMS Project Officer, William D. Clark of CMS (ORDI), for his comments in an earlier version of this report.

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## Preface

In 2003, Congress directed the Centers for Medicare & Medicaid Services (CMS) to commission a study in up to 8 States to explore the various management techniques and programmatic features that States have put in place to rebalance their Medicaid long-term care (LTC) systems and their investments in long-term support services towards community care. The States of Arkansas, Florida, Minnesota, New Mexico, Pennsylvania, Texas, Vermont, and Washington are participating in this 3-year Rebalancing Study. For the study, CMS defined rebalancing as reaching “a more equitable balance between the proportion of total Medicaid long-term support expenditures used for institutional services (i.e., Nursing Facilities [NF] and Intermediate Care Facilities for the Mentally Retarded [ICFs-MR]) and those used for community-based supports under its State Plan and waiver options.” CMS further clarified that a balanced LTC system “offers individuals a reasonable array of balanced options, particularly adequate choices of community and institutional options.”

The products for the entire study include 3 iterations of State-specific case studies that qualitatively and quantitatively examine each State’s management approaches to rebalance its long-term care systems; 6 cross-cutting topic papers on issues in rebalancing; and a series of 6 Chartbooks with special quantitative analyses. Various products are posted on <http://www.hcbs.org>, on the CMS website at [http://www.cms.hhs.gov/NewFreedomInitiative/035\\_Rebalancing.asp#TopOfPage](http://www.cms.hhs.gov/NewFreedomInitiative/035_Rebalancing.asp#TopOfPage), and on the study director’s website at University of Minnesota at <http://www.hsr.umn.edu/LTCResourceCenter>.

The special quantitative work was performed under the direction of Robert L. Kane. We thank Glenn Mitchell and Su Wang (in Florida), Mike Baldwin and Bob Myers (in Minnesota), Kathy Leitch, Bill Moss, Patricia Richards, and Terry Rupp (in Washington) and Bill Clark and Karyn Anderson (at CMS) for their cooperation and assistance but the responsibility for all material rests with the authors.

The special quantitative studies for this project used secondary data from State and Federal sources to explore enrollment, service utilization, and expenditures for state LTC program recipients. In general, they compared Medicaid expenditures for participants in HCBS and nursing homes, as well as Medicare expenditures for individuals dually eligible for Medicaid and Medicare. This quantitative report, Chartbook Number 4, describes the total expenditures of dually eligible long-term care consumers in institutions and receiving HCBS using data from 2001 and 2002.

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## **Executive Summary**

Most attention about the use of waivers to increase the use of home and community-based services (HCBS) to provide long-term care (LTC) under Medicaid has been directed towards LTC expenditure patterns. As part of a study of rebalancing in eight states (Arkansas, Florida, Minnesota, New Mexico, Pennsylvania, Texas, Washington, and Vermont), this paper focuses on describing 1) the demographics of the dual eligible population; 2) the relative use of Medicare covered services across waiver and state plan participants; as well as 3) the role/impact of the two funding sources, Medicare and Medicaid, on overall payment for LTC and medical care services.

This paper presents analyses for dual eligible beneficiaries using combined Medicare and Medicaid claims data of payments for LTC and medical care services in the eight states

participating in the study. The data presented here are restricted to Medicare and Medicaid fee-for-service (FFS) payments for the dual eligible population. Previous reports presented analyses of Medicaid FFS utilization and payments using Medicaid Analytic eXtract (MAX) data for years 2001, 2002, and 2003. A subsequent report presents analyses based on Diagnostic Cost Group (DCG) case mix adjustments. This chartbook focuses on describing 1) the demographics of the dual eligible population; 2) the relative use of Medicare covered services across waiver and state plan participants; as well as 3) the role/ impact of the two funding sources, Medicare and Medicaid, on overall payment for LTC and medical care services.

## Research Questions

Specific research questions addressed in this chartbook include:

1. How does the cost of medical services (e.g., hospital, emergency room, physician, pharmaceuticals) covered by Medicare for dual eligible Home and Community-Based Services (HCBS) waiver participants, and state plan recipients receiving LTC services differ across recipient groups and states?
2. How does the cost of LTC services (e.g., nursing facility, intermediate care facility (ICF), personal care) covered by Medicare for dual eligible HCBS waiver participants and LTC state plan recipients differ across recipient groups and states?
3. What is the role/impact of Medicare payments on overall payments for LTC and medical services?

Finder files were created by each state based on persons enrolled in each relevant waiver program or who had used state plan LTC services. Person month is the unit of analysis.

Specific waiver groups in each state were regrouped (based on their eligible population) into the following two waiver categories of interest: Aging and (Physical) Disability and Mental Retardation/Developmental Disability (MR/DD). Our state plan groups of interest across eight states were limited to individuals who used nursing facility, intermediate care facility (ICF), home health, and personal care services. Our analysis is limited to dual eligible enrollees in FFS plans. Because reliable measures of utilization of services and their associated payment could not be obtained for managed care enrollees, those covered by managed care were eliminated from this analysis.

The number of person months in Medicaid managed care greatly varied across states, ranging from virtually none in Arkansas, to over half for persons in nursing facilities in

Minnesota. We analyzed both medical care services (including inpatient hospital, physician, physical therapy/occupational therapy/others, other practitioner, outpatient service, rehabilitation, hospice, other services, and prescription drugs) and LTC services (including nursing facility, ICF, home health, personal care, and transportation). Our results look at each type of service separately.

### **Findings and Conclusions**

- There is variation in the use of different types of health care services within and across states and among waiver groups and state plan recipients. For example, recipients of home health state plan services have much higher inpatient Medicare payment rates than waiver and other state plan groups. Pennsylvania tends to have higher Medicare payment rates for most types of services whereas Vermont tends to have lower payment rates. This pattern is generally consistent across analytic groups.

- Medical care for younger persons generally costs less than for older beneficiaries.
- The ratio of payments for medical care to payments for LTC increases after adding Medicare payments consistent with Medicare coverage. The increase, however, is not as high as might be anticipated given the population, suggesting that Medicaid payments overall and payments for LTC services in particular continue to be substantial in the dual eligible population. The exception is for home health state plan recipients.

## Introduction

This paper is one of several *Topics in Rebalancing* papers being produced by the University of Minnesota as a deliverable for the Centers for Medicare and Medicaid Services (CMS) funded project “Research on Program Management Techniques by States to Rebalance Their Long-Term Care Systems.”

Through the use of both qualitative and quantitative methods, this three-year project examines the management processes that states use to shift long-term care (LTC) resources, especially those funded through Medicaid, away from traditional LTC institutions to home and community-based services (HCBS). The qualitative component of the project was focused on identifying and describing the management approaches states use to “rebalance” their LTC services, including service expansion, service access, and budgetary and service linkage strategies. The quantitative portion of the project used secondary data from State and Federal sources to explore

enrollment, service utilization, and expenditures for state LTC program recipients. More information about the full project, including an Executive Summary, case studies on each of the participating states, and other topic papers may be found at <http://www.hsr.umn.edu/LTCResourceCenter> as well as <http://www.hcbs.org>.

This paper presents analyses for dual eligible beneficiaries using combined Medicare and Medicaid claims data of payments for LTC and medical care services in the eight states participating in the study. The data presented here are restricted to Medicare and Medicaid fee-for-service (FFS) payments for the dual eligible population. Previous reports presented analyses of Medicaid FFS utilization and payments using Medicaid Analytic eXtract (MAX) data for years 2001, 2002 and 2003. A subsequent report presents analyses based on Diagnostic Cost Group (DCG) case mix adjustments. This chartbook focuses on describing 1) the demographics of the

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dual eligible population; 2) the relative use of Medicare covered services across waiver and state plan participants; as well as 3) the role/impact of the two funding sources, Medicare and Medicaid, on overall payment for LTC and medical care services.

## **Background**

Currently, states are in varying stages of rebalancing their LTC systems. The historical contexts in which states' LTC systems have developed are diverse, and states differ in their LTC policies and programs, service delivery, and management approaches. States use a combination of Medicaid state program funds (state plan services) as well as Medicaid HCBS waivers to fund and provide LTC services. Eight states are participating in the project: Arkansas, Florida, Minnesota, Pennsylvania, New Mexico, Texas, Vermont, and Washington. Each of these eight states offers a number of institutional and HCBS programs through its Medicaid state plans, including nursing homes and ICFs for the mentally retarded as well as hospice, home health care, and personal care. However, the full scope of LTC state plan services and the nature of these services vary across the states. Regarding HCBS waivers, states vary in terms of whether a state provides numerous

specialized waivers versus fewer consolidated programs, emphasizes waivers over state plan services, or provides waiver services through FFS or managed care programs. A list of the waiver programs offered in 2001 by each of the states participating in the project is found in Table 1.

## **Data Acquisition**

### *State Finder File Data*

*Our study population consists of all Medicaid LTC recipients in each state during 2001 and 2002. CMS collects Medicaid enrollment and utilization data from states through its Medicaid Statistical Information System (MSIS). This standardized data collection has only recently allowed for specific waiver participants to be identified. Therefore, we collected participant data directly from each of the eight states. We asked states to provide a “finder file” including all individuals who were eligible for a HCBS waiver at least at one point during a year and including all individuals who received an LTC service under a state plan during a year. These files were then matched against the CMS Medicaid and Medicare claims data (discussed below) to permit analysis of*

*medical and LTC service utilization among HCBS waiver and other Medicaid LTC beneficiaries.*

Each state provided finder file data for their relevant HCBS waivers (Table 1). Some states were not able to furnish data for some of the state plan services we requested, but all states did provide finder file data for nursing facility and ICF recipients. Additionally, states that provided hospice, personal care, and home health services under their state plan (and for which data were readily available) provided data for these recipients as well (Table 2). Table 3 summarizes the data extraction approaches used by each of the states to produce the HCBS and state plan finder files. Differences in utilization rates and payments may be a result of different selection criteria used rather than actual differences in utilization/payments (selection criteria based upon service use may show higher utilization than a method based upon authorization).

**Table 1. HCBS Waivers offered in Each State (2001)**

State	Waivers in Each State	Number Served or Authorized in 2001
Arkansas	ElderChoices Waiver	8,541
	Alternatives for Adults with Physical Disabilities Waiver	909
	Alternative Community Services Waiver (DD)	2,502
Florida	Aging and Disabled Adults Waiver	14,530
	Nursing Home Diversion Waiver	1,006
	Assisted Living for Elderly Waiver	2,476
	Disability Services Waiver	22,504
	Family/Supported Living Waiver	17
	Channeling Waiver	1,564
	Project AIDS Care Waiver	6,743
	Katie Beckett Waiver	3
TBI and Spinal Cord Injury Waiver	132	
Minnesota	Elderly Waiver	11,992
	Community Alternative Care Waiver	134
	Community Alternative for Disabled Individuals Waiver	5,460
	DD-MR/Related Conditions Waiver	14,986
	Traumatic Brain Injury Waiver	536
New Mexico	Disabled and Elderly Waiver	3,000
	Mental Retardation/Developmental Disability Waiver	2,6245
	Developmental Disability with Medically Fragile Condition Waiver	289
	HIV/AIDS Waiver	46

State	Waivers in Each State	Number Served or Authorized in 2001
Pennsylvania	PA Department of Aging Waiver	12,030
	Attendant Care Waiver	3,351
	Elwyn Waiver	44
	Michael Dallas Waiver	60
	OBRA Waiver	546
	Independence Waiver	339
	Consolidated MR/DD Waiver	14,027
	Infant, Toddlers, and Families Waiver	2,972
	Person/Family Directed Support Waiver	5,381
Texas	Community-Based Alternatives Waiver	35,976
	Community Living Assistance and Support Services Waiver	1,501
	Medically-Dependent Children's Program Waiver	1,031
	Deaf-Blind Multiple Disabilities Waiver	190
	Consolidated Waiver Program	5
Vermont	Home and Community-Based Services Waiver	5,157
	Enhanced Residential Care Waiver	174
	Home-Based Waiver	1,200
	Developmental Services (DD) Waiver	1,846
Washington	Traumatic Brain Injury (TBI) Waiver	54
	Community Options Program Entry System (COPES)	30,532
	Community Alternative Program	11,823

**Table 2. Summary of State Plan Finder File Data by State**

State	State Plan Groups			
	Homecare	Intermediate Care Facility	Nursing Facility	Personal Care
Arkansas	X	X	X	X
Florida	X	X	X	-
New Mexico	X	X	X	X
Minnesota	X	X	X	X
Pennsylvania	X	X	X	-
Texas	-	X	X	X
Vermont	X	X	X	-
Washington	X	X	X	X

**Table 3. Summary of State Finder File Data Extraction Approaches**

State	Selection Criterion			
	State Plan Services		HCBS Waivers	
	Authorization/ Eligibility	Services Use; Claims	Authorization/ Eligibility	Services Use; Claims
Arkansas		X	X	
Florida		X		X
Minnesota		X	X	
New Mexico		X		X
Pennsylvania		X	MR/DD	Aging
Texas	X		X	
Vermont		X		X
Washington		X	MR/DD	Aging

*CMS Medicare and Medicaid Data*

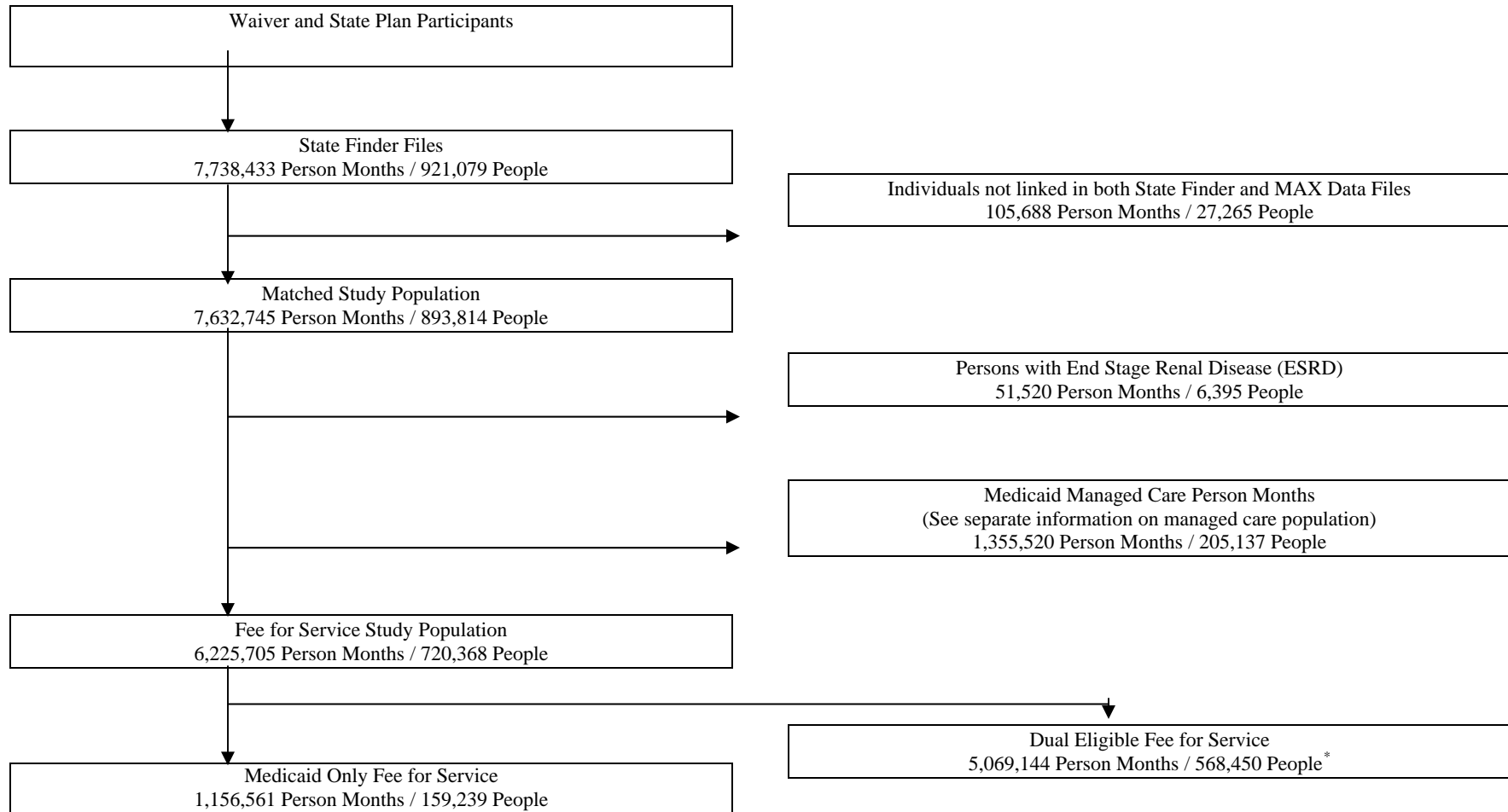
Cost data for medical and LTC services were obtained from Medicare and MAX claims files, both created by CMS. Using the CMS Health Insurance Claim (HIC) number for Medicare and the Eligible Identifier Number obtained from the MAX PS file, we extracted all claims pertaining to the persons identified and linked with the state provided finder files. Medicare claims were extracted from the MedPar (finalized inpatient claims), Outpatient, Carrier, and Home Health files. Medicaid claims were extracted from the MAX utilization files (MAX IP: inpatient, MAX LT: long-term care, MAX OT: other services, MAX RX: prescription drugs).

Our study population for this specific chartbook includes individuals who are enrolled in a relevant Medicaid waiver or LTC state plan service, and were dual eligible recipients, enrolled in both Medicaid and Medicare as a result of age or disability. Only those individuals who were identified in the

state finder files, were linked to Medicaid MAX data and were eligible for Medicare were included in our analyses. Figure 1 traces the development of our analytic sample.

We excluded from our study population those individuals identified as having end stage renal disease, (ESRD). Although they represent a small portion of the population (less than 1% across the eight states), their high utilization of services could skew the results. Therefore, these individuals, identified through diagnoses associated with their claims data, were excluded from our study population.

**Figure 1: Study Sample Development Process**



\* This chartbook includes data for the dual eligible population only. Information on the Medicaid only population can be found in previous chartbooks.

### *Creation of Person Months and Waiver/State Plan Analytic Groups*

Person month was chosen as the unit of analysis. For each person, we identified the primary waiver program (if any) in which they were enrolled in each month, and flagged the utilization of the various services of interest. In months where no waiver enrollment was indicated, but utilization of a state plan LTC service of interest was reported, we classified the person month as “state plan.”

Specific waiver groups in each state were then regrouped (based on their eligible population) into the following two waiver categories of interest: Aging and (Physical) Disability and Mental Retardation/Developmental Disability (MR/DD). For instance, in Arkansas, enrollees in the Alternative Community Services Waiver were placed in the MR/DD category and those in the Elderly Choice waiver or the Alternatives for Adults with Physical Disability waiver were

both included in the Aging and Disability category. Specific waiver groups that did not fall into the waiver categories were excluded from the analysis. Our analysis summarized in this report focuses primarily on the larger HCBS waivers in each state serving the aging and disabled populations.

Our state plan groups of interest across the eight states consisted of those individuals who used nursing facility, ICF, home health, and personal care services. For each person month classified as “state plan” we identified the primary LTC state plan service used by each individual during that month. Use of a state plan service was used to assign person months to state plan groups for comparison purposes. Some individuals were listed in some state finder files as utilizing exclusively hospice or targeted case management state plan services. Because the provision of these services and what types of specific assistance were included varied widely across states, we

excluded the individuals receiving only these services from our analysis.

The waiver and state plan analytic groups from each state that are included in our cross-state comparison are presented in Table 4. All eight states have waiver groups in the MR/DD and Aging & Disability categories. All eight states also have ICF/MR and nursing facility state plan analytic groups. Texas does not have home health; and Florida, Pennsylvania, and Vermont do not have personal care as a state plan group.

**Table 4. Summary of Waiver and State Plan Analytic Groups in 2001 for Cross-state Comparison**

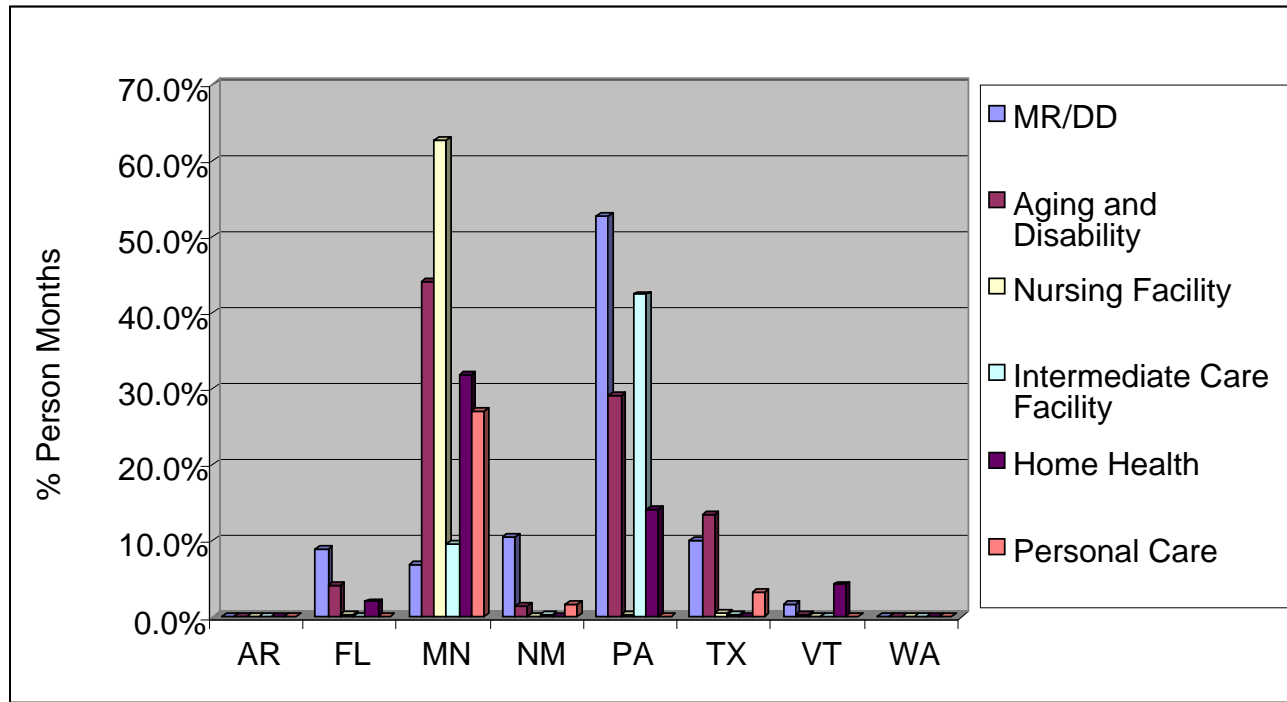
State	Waiver Groups		State Plan Groups			
	Mental Retardation/Developmental Disability	Aging & Disability	Nursing Facility	Intermediate Care Facility	Home Health	Personal Care
Arkansas	Alternative Community Services Waiver	<ul style="list-style-type: none"> <li>Elderly Choice Waiver</li> <li>Alternatives for Adults with Physical Disability Waiver</li> </ul>	Yes	Yes	Yes	Yes
Florida	Developmental Disability Waiver	Aging and Disabled Adults Waiver	Yes	Yes	Yes	-
New Mexico	Mental Retardation/Developmental Disability Waiver	Disabled Elderly Waiver	Yes	Yes	Yes	Yes
Minnesota	Mental Retardation/Related Conditions Waiver	<ul style="list-style-type: none"> <li>Elderly Waiver</li> <li>Community Alternative for Disabled Individuals Waiver</li> </ul>	Yes	Yes	Yes	Yes
Pennsylvania	Consolidated Mental Retardation/Developmental Disability Waiver	<ul style="list-style-type: none"> <li>PA Department of Aging Waiver</li> <li>Attendant Care Waiver</li> </ul>	Yes	Yes	Yes	-
Texas	<ul style="list-style-type: none"> <li>Home and Community-Based Services Waiver</li> <li>Community Living Assistance and Support Services Waiver</li> </ul>	Community-Based Alternatives Waiver	Yes	Yes	-	Yes
Vermont	Developmental Services Waiver	<ul style="list-style-type: none"> <li>Enhanced Residential Care Waiver</li> <li>Adult Disability Waiver</li> </ul>	Yes	Yes	Yes	-
Washington	Community Alternatives Program	Community Options Program Entry System	Yes	Yes	Yes	Yes

### *Exclusion of Managed Care Person Months from Analysis*

Our analysis is limited to dual eligible enrollees in FFS plans. MAX data include enrollment in prepaid Medicaid plans as well as premium payments made by Medicaid into prepaid Medicare plans. Some service data are found in the MAX files, but the data are inconsistently reported, and there are no cost data available. Managed care claims were reported either as FFS claims with associated payments, encounter claims without payment details, or in some cases went unreported despite enrollment in the group. Reliable measures of service utilization and associated payment could not be obtained for Medicaid managed care enrollees. Likewise, data for services provided through Medicare managed care plans were not available for the specific years included in our analyses. Therefore, we excluded managed care person months from the analysis (Figure 1).

The proportion of person months in managed care varied greatly across states (Figure 2), ranging from almost 0% in Arkansas, to as high as 63% for the nursing facility state plan group in Minnesota. Minnesota had the highest percentage of managed care enrollment across the waiver and state plan services among the eight states, followed by Pennsylvania and Florida. Managed care enrollment indicated in the MAX data represents different variants of managed care. Managed care enrollees can be enrolled in a comprehensive plan, a dental plan, a behavioral plan, a primary care case management plan, some other managed care plan, or a combination of plans. Comprehensive Medicaid managed care plans may include comprehensive acute health care services but may not include some or all LTC services such as nursing home stays. Some of the waiver programs in some states are also offered through a managed care plan.

**Figure 2. Percentage of Dual Eligible Person Months in Managed Care in Analytic Groups-2001**



Tables 5 and 6 show basic demographic data on the managed care individuals excluded from our analysis compared to dual eligible FFS individuals in our analysis. In those states where the managed care population is larger, such as Minnesota, Pennsylvania, and Florida, the pattern of age, gender, and race is fairly consistent between the FFS and managed care populations. However, in some instances, the managed care population is slightly younger, and fewer are white. In many instances the managed care population is more urban than the FFS enrollees. There are considerably fewer managed care enrollees who are dual eligible for Medicaid and Medicare (except in Minnesota nursing facility state plan groups) than the dual eligible FFS population in each state.

**Table 5. Demographic Summary for Dual Eligible FFS and Managed Care Enrollees by Waiver Analytic Group (2001)**

State	Demographic		Dual Eligible FFS Waiver Groups		Dual Eligible Managed Care Waiver Groups	
			MR/DD	Aging/Disability	MR/DD	Aging/Disability
AR	N	# Persons	988	7,607	0	0
	Age	Mean Age	41	79	NA	NA
		Range (Min-Max)	20-82	21-113	NA	NA
	Gender	% Female	45.6%	76.0%	NA	NA
	Race	% White	81.0%	75.9%	NA	NA
	Urban	% Metro	51.5%	35.1%	NA	NA
FL	N	# Persons	9,981	11,776	1,008	543
	Age	Mean Age	47	78	39	77
		Range (Min-Max)	20-108	21-108	20-101	26-102
	Gender	% Female	49.7%	78.0%	47.4%	74.3%
	Race	% White	77.0%	59.8%	62.4%	51.8%
	Urban	% Metro	87.2%	84.0%	91.9%	88.0%
MN	N	# Persons	6,134	8,441	402	4,824
	Age	Mean Age	43	73	74	77
		Range (Min-Max)	20-95	20-105	21-96	34-107
	Gender	% Female	45.1%	72.9%	47.5%	81.1%
	Race	% White	95.3%	94.2%	97.8%	89.9%
	Urban	% Metro	61.2%	52.0%	58.5%	59.5%
NM	N	# Persons	1,049	1,691	130	23
	Age	Mean Age	43	74	34	65
		Range (Min-Max)	20-88	21-106	21-100	22-100
	Gender	% Female	42.6%	71.6%	36.2%	60.9%
	Race	% White	48.9%	39.5%	56.2%	34.8%
	Urban	% Metro	65.3%	42.3%	63.8%	21.7%
PA	N	# Persons	3,689	8,769	3,855	3,504
	Age	Mean Age	49	76	49	70
		Range (Min-Max)	20-96	21-109	20-89	16-104
	Gender	% Female	43.9%	75.4%	43.1%	76.1%
	Race	% White	94.7%	79.4%	83.5%	53.3%
	Urban	% Metro	70.4%	72.6%	96.6%	96.4%
TX	N	# Persons	2,134	23,206	201	3,806
	Age	Mean Age	44	75	41	73
		Range (Min-Max)	20-90	21-112	21-84	21-106
	Gender	% Female	41.8%	70.6%	43.3%	74.8%
	Race	% White	72.5%	52.5%	69.2%	46.3%
	Urban	% Metro	78.9%	63.7%	93.5%	95.5%
VT	N	# Persons	962	1,042	7	5
	Age	Mean Age	46	78	30	53
		Range (Min-Max)	20-91	24-103	21-46	32-77
	Gender	% Female	45.7%	72.1%	71.4%	40.0%
	Race	% White	84.5%	77.9%	57.1%	100.0%
	Urban	% Metro	26.3%	32.2%	28.6%	60.0%
WA	N	# Persons	4,352	17,393	0	5
	Age	Mean Age	45	75	NA	62
		Range (Min-Max)	20-91	22-108	NA	38-82
	Gender	% Female	44.0%	73.6%	NA	40.0%
	Race	% White	91.3%	85.9%	NA	100.0%
	Urban	% Metro	86.5%	83.9%	NA	80.0%

**NA means that the state did offer that particular state plan service or have participants in managed care planes in those specific waiver groups.**

**Table 6. Demographic Summary for Dual Eligible FFS and Managed Care Enrollees by State Plan Analytic Group (2001)**

State	Demographic		Dual Eligible FFS State Plan Groups				Dual Eligible Managed Care State Plan Groups			
			NF	ICF	Home Health	Personal Care	NF	ICF	Home Health	Personal Care
AR	N	# Persons	14,824	862	299	5,440	0	0	0	0
	Age	Mean Age	82	44	71	75	NA	NA	NA	NA
		Range (Min-Max)	27-119	21-74	22-98	1-122	NA	NA	NA	NA
	Gender	% Female	73.9%	42.5%	72.8%	79.4%	NA	NA	NA	NA
	Race	% White	82.9%	84.0%	52.3%	53.0%	NA	NA	NA	NA
	Urban	% Metro	39.4%	61.9%	28.2%	28.2%	NA	NA	NA	NA
FL	N	# Persons	62,988	1,960	32,908	NA	402	0	778	NA
	Age	Mean Age	82	48	70	NA	73	NA	65	NA
		Range (Min-Max)	22-125	20-88	20-121	NA	29-104	NA	20-98	NA
	Gender	% Female	71.3%	41.0%	70.4%	NA	64.8%	NA	66.3%	NA
	Race	% White	77.6%	79.5%	59.4%	NA	41.6%	NA	47.7%	NA
	Urban	% Metro	89.5%	81.5%	82.9%	NA	93.9%	NA	86.3%	NA
MN	N	# Persons	15,912	1,824	1,336	1,142	14,330	175	688	490
	Age	Mean Age	81	48	53	47	86	74	76	78
		Range (Min-Max)	20-109	21-88	21-107	21-94	49-113	66-95	21-99	21-97
	Gender	% Female	69.0%	46.9%	56.3%	48.2%	76.3%	50.9%	68.5%	71.0%
	Race	% White	95.6%	97.5%	81.2%	83.3%	96.2%	99.4%	63.7%	24.7%
	Urban	% Metro	51.3%	59.7%	69.7%	85.8%	66.0%	59.4%	85.9%	99.4%
NM	N	# Persons	5,456	156	65	2,944	0	1	0	60
	Age	Mean Age	83	50	74	74	NA	34	NA	56
		Range (Min-Max)	22-114	25-91	20-103	22-106	NA	NA	NA	27-89
	Gender	% Female	68.8%	45.5%	67.7%	74.7%	NA	100.0%	NA	66.7%
	Race	% White	62.6%	65.4%	53.8%	44.4%	NA	0.0%	NA	31.7%
	Urban	% Metro	47.8%	45.5%	58.5%	39.0%	NA	0.0%	NA	45.0%

NA means that the state did offer that particular state plan service or have participants in managed care planes in those specific waiver groups.

**Table 6 continued. Demographic Summary for Dual Eligible FFS and Managed Care Enrollees by State Plan Analytic Group (2001)**

State	Demographic		Dual Eligible FFS State Plan Groups				Dual Eligible Managed Care State Plan Groups			
			NF	ICF	Home Health	Personal Care	NF	ICF	Home Health	Personal Care
PA	N	# Persons	70,382	1,890	63	NA	741	1,341	4	NA
	Age	Mean Age	83	52	51	NA	79	50	48	NA
		Range (Min-Max)	20-113	22-92	23-88	NA	24-104	21-96	28-82	NA
	Gender	% Female	75.3%	45.7%	66.7%	NA	76.2%	45.1%	100.0%	NA
	Race	% White	88.4%	91.5%	81.0%	NA	66.3%	86.1%	50.0%	NA
Urban	% Metro	80.8%	53.6%	74.6%	NA	93.5%	99.6%	100.0%	NA	
TX	N	# Persons	75,856	4,157	NA	80,501	794	16	NA	2,668
	Age	Mean Age	82	48	NA	75	77	39	NA	73
		Range (Min-Max)	4-118	20-88	NA	20-110	28-105	27-56	NA	21-107
	Gender	% Female	71.7%	45.6%	NA	72.4%	71.8%	37.5%	NA	82.3%
	Race	% White	73.5%	74.7%	NA	42.1%	36.9%	68.8%	NA	33.5%
Urban	% Metro	69.1%	79.6%	NA	72.1%	95.5%	93.8%	NA	93.5%	
VT	N	# Persons	2,878	7	619	NA	2	0	26	NA
	Age	Mean Age	83	62	69	NA	52	NA	52	NA
		Range (Min-Max)	24-117	35-77	26-100	NA	37-67	NA	27-69	NA
	Gender	% Female	72.1%	57.1%	67.6%	NA	50.0%	NA	65.4%	NA
	Race	% White	76.7%	85.7%	90.5%	NA	50.0%	NA	92.3%	NA
Urban	% Metro	20.0%	0.0%	25.7%	NA	50.0%	NA	34.6%	NA	
WA	N	# Persons	16,020	45	131	4,219	7	0	0	2
	Age	Mean Age	82	52	69	70	76	NA	NA	41
		Range (Min-Max)	24-112	22-84	25-100	21-104	58-98	NA	NA	35-46
	Gender	% Female	68.7%	64.4%	64.1%	74.0%	85.7%	NA	NA	100.0%
	Race	% White	90.6%	95.6%	84.0%	65.2%	28.6%	NA	NA	100.0%
Urban	% Metro	89.9%	100.0%	83.2%	89.2%	100.0%	NA	NA	100.0%	

**NA means that the state did offer that particular state plan service or have participants in managed care planes in those specific waiver groups.**

## Results

### Inpatient Hospital Medicare Payment (\$) per Person Month in Group

*What is being measured?*

The annual Medicare payment amount per person month in an analytic group – total inpatient hospital Medicare payments divided by the total number of person months in the analytic group (users and nonusers of the service) during 2001 and 2002.

*Descriptive Results:*

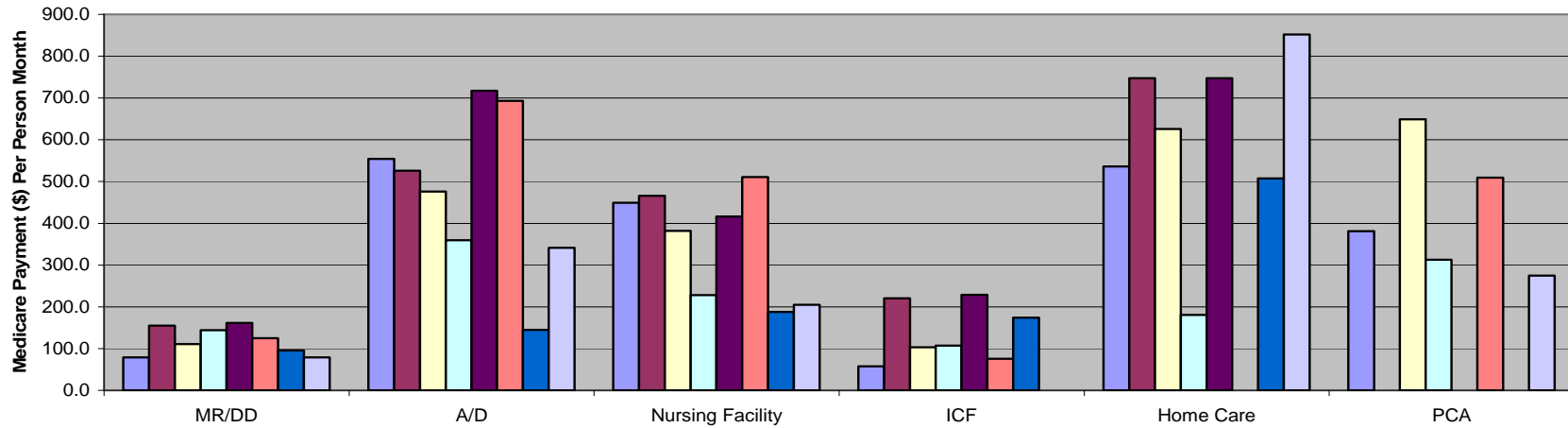
Figures 3a-3b

- Home Health clients generally have higher expenditures. NM is an exception.
- MR/DD clients in either institutions (ICF) or the community (MR/DD waiver program) have lower expenditures than the aging and disability waiver and nursing facility state plan groups.
- The pattern across states is somewhat consistent within each analytic group with the most variability in the home health state plan group.
- The pattern within groups and across states is fairly stable between 2001 and 2002 with the exception of the Vermont aging and disability waiver group and the Washington home health state plan group. Vermont and Washington have very small enrollments in these two specific groups. The large variability between years is a result of a large change in hospital utilization for a small number of individuals.

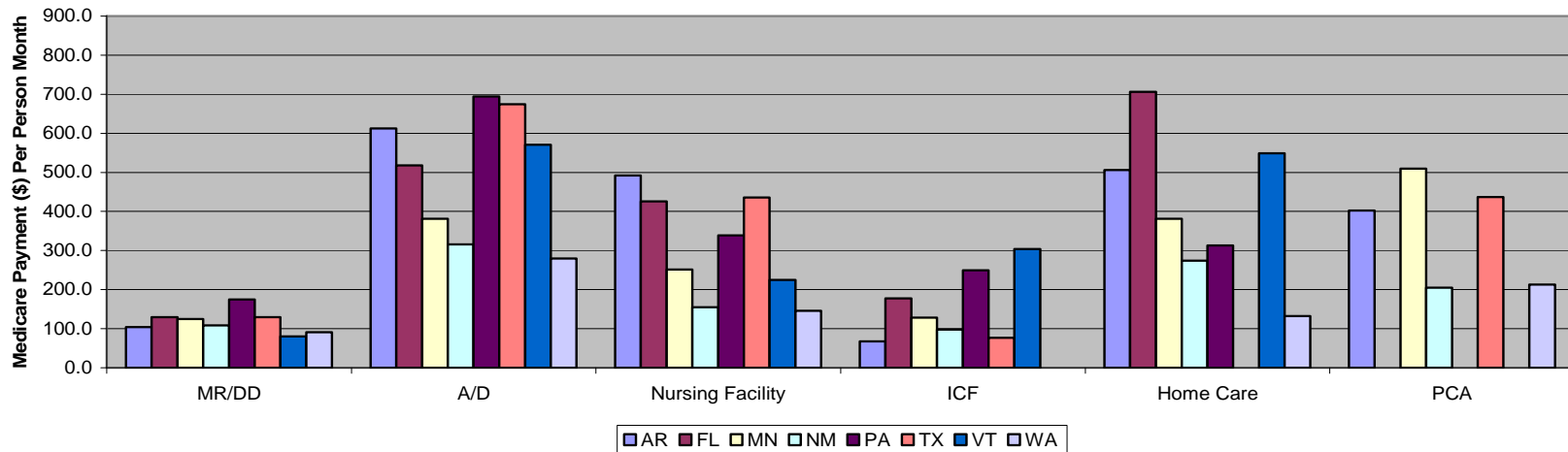
*Interpretation*

- Higher inpatient hospitalization payments in the aging/disability waiver and NF populations could reflect the age and type of chronic illnesses presented in those populations compared to the MR/DD and ICF populations.
- The higher inpatient hospitalization payments for home health clients may be due in part to the case mix of the population.

**Figure 3a. Inpatient Hospital Medicare Payment (\$) per Person Month in Group, by Waiver/State Plan Service Group – Dual Eligible FFS Enrollees (2001)**



**Figure 3b. Inpatient Hospital Medicare Payment (\$) per Person Month in Group, by Waiver/State Plan Service Group – Dual Eligible FFS Enrollees (2002)**



## **Residential LTC Medicare Payment (\$) per Person Month in Group**

*What is being measured?*

The average Medicare payment amount per person month in an analytic group across the year total Medicare payments for nursing home care for all beneficiaries in the year divided by the total number of person months in the analytic group (users and nonusers of the service).

*Descriptive Results:*

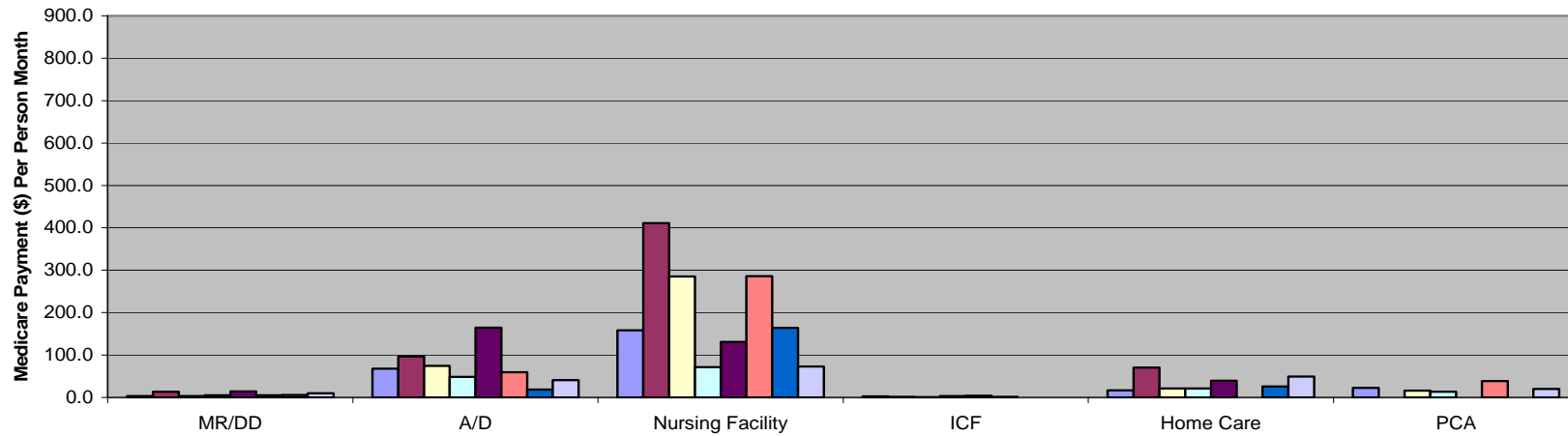
Figures 4a-4b

- There is virtually no use of nursing facilities by waiver participants or Medicaid recipients utilizing other LTC services such as home health or personnel care.
- The average Medicare cost of nursing facility care for nursing home residents varies somewhat across states ranging from over \$400 per person month in Florida to less than \$100 per person month in New Mexico and Washington.
- The pattern across analytic groups and states is similar between 2001 and 2002.

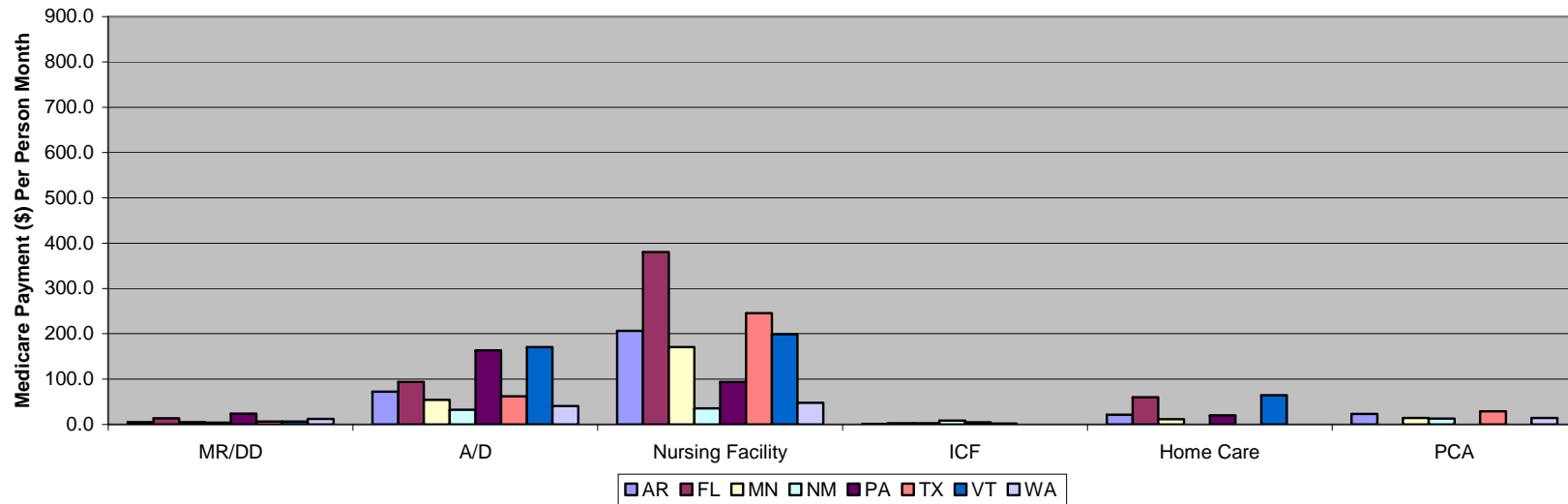
*Interpretation*

- Residential LTC options, including nursing homes and ICF, are not being used by participants primarily utilizing HCBS.

**Figure 4a. Residential LTC Medicare Payment (\$) per Person Month in Group, by Waiver/State Plan Service Group – Dual Eligible FFS Enrollees (2001)**



**Figure 4b. Residential LTC Medicare Payment (\$) per Person Month in Group, by Waiver/State Plan Service Group – Dual Eligible FFS Enrollees (2002)**



## **Total Ambulatory Service Medicare Payment (\$) per Person Month in Group**

### *What is being measured?*

The annual Medicare payment amount for ambulatory services per person month in an analytic group divided by the total number of person months in the analytic group (users and non users of the service). Ambulatory services include physician, other practitioner (such as nurse practitioner and nurse midwife), and outpatient services (including outpatient hospital and clinic visits).

### *Descriptive Results:*

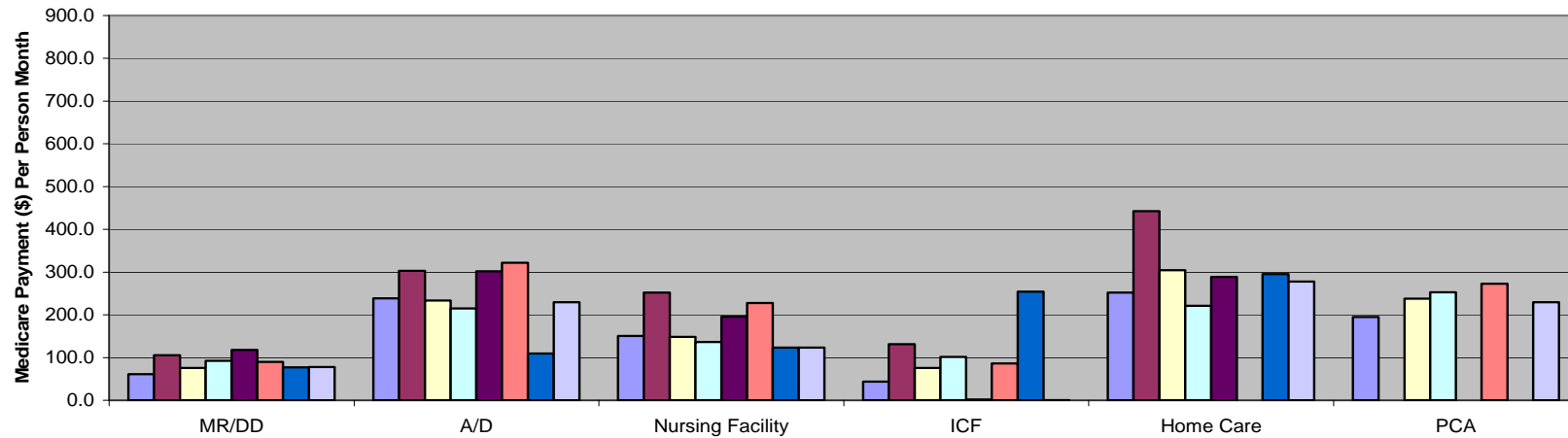
#### Figures 5a- 5b

- There are similarities in ambulatory service payments between MR/DD waiver clients and ICF as well as between the aging and disability waiver clients and the nursing facilities group.
- Ambulatory care services payments are the highest in the home health state plan and aging and disability waiver groups; PCA clients also have a substantial amount of total payments for ambulatory services.
- The pattern within analytic groups and across states is similar between 2001 and 2002.

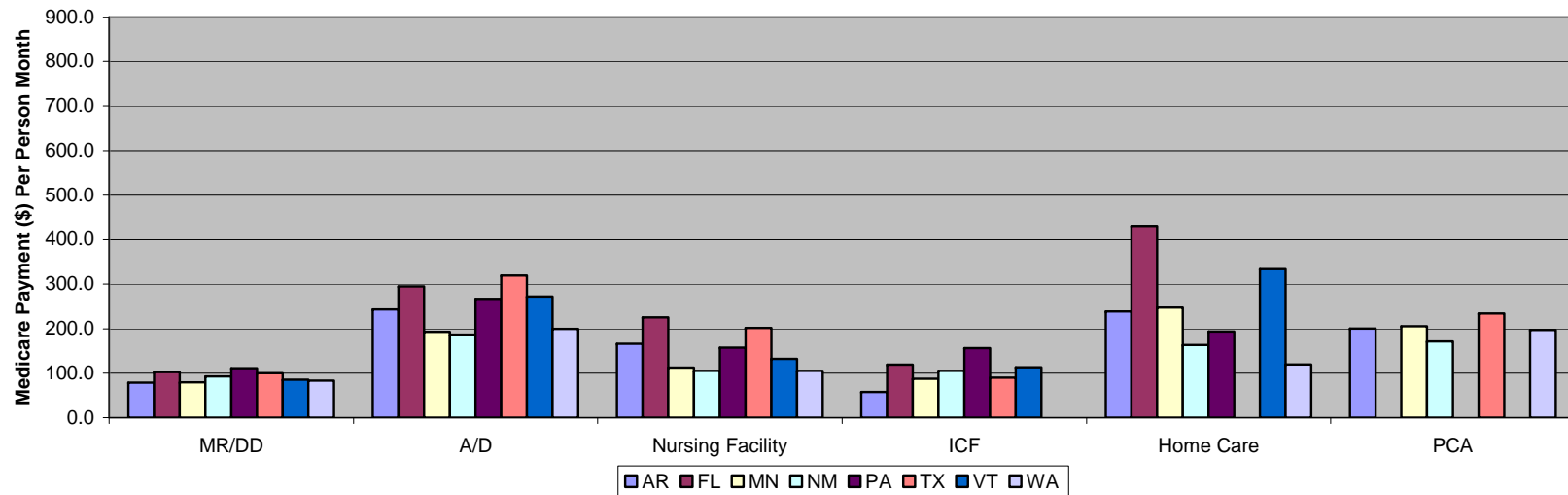
### *Interpretation*

- The slightly higher ambulatory service utilization rates for home health clients may be due in part to the case mix of the population.

**Figure 5a. Total Ambulatory Service Medicare Payment (\$) per Person Month in Group, by Waiver/State Plan Service Group – Dual Eligible FFS Enrollees (2001)**



**Figure 5b. Total Ambulatory Service Medicare Payment (\$) per Person Month in Group, by Waiver/State Plan Service Group – Dual Eligible FFS Enrollees (2002)**



## Ratio of Medical Care to LTC Medicaid Only Payments per Person Month in Group Compared to the same Ratio adding Medicare Payments (2002)

### *What is being measured?*

The ratio of Medicaid payments for each LTC service group aggregated into medical care and LTC compared to the same ratio of medical care and LTC including both Medicaid and Medicare payments. We have excluded the payment for prescription drugs because drugs are primarily covered and paid for only by Medicaid.

### *Descriptive Results:*

#### Figure 6a Medicaid only payments - Waiver groups

- The ratios vary by waiver group as well as by state.
- In six states expenditures for LTC services exceeded payments for medical care – Arkansas, Florida, New Mexico, Pennsylvania, Vermont, and Washington. In two states expenditures for medical care exceeded and in some cases far exceeded the cost of long term care – Minnesota, and Texas - for MR/DD waivers

#### Figure 6b Medicaid and Medicare payments – Waiver groups

- As anticipated, in all states the ratios increased after adding in the Medicare payments.
- More states have ratios above 1 after adding Medicare costs.

#### Figure 6c Medicaid only payments – State plan groups

- The ratios vary by waiver group as well as by state.
- In three states expenditures for medical care exceeded payments for LTC services – Arkansas, Texas, and Washington.

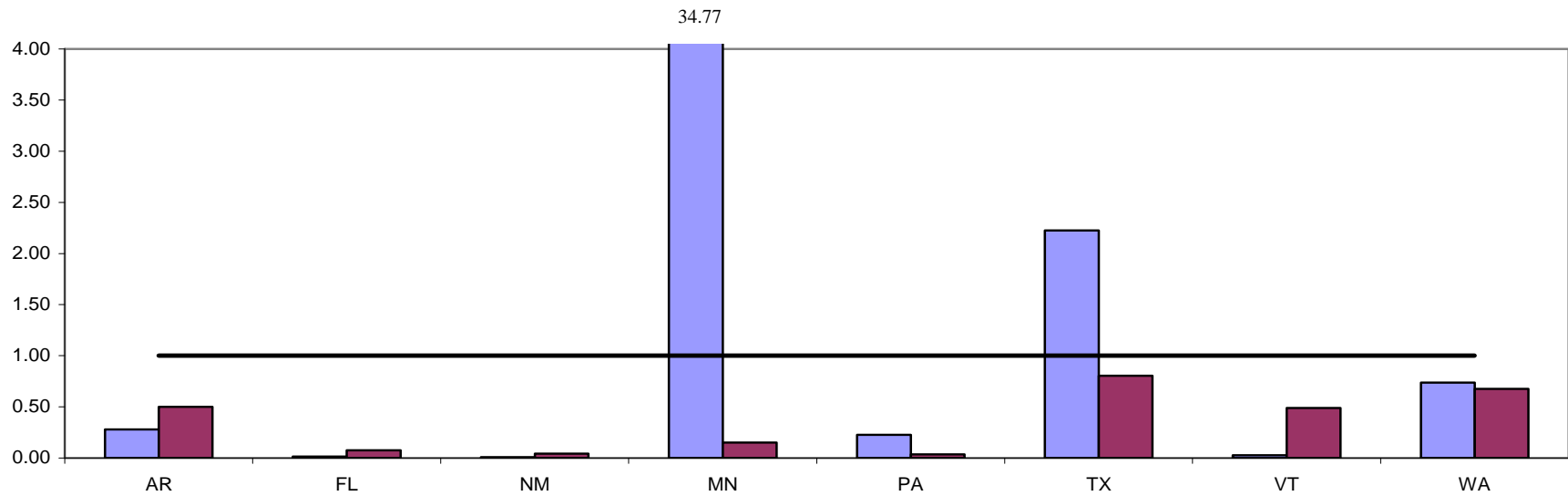
#### Figure 6d Medicaid and Medicare payments, 2002 – State plan groups

- As anticipated, in all states the ratios increased after adding in the Medicare payments.
- Almost all states have ratios above one in the homecare analytic group after adding Medicare costs.
- In those states where the expenditures for LTC services exceeded payments for medical care when using only Medicaid payments, the ratios remained below one after adding Medicare payments.

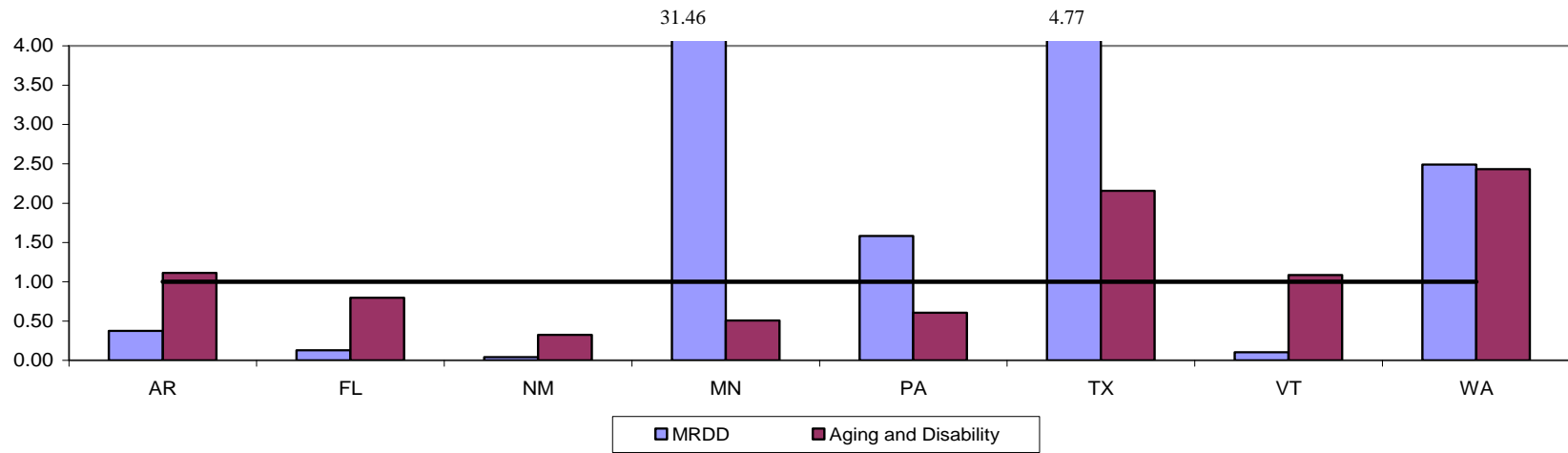
### *Interpretation*

- The dark horizontal bar represents a ratio equal to one. Bars above that line indicate greater spending on medical care. Bars below that line indicate greater spending on LTC. Care must be paid in interpreting the ratios. Those greater than one are self-evident, but those less than one must be translated to make them comparable. For example, a ratio of two is equivalent to a ratio of 0.5.
- Because Medicare covers predominantly medical care services the numerator should increase faster than the denominator. While the ratios after adding Medicare payments to the Medicaid payments are higher, they are not that much higher than expected.
- The higher ratios for home care participants after adding Medicare payments into the calculation may reflect a higher acuity level for this service group.

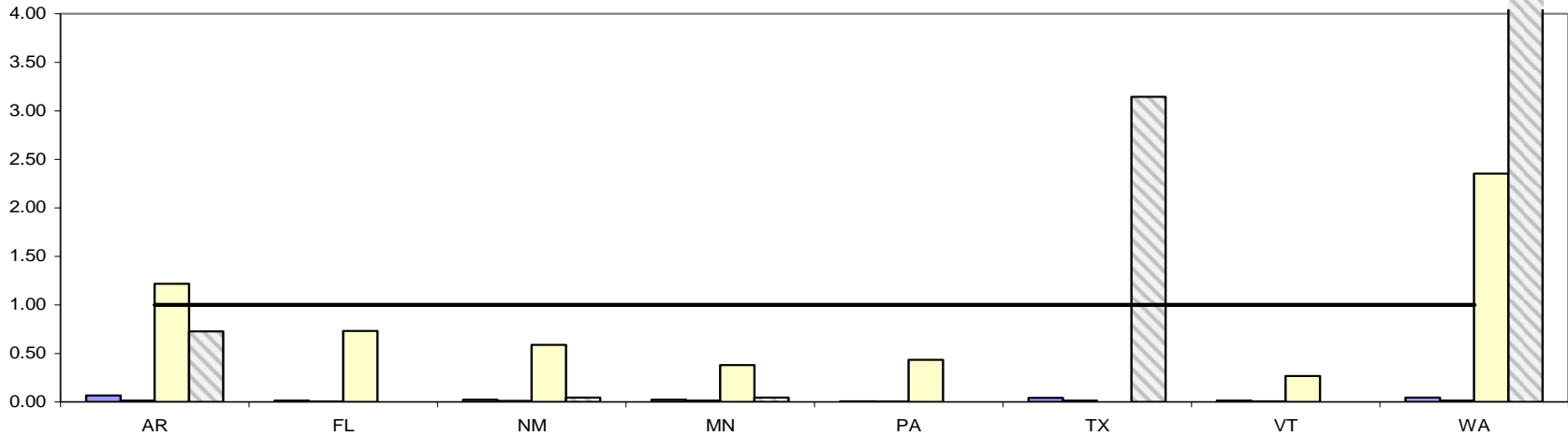
**Figure 6a. Ratio of Medical Care to LTC Medicaid Only Payment per Person Month in Waiver Groups 2002: Dual Eligible FFS Enrollees**



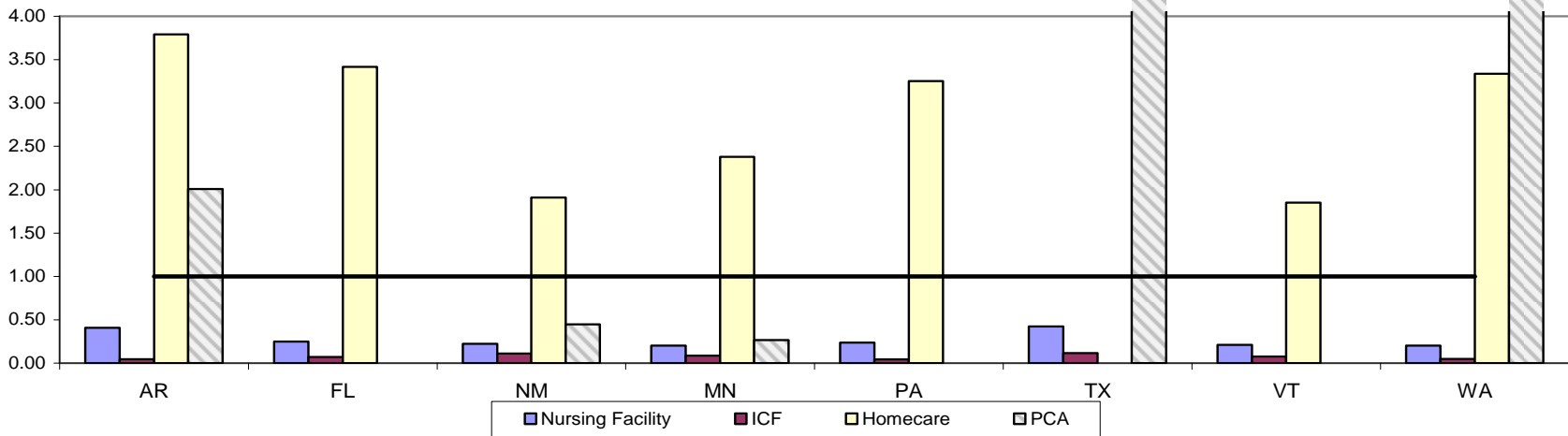
**Figure 6b. Ratio of Medical Care to LTC Medicaid and Medicare Payment per Person Month in Waiver Groups 2002: Dual Eligible FFS Enrollees**



**Figure 6c. Ratio of Medical Care to LTC Medicaid Only Payment per Person Month in State Plan Groups 2002: Dual Eligible FFS Enrollees** 24.58



**Figure 6d. Ratio of Medical Care to LTC Medicaid and Medicare Payment per Person Month in State Plan Groups 2002: Dual Eligible FFS Enrollees** 9.48



## Conclusion

There is variation in the use of different types of health care services within and across states and among waiver groups and state plan recipients. For example, recipients of home health state plan services have much higher inpatient Medicare payment rates than waiver and other state plan groups. Pennsylvania tends to have higher Medicare payment rates for most types of services whereas Vermont tends to have lower payment rates. This pattern is generally consistent across analytic groups.

There is some correspondence between waiver and state plan spending by target group (i.e., MR/DD and ICF); medical care for younger persons generally costs less than for older beneficiaries.

The ratio of payments for medical care to payments for LTC increases after adding Medicare payments consistent with

Medicare coverage; however, the increase is not as high as might be anticipated, given the population, suggesting that Medicaid payments overall, and payments for LTC services in particular, continue to be substantial in the dual eligible population. The exception is for home health state plan recipients where the ratio increases substantially.