

**MEDI-CAL'S DUAL ELIGIBLE POPULATION
DEMOGRPHICS, HEALTH CHARACTERSTICS AND
COSTS OF HEALTH CARE SERVICES**

Compiled by the Research and Analytics Studies Section

Department of Health Care Services

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I. INTRODUCTION

Dual eligibles suffer from costly and debilitating conditions and in many cases multiple chronic health conditions. While they represent some of the most costly and medically complicated health cases in the Medi-Cal program, they receive their health care through a unique and sometimes fragmented system that in many cases is complicated by the intersection of Medicare and Medi-Cal. In MEDPAC's "Report to Congress: New Approach to Medicare", the Commission noted that "the current policy towards dual eligibles creates incentives to shift costs between payers, often hinders efforts to improve quality and coordinate care, and may reduce access to care." Considering the enormous cost to the state and federal programs and the growing concern over the State's budget, contemplating new policy proposals and understanding the dual eligible population and cost drivers has never been more important.

Medi-Cal's 1.1 million dual eligibles generated \$4.77 billion, or 31 percent, of total Department of Health Care Service (DHCS) administered fee-for-service (FFS) claim expenditures during CY 2007. When the combined expenditures associated with dual eligible beneficiaries enrolled in managed care, the Medicare Part D "clawback", Medicare Part A and B premiums, and coinsurance/deductibles are considered, Medi-Cal's dual eligible beneficiaries generated roughly \$8.6 billion in total Medi-Cal expenditures. Within some categories of service, such as long-term care (LTC¹), the dual eligible population is the single greatest cost driver. During calendar year (CY)

¹ Long-term care as used here refers to those costs associated with the facility or Medi-Cal provider type.

2007, dual eligible beneficiaries accounted for roughly eight out of every ten dollars spent on LTC services. The dual eligible population amassed \$3.2 billion in LTC expenditures out of Medi-Cal's total LTC expenditures of \$4.2 billion.

This report profiles the demographic composition, health characteristics, and patterns of expenditure for beneficiaries entitled to both Medi-Cal and Medicare. It provides decision makers with reliable information and new insights to inform complex policy. DHCS Research and Analytic Studies Section (RASS) staff has reviewed what is known about Medicare's dual eligibles and also provides information derived from both Medi-Cal and Medicare administrative claims data.

DHCS RASS staff utilized retrospective data analysis to evaluate the expenditures and characteristics of Medi-Cal's 1.1 million dual eligible beneficiaries. A two-step approach was utilized in this analysis. First, RASS staff evaluated the entire dual eligible population utilizing Medi-Cal paid claims only, and then examined this population's impact on overall Medi-Cal expenditures. In step two, RASS staff narrowed its focus to the disabled dual eligible population. In this part of the analysis, RASS staff evaluated clinical conditions and total expenditures across both Medi-Cal and Medicare.

RASS staff created two samples to compile a combined Medi-Cal and Medicare data set: (1) a sample of 1,000 disabled beneficiaries eligible for Medi-Cal and Medicare, and (2) a sample of 1,000 disabled beneficiaries eligible for Medi-Cal only. The samples allowed RASS staff to compare and contrast the two populations across several dimensions.

To capture medical utilization across Medi-Cal and Medicare, RASS staff compiled all Medi-Cal and Medicare claims associated with the sample of dual eligible beneficiaries. This process enabled RASS staff to present total average per-capita costs (both Medicare and Medi-Cal combined) for disabled dual eligible beneficiaries. In addition, supplementing the Medi-Cal administrative claims data with Medicare data enhanced RASS staff's ability to categorize and group beneficiaries by specific diseases or clinical classifications, as RASS staff was able to utilize the Medicare diagnoses.

Throughout this paper, the term "dual eligible" refers to Medi-Cal beneficiaries who are eligible for both Medi-Cal and Medicare. In addition, except as otherwise noted, the term "expenditures" refers to those derived from administrative claims for DHCS administered services and does not include expenditures or transfer of funds made outside this process. Therefore, the transfer of funds for Medicare premiums, copayments, the Part D "clawback", and managed care capitation payments associated with dual eligibles are not included in this definition. Where appropriate, these transfers of funds from the state to the federal government are presented and identified separately. In addition, RASS evaluated claims and expenditures for non-DHCS administered services such as Department of Mental Health-Short-Doyle, Department of Social Services—In-Home Support Services, Department of Developmental Services-waivers, Dental, etc., and presented them separately.

II. LITERATURE REVIEW

The Centers for Medicare and Medicaid Services (CMS) define Dual Eligibles as beneficiaries who are simultaneously eligible for Medicare parts A and/or B and "some form of Medicaid benefits" (CMS). Dual eligibles are entitled to Medicare benefits by

meeting the eligibility requirements of being either chronically disabled persons under age 65 or individuals aged 65 and older who have coverage "under Social Security or Railroad Retirement" (CMS). These beneficiaries, also, have established eligibility for some level of Medicaid benefits "because they are aged, blind, or disabled and meet the income and asset requirements for receiving Supplemental Security Income (SSI) assistance" (Moon and Shin). The dual eligible population uses "Medicaid to pay for Medicare premiums and cost-sharing and to cover critical benefits not covered by Medicare, such as long term care" (Coughlin, Waidmann, and Watts).

In calendar year (CY) 2005, roughly "8.8 million beneficiaries were" concurrently enrolled in both Medicaid and Medicare nationally, which "represented 18% of all Medicaid enrollees" (Holahan, Miller, and Rousseau). Of these dual eligibles, 5.6 million beneficiaries "were age 65 and older and 3.2 million were disabled individuals under age 65" (Holahan, Miller, and Rousseau). Approximately 81% of these dual eligibles received full Medicaid benefits, while 19% only received Medicaid "assistance with Medicare premiums, cost-sharing and out-of-pocket costs" (Holahan, Miller, and Rousseau). Dual eligibles who are only eligible for restricted Medicaid benefits are not entitled to "non-Medicare covered Medicaid services such as long-term care, vision or dental" (Holahan, Miller, and Rousseau).

Dual eligibles "are the most costly population being served by publically funded health care programs" (Moon and Shin). Dual eligibles represent only about "one-fifth of each program's enrollment" but account for a large percentage of their respective expenditures (Moon and Shin). In CY 2005, the Medicaid and Medicare programs combined to spend \$196.3 billion for health care provided to dual eligibles. Additionally,

in CY 1999, dual eligibles accounted for, approximately, 24% of total Medicare expenditures and about 35% of national Medicaid expenditures (Moon and Shin). The drivers behind the high costs associated with dual eligibles are directly indicated by the population's demographics and health conditions.

The majority of available literature compared and contrasted the demographic characteristics of dual eligibles to the Medicare population as a whole. A CY 2006 paper by Moon and Shin provided insight into the demographic trends associated with the dual eligible population. In particular, Moon and Shin found that dual eligibles are more likely to be "either younger (under the age of 65) or older (over age 85)" than other Medicare beneficiaries. Additionally, dual eligibles are more culturally diverse than the entire the Medicare population (Moon and Shin). For instance, more than "42% of dual eligibles were classified as a racial minority, while only 16% of the entire Medicare populations were classified a racial minority (Moon and Shin). Additionally, available literature stressed the distinct disparity in income levels between dual eligibles and other Medicare beneficiaries. A CY 2009 analysis by Coughlin, Waidmann, and Watts indicated that the dual eligible population has a vastly lower income level than other Medicare beneficiaries. Approximately, "61% of dual eligibles have annual incomes less than \$10,000, as compared to only 9% of other Medicare beneficiaries" (Coughlin, Waidmann, and Watts).

Dual eligibles are also sicker and more likely to be disabled than other Medicare beneficiaries (Moon and Shin). Moon and Shin indicated that "over half of the dual eligibles are in fair or poor health, whereas only one quarter of the entire Medicare population is reported to be in fair or poor health." For instance, dual eligibles are more

likely than other Medicare beneficiaries “to suffer from chronic or serious health conditions such as diabetes, pulmonary disease, and stroke” (Moon and Shin). Additionally, dual eligibles are more likely to suffer from mental health issues (Moon and Shin). Over 40% of the dual eligible population had a “cognitive or mental impairment, while only 9% of the entire Medicare population suffered from similar mental health problems” (Moon and Shin).

The chronic and mental conditions afflicting dual-eligible beneficiaries are extremely expensive to treat and can, ultimately, require costly long term care. In particular, Coughlin, Waidmann and Watts note that dual eligibles are “more likely than other Medicare beneficiaries to need assistance with multiple activities of daily living.” Dual eligible beneficiaries are also more likely than other Medicare beneficiaries “to be living in an institutional setting” (Coughlin, Waidmann and Watts). Similarly, a CY 2007 paper by O’Leary, Sloss, and Melnick indicated that from CY 1996 to CY 2001 dual eligibles had “consistently higher hospitalization rates and average length of stay” than other Medicare beneficiaries. According to this analysis, the total of “inpatient days remained higher among dual eligibles than other Medicare beneficiaries when stratified by the system of care, age, sex, or race” (O’Leary, Sloss, and Melnick).

III. STUDY DESIGN AND METHODOLOGY

Retrospective data analysis was performed and a two step approach was used to evaluate the expenditures, utilization, and medical conditions associated with Medi-Cal’s dual eligibles. The first step entailed evaluating all dual eligibles in the Medi-Cal program, including the disabled and all other aid code categories. The second step

involved a narrower focus, as RASS limited its analysis to the disabled dual eligibles. This part of the analysis included a review of both Medicare and Medi-Cal claims.

Step 1: Evaluating Medi-Cal's Dual Eligible Population

The first step of our analysis entailed evaluating all Medi-Cal administrative claims data associated with the 1.1 million dual eligibles. For this analysis, RASS staff compiled an eligibility data set that included one record for each dual eligible beneficiary who was eligible for the period January 1, 2007 through December 31, 2007. Each record contained demographic and specific eligibility information for each beneficiary's month-of-eligibility. The unique beneficiary identification numbers contained in the dual eligibility file were then used to select all paid claims for the population. That is, for each unique beneficiary and their unique month-of-eligibility, all claims were selected to create a file of paid claims. The paid claims file, which represented all FFS utilization associated with the dual eligible users, was enhanced with specific data derived from the eligibility file, such as aid code, aid code category, birth date, age, month-of-eligibility, etc. Beneficiaries enrolled in both FFS Medi-Cal and Medi-Cal managed care plans were included in the analytic file. Medi-Cal FFS claims expenditures with dates-of-service between January 1, 2007 and December 31, 2007, paid through December 2008 were evaluated.

Step 2: Evaluating Samples: Dual Eligible and Medi-Cal Only Populations

The second step involved evaluating the claims and utilization paid for by the Medicare and Medi-Cal programs and comparing the disabled dual eligible beneficiaries to beneficiaries eligible for Medi-Cal only. To compare and contrast the disabled dual

eligible beneficiaries to the disabled Medi-Cal eligible only population, RASS staff generated two random samples of 1,000: (1) one for disabled dual eligibles, and (2) one for disabled beneficiaries eligible for Medi-Cal only. RASS staff then evaluated the costs, utilization, and medical conditions associated with each sample and compared and contrasted them where appropriate. In addition to evaluating the medical utilization and characteristics of the populations studied, RASS staff estimated the per-capita costs for each sample.

A sample size of 1,000 was selected to estimate the true per-capita cost within 20 percent of the per-capita cost in the population. No sub-domains were estimated or considered in the planning stage, therefore sample sizes associated with specific sub-domains are not considered reliable. In addition, because the data displayed a positively skewed distribution, the confidence intervals presented may be subject to additional error. The reader should keep this in mind when utilizing the estimates presented, as this will dictate whether the normal approximation is reliable enough for specific uses.

RASS staff utilized Medi-Cal claims data, Medi-Cal eligibility data, and Medicare claims data for this analysis. Disabled dual eligible members were eligible for sampling if they met the following criteria:

- They were Medi-Cal beneficiaries enrolled in FFS Medi-Cal for at least one month during CY 2007.
- They were Medi-Cal beneficiaries enrolled in one of the 20 Medi-Cal disabled aid codes. (Table 1)
- They were Medi-Cal beneficiaries eligible for either Medicare Parts A or B or D.

Beneficiaries entitled to Medi-Cal only were eligible for sampling if they met the following criteria:

- They were Medi-Cal beneficiaries enrolled in FFS Medi-Cal during CY 2007.
- They were Medi-Cal beneficiaries enrolled in one of the 20 Medi-Cal disabled aid codes. (Table 1).
- They were Medi-Cal beneficiaries not eligible for either Medicare Parts A or B or D.

The samples were derived from the RASS CINBYMOE analytic file, which contains one record for each beneficiary for each month-of-eligibility.

Table 1: Disabled Aid Codes Utilized In The Analysis

Aid Category	Aid Code and Description
MEDICALLY NEEDY- DISABLED	64-Disabled-MN
	67-Disabled-MN SOC
	6G-250% Income Level Working Disabled
	6H-Disabled-FPL Program
	6S-Disabled-SGA/ABD-MN (IHSS)
	6U-Disabled-FPL Program-Undocumented
	6V-DDS Waivers (No SOC)
	6X-Model Waiver (No SOC)
	6Y-Model Waiver (SOC)
	6W-DDS Waivers (SOC)
PUBLIC ASSISTANCE- DISABLED	36-Disabled-COBRA-Widow/ers
	60-Disabled-SSI/SSP-Cash
	66-Disabled-Pickle Eligible
	6C-DAC Disabled
	6E-Craig v Bonta; Continued Eligibility.- Disabled
	6N-Former SSI No Longer Disabled
	6P-PRWORA/No Longer Disabled Child

Source: Compiled by RASS utilizing the Aid Code Master Chart

Medicare paid claims data for Medi-Cal disabled dual eligibles were obtained from SafeGuard Services (SGS), a subsidiary of Electronic Data Systems (EDS). SGS is a data warehousing and reporting contractor for the Medicare program, and maintains data on claims processed by Palmetto GBA, the Medicare Administrative Contractor

(MAC) responsible for processing Medicare Part A and B claims, and Noridian LLC, the MAC responsible for processing medical supply and durable medical equipment claims.

The data extracted included all Medicare claims for Part A, Part B and DME services for the 1,000 disabled dual eligible beneficiaries in the study sample, for dates-of-service between January 1, 2007 and December 31, 2007. Because RASS staff was unable to access the Medicare Part D drug claims data, RASS staff utilized pharmacy utilization and expenditures from the Medi-Cal claims data prior to the enactment of Medicare Part D (I.e., January 1, 2006) as a proxy. RASS staff determined the Medi-Cal pharmaceutical utilization and expenditures for the populations studied for CYs 2002 through 2005. RASS staff then trended the per-capita costs forward to CY 2007.

In addition to Medicare claims, RASS staff also evaluated Medi-Cal claims and MEDS data. Both paid claims covering services administered by the DHCS as well as claims paid by other payers and programs such as the Department of Social Services, Department of Developmental Services, Department of Mental Health, etc. were evaluated. Claims data included all claims with dates-of-service between January 1, 2007 and December 31, 2007.

IV. BACKGROUND

Dual eligible beneficiaries are those individuals who meet the eligibility requirements for both Medicare and Medi-Cal and are enrolled in both programs. But, this simple characterization does not truly convey the complexities associated with this unique population. Therefore, recognizing this complexity, RASS staff will explore and explain these technical qualifications in this section. This will allow the reader to better

understand the differing benefits available to various dual eligible beneficiaries and how their utilization and expenditures are reflected in the Medicare and Medi-Cal data sets.

Medicare is the primary payer for dual eligibles and covers medically necessary services such as: acute care services, physician services, hospital services, SNF services, and home health care services. Medi-Cal is the secondary payer and generally covers:

- Services not covered by Medicare. This may include services such as transportation, dental, vision, some mental health services, and until 2006, most outpatient prescription drugs.

Medicare Programs

Medicare Part A – Insurance coverage for inpatient hospital, skilled nursing facility and some home health services. Medicare covers this premium for individuals or spouses who have 40 or more quarters of Medicare covered employment.

Medicare Part B – Optional insurance coverage for physician services, outpatient hospital services, durable medical equipment and certain home health services. In 2007, the Medicare Part B Premium was \$93.50 per month.

Medicare Part C – Insurance coverage that combines Parts A and B and is provided by pre-approved private insurance companies. Insurance plans are known as “Medicare Advantage Plans.”

Medicare Part D – Optional insurance coverage for prescription drugs.

- Services such as cost-sharing and deductibles for Medicare as well as acute care and skilled nursing facility services that are delivered after the Medicare benefit is exhausted or specific criteria has not been met.
- Long-term care, including custodial nursing facility care, home and community-based services, and personal care services.
- Medicare Part A and B premiums for some dual eligible populations.

Dual eligibles can be divided into several different groups; each qualifying for a different set of benefits (Table 3). Two broad categories can be utilized to describe the

dual eligibles: (1) “full” dual eligibles, and (2) those who participate in the Medicare Savings Programs, commonly referred to as “partial” dual eligibles. Beneficiaries who are considered “full” dual eligibles are entitled to premium assistance for Part A (if necessary), Medicare Part B, cost-sharing, and full Medicaid benefits (Table 2). Those individuals eligible for Supplemental Security Income (SSI), persons with low-incomes, the medically-needy, elderly or disabled receive “full” benefits. There are other Medicaid dual eligible populations who are not entitled to full benefits (i.e., Part A premiums, Part B premiums, cost sharing, and full Medicaid benefits), but are entitled to some of these benefits (Table 2).

Dual eligible beneficiaries with higher income and asset levels may be eligible for Medicare premium assistance, cost sharing, or full Medicaid benefits². Medicare refers to this as the Medicare Savings Program. The following groups are covered under the Medicare Savings Program:

Qualified Medicare Beneficiary (QMB)

These individuals are entitled to Medicare Part A and have an income of 100% of the Federal Poverty Level (FPL) or less with resources that do not exceed twice the SSI limit (\$4,000 for an individual, and \$6,000 for a couple). These individuals are QMB only, and are not otherwise eligible for full Medicaid. Medicaid pays their Medicare Part A premiums, as well as any Medicare Part B premiums. Also, Medicare deductibles and coinsurance for Medicare services provided by Medicare providers are covered to the extent that it is consistent with the Medicaid State plan. The federal financial

² Health Assistance Partnership; Medicare and Medicaid: Dual Eligible Beneficiaries, December 2007 <http://www.hapnetwork.org/assets/pdfs/duals-overview.pdf>

participation (FFP) amount for these dual eligibles is equal to the federal medical assistance percentage (FMAP).

QMBs with full Medicaid (QMB Plus)

These individuals are entitled to Medicare Part A and have an income of 100% of the FPL or less with resources that do not exceed twice the limit for SSI eligibility, and are eligible for full Medicaid benefits. Medicaid pays their Medicare Part A premiums, as well as any Medicare Part B premiums. Also, Medicare deductibles and coinsurance are covered to the extent consistent with the Medicaid State plan and full Medicaid benefits are provided. The FFP amount for these dual eligibles is equal to the FMAP.

Specified Low-income Medicare Beneficiary (SLMB)

These individuals are entitled to Medicare Part A and have incomes above 100% of the FPL, but less than 120% of the FPL with resources that do not exceed twice the SSI eligibility limit. These dual eligibles are SLMB only and are not otherwise eligible for Medicaid. Medicaid pays their Medicare Part B premiums only. The FFP amount is equal to the FMAP.

SLMBs with full Medicaid (SLMB Plus)

These individuals are entitled to Medicare Part A and have an income greater than 100% of the FPL, but less than 120% of the FPL, with resources that do not exceed twice the limit for SSI eligibility, and are eligible for full Medicaid benefits. Medicaid pays their Medicare Part B premiums and provides full Medicaid benefits. FFP is equal to FMAP.

Qualified Disabled and Working Individual (QDWI)

These individuals lost Medicare Part A benefits due to returning to work, but are eligible to enroll in and purchase Medicare Part A, but must have income of 200% FPL or less and resources that do not exceed twice the SSI limit. They are and not otherwise eligible for Medicaid benefits. Medicaid pays the Medicare Part A premiums only and FFP equals FMAP

Table 2: Medicaid Benefits For Specific Dual Eligible Populations

Dual Eligible Category	Type of Medicaid Benefit			
	Part A Premium	Part B Premium	Medicare cost-sharing (co-insurance, deductible)	Full Medicaid Benefits
Full Dual eligible				
MN <i>optional</i>	Yes	Yes	Yes	Yes
HCBS waivers <i>optional</i>	Yes	Yes	Yes	Yes
Special Income Level Institutionalized <i>optional</i>	Yes	Yes	Yes	Yes
Poverty Level <i>optional</i>	Yes	Yes	Yes	Yes
SSI Cash Assistance <i>mandatory</i>	Yes	Yes	Yes	Yes
Partial dual eligible (Medicare Savings Programs)				
QMB <i>mandatory</i>	Yes	Yes	Yes	No
QMB Plus	Yes	Yes	Yes	Yes
SLMB <i>mandatory</i>	No	Yes	No	No
SLMB Plus	No	Yes	No	Yes
QI <i>mandatory</i>	No	Yes	No	No
QDWI <i>mandatory</i>	Yes	No	No	No

Sources: [Kaiser: Dual Eligibles: Medicaid Enrollment and Spending for Medicare Beneficiaries in 2005, February 2009](#) and [Dual Eligibles: Medicaid's Role for Low-Income Medicare Beneficiaries, July 2005](#). [CMS: Dual Eligible Categories and List and Definition of Dual Eligibles, 2/3/06](#). [Health Assistance Partnership: Medicare and Medicaid: Dual Eligible Beneficiaries, December 2007](#). [U.S. National Library of Medicine: Impact of the Medicare Savings Programs on Service Use and Out-of-Pocket Costs: How Do Effects Differ by Coverage? Report to the Congress: New Approaches in Medicare|June 2004 \(Chapter 3, Dual eligible beneficiaries: An overview\)](#)

Claims for coinsurance and deductible amounts related to dual eligible beneficiaries participating in the Medicare savings program are reflected in the Medi-Cal FFS claim

expenditures³. The expenditures, or claim for services, associated with this population (i.e., QMB) represents only the Medicare coinsurance and or deductible amounts. Claims billed for non-Medicare covered services, or services other than Medicare coinsurance and or deductibles, are denied. Table 3 presents the average monthly eligibles for the Medicare Savings Program groups.

Qualifying Individual (QI) (1) - (QI-1s) (effective 1/1/98 - 12/31/02; extended to 12/31/10)⁴.

There is an annual cap on the amount of money available that can limit the number of individuals in the group, these individuals are entitled to Medicare Part A with an income at least 120% FPL, but less than 135% FPL and resources that do not exceed twice the SSI limit and are not otherwise eligible for Medicaid benefits. Medicaid pays their Medicare Part B premiums only. FFP equals FMAP at 100%.

**Table 3: Average Monthly Eligibles
For Medi-Cal’s Dual Eligibles: CY 2007 Months-of-Eligibility**

Eligible Category	Average Monthly Eligibles	Certified Eligible (Yes, No) See note below
QMB Mandatory	6,179	Yes
QMB Plus	260,109	Yes
QMB Pending	11,839	No
SLMB Mandatory	59,446	No
SLMB Plus	4,004	Yes
QI-1 Mandatory	13,497	No

Source: Created by RASS utilizing MM0811_Medicare-Medi-Cal aid code file_2008_11 file.

Note: Not all of the beneficiaries who participate in the Medicare Savings Program are deemed certified eligible for Medi-Cal. As noted in Table 3, some of the groups are not entitled for Medi-Cal benefits. Medi-Cal is only paying their Medicare Part A or B premium. Those that are eligible for “Cost Sharing”, but not full Medicaid benefits, are deemed certified eligible, but with restrictions. In this case, the restriction relates to the fact that Medi-Cal will only pay for Medicare co-insurance or deductible amounts; all other medical services are denied. The “QMB Pending” category represents beneficiaries that will be assigned to the QMB group pending Medicare Part A and B confirmation

³ See EDS edit or error code 0628. Medi-Cal pays only medicare coinsurance and deductible for QMBs (aid code 80) as allowed. Qualified Medicare Beneficiaries (QMBs) identified by aid code 80 are only eligible for Medicare coinsurance and deductibles. Claims billing Medicare non-covered services or for services other than Medicare coinsurance and deductible are denied.

⁴ DHCS ACWDL No.: 09-11
<http://www.dhcs.ca.gov/services/medi-cal/eligibility/Documents/c09-11.pdf>

V. MEDI-CAL'S DUAL ELIGIBLE POPULATION

During calendar year 2007, 1,172,497 dual eligible Medi-Cal beneficiaries were eligible at some time throughout the year. They accounted for 12,609,056 member months (Table 4).

Dual Eligible Enrollment

For this analysis, enrollment was summarized into two categories: (1) member months associated with beneficiaries enrolled in FFS Medi-Cal, and (2) member months associated with beneficiaries enrolled in Medi-Cal managed care. Most, or roughly 83 percent, of the member months were associated with FFS Medi-Cal (Table 4).

**Table 4: Medi-Cal Dual Eligible Enrollment by Plan Type-
CY 2007 Months of Enrollment**

Eligibility Category	While Eligible For Medicare A or B			% of Total member Months
	Member Months While Enrolled In FFS	Member Months While Enrolled In A Managed Care Plan	Total Member Months For Dual Eligibles	
Aged	5,368,023	1,036,222	6,404,245	51%
Blind	138,543	25,631	164,174	1%
Disabled	4,188,132	894,728	5,082,860	40%
LTC	602,886	91,102	693,988	6%
Other	151,343	112,446	263,789	2%
Total	10,448,927	2,160,129	12,609,056	100%
Percentage of Total Member Months	83%	17%	100%	

Source: Created by RASS utilizing RDS2007 Analytic file.

Note: Medicare member months do not equal Medi-Cal member months because some beneficiaries gain Medicare eligibility throughout the year. They are eligible for Medi-Cal only for part of the year prior to gaining Medicare eligibility.

Age and Gender

Consistent with the literature reviewed, Medi-Cal's dual eligibles were more likely to be female than male. Roughly 59% of Medi-Cal's dual eligible population was female (Table 5). Ninety-four percent of Medi-Cal's dual eligible population was 40 years of age or older (Table 6).

Table 5: Gender Distribution for Medi-Cal's Dual Eligible Population

Gender	Unduplicated Beneficiaries	% Of Total Unduplicated Beneficiaries
Female	687,736	59%
Male	484,761	41%
Total	1,172,497	100%

Source: Created By RASS Utilizing the CINBYMOE 2007 analytic file.

Table 6: Eligibles By Age Group :Medi-Cal's Dual Eligible Population

Age Group	Unduplicated Beneficiaries	% Of Total Unduplicated Beneficiaries
Between 0 and 19	306	0%
Between 20 and 39	73,257	6%
Between 40 and 64	271,928	23%
65+	827,006	71%
Total	1,172,497	100%

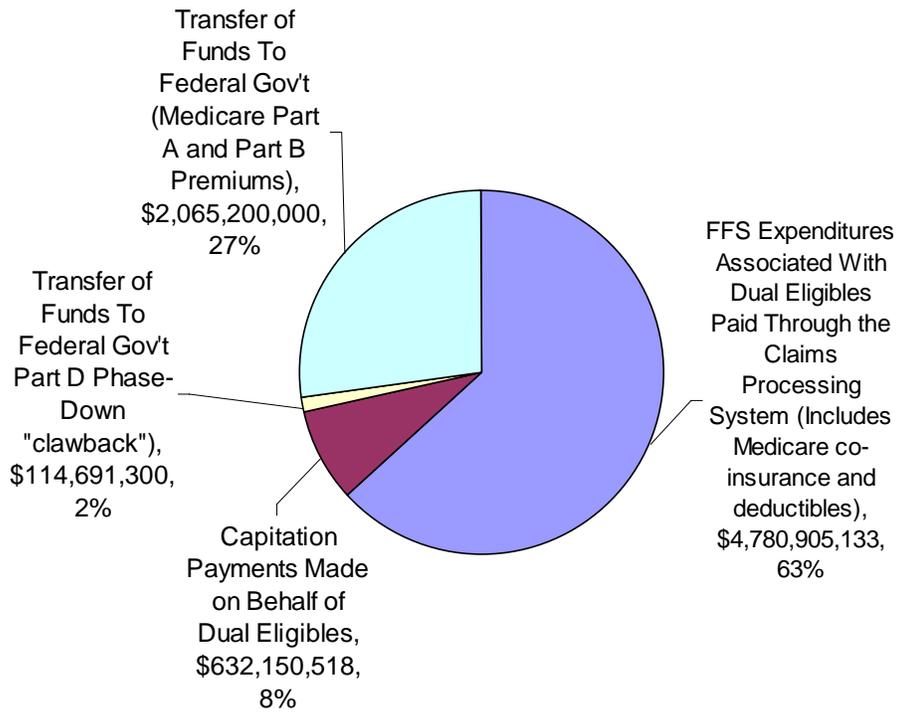
Source: Created By RASS Utilizing the CINBYMOE 2007 analytic file.

Medi-Cal Dual Eligible Expenditures

Medi-Cal's spending on behalf of dual eligibles can be grouped into four distinct elements: (1) expenditures associated with the payment of Medi-Cal FFS providers and reflected in the administrative claims, including Medicare co-insurance and deductibles, (2) the transfer of funds associated with Medicare Part A and B premiums made on behalf of dual eligibles, (3) expenditures associated with dual eligibles enrolled in Medi-Cal managed care plans, and (4) the transfer of funds associated with Medicare Part D

(i.e., "clawback"). Figure 1 below presents the four elements and their relative percentage of total expenditures and fund transfers associated with Medi-Cal's dual eligible population.

Figure 1: Total Medi-Cal Expenditures and Transfers of Funds Associated With Dual Eligible Beneficiaries
Total Expenditures/Transfer of Funds = \$7.6 Billion



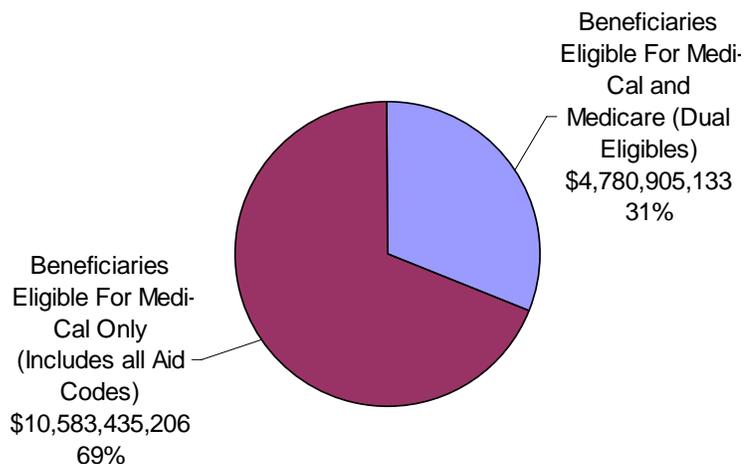
Source: Created by RASS utilizing RDS2007 Analytic file.

Note: The expenditures associated with dual eligibles paid through the claims processing system include Medi-Cal FFS expenditures for carve-out services. These are expenditures paid through the FFS system while the beneficiary was enrolled in a Medi-Cal managed care plan. The transfer of funds for the Part D Phase down was derived from the November 2007 Medi-Cal Estimate FY 07-08, page 28. The phase down contribution is funded 100% by state general funds. The transfer of funds for the Medicare Part A and Part B premiums were derived from the November 2007 Medi-Cal Estimate FY 07-08, page 26.

Total Medi-Cal FFS claim expenditures associated with dual eligibles equaled \$4.77 billion for CY 2007 dates-of-service (Figure 2). It should be noted that these expenditures represent DHCS administered services only and do not include services

and expenditures administered by Department of Mental Health, Department of Social Services, Department of Developmental Services, etc. These services and their associated expenditures will be presented later in this paper.

**Figure 2: Total CY 2007 FFS Medi-Cal Expenditures
Dual Eligible vs. Non-Dual Eligibles
Total Expenditures = \$15.3
Billion**



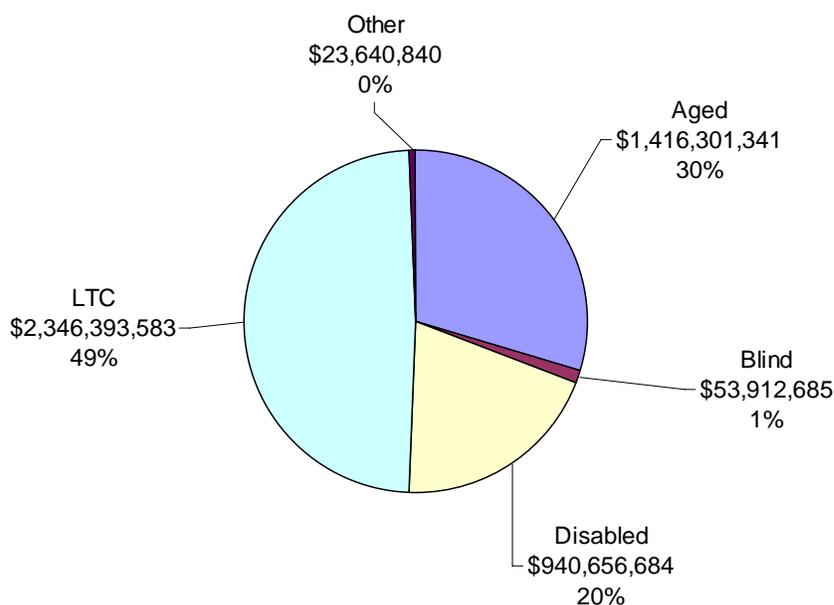
Source: Created by RASS utilizing paid claims and eligibility data.

Source: Created by RASS utilizing the RDS2007 Analytic file. Dates-of-service 2007.

Note: Total Medi-Cal expenditures exclude Family PACT and expenditures associated with Presumptive eligibles. F-PACT and Presumptive Eligibles are not reflected on the MEDS file and have been excluded for this analysis. Only certified Medi-Cal eligibles with a MEDS record have been included. During CY 2007, F-PACT expenditures totaled \$ \$436,178,446 and expenditures associated with presumptive eligibles totaled \$ \$152,073,464.

Of the \$4.78 billion, 20 percent or \$940 million was associated with disabled dual eligibles. Dual eligibles residing in long-term care facilities⁵ generated the greatest expenditure totals, accounting for \$2.3 billion or 49 percent of all Medi-Cal FFS claim expenditures associated with dual eligibles. The aged dual eligibles accounted for \$1.4 billion or 30 percent of all expenditures, while the other/families, and blind dual eligibles accounted for \$77 million or 1.6 percent of the total dual eligible FFS claims expenditures (Figure 3).

Figure 3: Distribution of Medi-Cal FFS Expenditures Associated With Dual Eligible Beneficiaries by Eligibility Category, CY 2007 Dates-of-Service; Total Expenditures = \$4.7 Billion



Source: Created by RASS utilizing the RDS2007 Analytic file. Dates-of-service 2007.

⁵ These are beneficiaries that have been assigned to a LTC aid code (i.e., 13, 23, 53, and 63). The expenditures reflected include total expenditures, not just LTC expenditures. The distribution of expenditures reflected in Figure 2 was based on eligibility category. The reference to LTC is indicative of the fact that the beneficiary resided in a LTC facility, not the service category.

Evaluating Medi-Cal's dual eligible expenditures by category-of-service discloses that LTC services are a significant cost driver. Roughly 65 percent of the total FFS claim expenditures associated with Medi-Cal's dual eligible population was for LTC services (Table 7). In the context of Medi-Cal's overall LTC FFS claim expenditures (i.e., duals and non-duals), the dual eligibles were the primary driver of total expenditures. During CY 2007, Medi-Cal FFS claim expenditures for LTC services totaled \$4.2 billion. Of this total, Medi-Cal's dual eligible population accounted for roughly 77 percent (Table 8). It should be noted, the LTC services as displayed in Tables 7 and 8 were compiled by vendor code. Therefore, this includes FFS LTC expenditures related to beneficiaries assigned to LTC aid codes as well as beneficiaries assigned to non-LTC aid codes. The beneficiaries assigned to non-LTC aid codes that utilized LTC services generally incurred short-term stays or have not been assigned to a LTC aid code when the data was compiled. This explains the difference noted between the LTC expenditures reflected in Tables 8 and 9 and Figure 3. The expenditures displayed in Figure 3 represent only those associated with beneficiaries assigned to a specific eligibility category or LTC aid code. Therefore, short-term stays in LTC facilities incurred by beneficiaries not enrolled in a LTC aid code were not captured.

Table 7: Total FFS Medi-Cal Claim Expenditures For Dual Eligibles By Service Category

Vendor Code	Total FFS Medi-Cal Expenditures While Enrolled In FFS	Total FFS Medi-Cal Expenditures While Enrolled in Managed Care	Total Combined (Includes Beneficiaries Enrolled in FFS and Those Enrolled in MC Plans)	% of Total
80-Nursing Facility (formerly known as Skilled Nursing Facility)	\$2,837,793,232.19	\$87,222,543.14	\$2,925,015,775.33	61%
60-Community Hospital-Acute Inpatient	\$355,806,433.65	\$8,438,668.07	\$364,245,101.72	8%
01-Adult Day Health Care Center	\$304,291,046.20	\$27,903,605.86	\$332,194,652.06	7%
26-Pharmacist	\$213,665,833.68	\$2,763,334.65	\$216,429,168.33	5%
47-Intermediate Care Fac	\$193,539,898.02	\$6,728,647.46	\$200,268,545.48	4%
78-Community Hemodialysis Center	\$95,418,912.84	\$2,706,595.05	\$98,125,507.89	2%
06-Certified Hospice Service	\$94,415,912.83	\$224,578.78	\$94,640,491.61	2%
77-Rural Health Clinic/Federally Qualified Health Center/Indian Health Clinic	\$74,478,490.80	\$15,949,717.85	\$90,428,208.65	2%
42-Medical Transportation	\$73,638,254.72	\$831,513.57	\$74,469,768.29	2%
40-Other Provider	\$67,462,282.51	\$935,597.04	\$68,397,879.55	1%
22-Physician Group	\$57,893,274.82	\$1,503,824.34	\$59,397,099.16	1%
62-Community Hospital-Outpatient	\$56,453,287.82	\$1,702,581.96	\$58,155,869.78	1%
81-MSSP Waiver Services	\$41,197,690.18	\$7,534,204.16	\$48,731,894.34	1%
20-Physician	\$34,659,825.69	\$1,407,609.97	\$36,067,435.66	1%
71-Home & Community Based Waiver Svcs-IHMC, SNF, & Model Waivers	\$25,660,571.21	\$2,520,146.49	\$28,180,717.70	1%
50-County Hospital-Acute Inpatient	\$13,363,474.10	\$88,538.92	\$13,452,013.02	0%
37-Audiologist	\$9,527,396.88	\$48,250.28	\$9,575,647.16	0%
28-Optometrist	\$8,143,021.51	\$34,583.70	\$8,177,605.21	0%
73-AIDS Waiver Services	\$6,249,765.40	\$992,011.51	\$7,241,776.91	0%
45-Hearing Aid Dispenser	\$6,492,851.39	\$21,045.26	\$6,513,896.65	0%
11-Fabricating Optical Lab	\$5,614,584.33	\$848,977.62	\$6,463,561.95	0%
84-Assisted Living Waiver	\$6,193,288.20	\$261,931.00	\$6,455,219.20	0%
52-County Hospital-Outpatient	\$4,082,094.76	\$5,372.15	\$4,087,466.91	0%
72-Surgicenter	\$3,815,376.19	\$165,158.35	\$3,980,534.54	0%
33-Acupuncturist	\$3,873,136.22	\$32,221.62	\$3,905,357.84	0%
24-Clinical Lab	\$3,186,786.48	\$61,336.72	\$3,248,123.20	0%
32-Podiatrist	\$2,990,079.78	\$58,991.94	\$3,049,071.72	0%
12-Optometric Group	\$2,367,611.26	\$14,206.01	\$2,381,817.27	0%
29-Dispensing Optician	\$1,345,729.98	\$5,109.59	\$1,350,839.57	0%
75-Organized Outpatient Clinic	\$1,205,802.52	\$118,029.00	\$1,323,831.52	0%
19-Portable X-ray Lab	\$1,066,816.79	\$40,632.08	\$1,107,448.87	0%
44-Home Health Agency	\$739,572.72	\$262,473.21	\$1,002,045.93	0%
02-Medicare Crossover Provider Only	\$589,594.63	\$44,664.34	\$634,258.97	0%
36-Speech Therapist	\$543,107.75	\$4,935.75	\$548,043.50	0%
31-Psychologist	\$293,645.82	\$18,687.55	\$312,333.37	0%
38-Prosthetist	\$230,682.99	\$4,354.21	\$235,037.20	0%
55-Local Education Agency	\$173,839.86	\$50,935.52	\$224,775.38	0%
58-County Hospital-Hemodialysis Center	\$152,986.50	\$0.00	\$152,986.50	0%
68-Community Hospital-Renal Dialysis Center	\$99,216.10	\$26,877.51	\$126,093.61	0%
07-Certified Pediatric Nurse Practitioner	\$71,068.43	\$118.17	\$71,186.60	0%
04-Genetic Disease Testing	\$45,352.00	\$20,955.00	\$66,307.00	0%
30-Chiropractor	\$56,492.86	\$2,934.69	\$59,427.55	0%
82-EPSDT Supplemental Services	\$25,004.39	\$31,856.11	\$56,860.50	0%
34-Physical Therapist	\$55,514.56	\$534.36	\$56,048.92	0%
05-Nurse Midwife	\$53,558.33	\$16.99	\$53,575.32	0%
08-Certified Family Nurse Practitioner	\$36,999.72	\$323.33	\$37,323.05	0%
13-Nurse Anesthetist	\$30,160.07	\$0.00	\$30,160.07	0%
69-Community Hospital-Rehab Facility	\$28,622.37	\$929.77	\$29,552.14	0%
91-Outpatient Heroin Detoxification	\$25,688.35	\$3,175.47	\$28,863.82	0%
09-Respiratory Care Practitioner	\$25,313.89	\$383.64	\$25,697.53	0%
79-Independent Rehab Facility	\$19,142.04	\$4,490.85	\$23,632.89	0%
53-Breast Cancer Early Detection Program	\$20,580.13	\$0.00	\$20,580.13	0%
39-Orthotist	\$15,269.65	\$56.03	\$15,325.68	0%
59-County Hospital-Rehab Facility	\$11,943.24	\$0.00	\$11,943.24	0%
XX	\$10,051.77	\$1,448.26	\$11,500.03	0%
03-CCS/GHPP Program	\$5,547.17	\$1,276.48	\$6,823.65	0%
35-Occupational Therapist	\$1,258.60	\$30.18	\$1,288.78	0%
63-Mental Health Inpatient Consolidation	\$747.63	\$0.00	\$747.63	0%
49-Birthing Center	\$387.31	\$0.00	\$387.31	0%
	\$4,609,254,111.83	\$171,651,021.56	\$4,780,905,133.39	100%

Source: Created by RASS utilizing the RDS 2007 file.

Note: If a beneficiary received dialysis from a Medicare-approved facility (independent or hospital-based), Medicare Part B pays the facility for dialysis related services at a per treatment rate (composite rate). This rate may be different from one facility to the next. Medicare pays 80% of the composite rate. The remaining 20% coinsurance is

paid by Medi-Cal. In addition to the 20% copayment amount, there is a yearly Part B deductible of \$135 (CY 2007 amount). The provider bills Medi-Cal for this coinsurance amount and it is reflected in the paid claims file in the field titled "Co-Insurance-Amount."

Table 8: Total Medi-Cal FFS Claim Expenditures For LTC Services Dual Eligible vs. Non-Dual Eligible

Eligibility Group	Total Paid	% of Total
Non-Duals FFS	\$1,002,676,479	24%
Dual FFS	\$3,219,924,812	76%
Total	\$4,222,601,291	100%

Source: Created By RASS Utilizing the CINBYMOE 2007 analytic file.

Source: Created by RASS utilizing the RDS 2007 file.

In terms of the overall Medi-Cal program, as stated previously, the dual eligibles accounted for 31 percent of all Medi-Cal FFS expenditures reflected in the administrative claims (Figure 2). The disabled dual eligibles accounted for 6 percent of Medi-Cal's total overall DHCS administered FFS claim expenditures (Table 9).

Table 9: Total Medi-Cal FFS Claim Expenditures Non-Dual vs. Dual By Eligibility Category, CY 2007 Dates-of-Service

Eligibility Category	Total Paid	% of Total Paid
Aged-Dual Eligibles	\$1,416,301,341	9%
Blind-Dual Eligibles	\$53,912,685	0%
Disabled - Dual Eligibles	\$940,656,684	6%
LTC - Dual Eligibles	\$2,346,393,583	15%
Other - Dual Eligibles	\$23,640,840	0%
Non-Dual Eligibles	\$10,583,435,206	69%
Total	\$15,364,340,339	100%

Source: Created by RASS utilizing paid claims and eligibility data.

For those that were enrolled in Medi-Cal managed care plans, roughly \$171 million was paid through the FFS system while they were enrolled in a managed care health plan (Figure 4). These expenditures were associated with services and medical

supplies not delegated to the Medi-Cal managed care contractor. These services and supplies are generally referred to as “carve-outs” and are paid through Medi-Cal FFS.

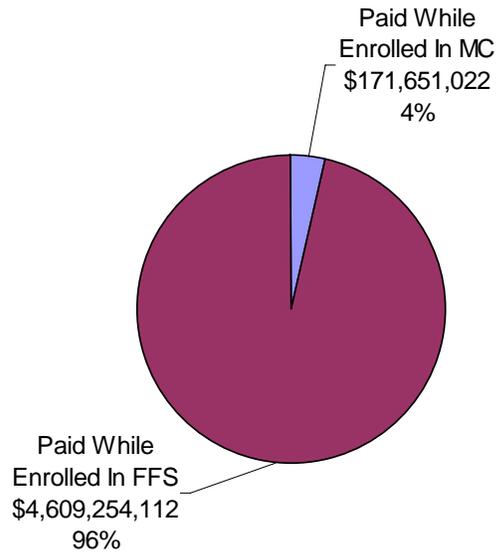
For a perspective on “carve-outs”, RASS staff isolated dual eligible beneficiaries who were enrolled in a Medi-Cal managed care health plan during CY 2007. Based on this population, the dual eligible population generated “carve-out” expenditures per-member-per-month (PMPM) of \$79, or average per-capita “carve-out” expenditures of \$2,268 (Table 10, see appendix 1 for a listing of dual eligibles by county enrolled in a managed care plan.).

Table 10: Medi-Cal Dual Eligible Carve-Out Expenditures, PMPM, Unduplicated Beneficiaries, Member Months

Eligibility Category	Unduplicated Beneficiaries	Member Months	Total Paid	PMPM
Aged	37,307	1,036,222	\$56,856,297.59	\$ 54.87
Blind	811	25,631	\$1,459,290.17	\$ 56.93
Disabled	30,716	894,728	\$43,890,136.42	\$ 49.05
LTC	4,068	91,102	\$67,453,907.24	\$ 740.42
Other	3,580	112,446	\$1,991,390.14	\$ 17.71
Total	75,661	2,160,129	\$171,651,021.56	\$ 79.46

Source: Created by RASS utilizing paid claims and eligibility data.

Figure 4: CY 2007 Carve-Out Expenditures As A Proportion of Total Dual Eligible Expenditures, Total Expenditures Equal \$4.7 billion



In addition to “carve-out” services, dual eligible beneficiaries may also receive services from Departments and programs not administered by DHCS. These departments, such as Department of Developmental Services (DDS), Department of Mental Health (DMH), Department of Social Services (DSS), etc. administer programs such as In-Home Support Services and developmental services. Table 11 presents total expenditures for each eligibility category by service type. The In-Home Support Services and the DDS developmental waiver are the two greatest cost drivers. Combined, these two categories of service account for 81 percent of the total expenditures administered by departments other than DHCS. These expenditures are also presented as Per-Member Per-Month figures in Table 12.

Table 11: Total Expenditures for Services Not Administered by DHCS By Eligibility Category and Service Category: Dual Eligibles CY 2007 Dates-of-Service

Member Months	5,368,023	138,543	4,188,132	602,886	151,343	10,448,927
Service Category	Aged	Blind	Disabled	LTC	Other	Total
Child Health and Disability Program	\$0.00	\$93.21	\$3,851.67	\$0.00	\$615.71	\$4,560.59
DDS Targeted Case Management	\$1,079,512.68	\$1,342,932.02	\$65,849,920.96	\$231,206.29	\$79,519.96	\$68,583,091.91
DDS Waiver Services	\$11,649,106.82	\$14,115,016.23	\$590,187,905.38	\$24,044.97	\$192,188.78	\$616,168,262.18
DSS-In-Home Support Services	\$1,295,186,962.78	\$70,425,307.70	\$1,010,674,105.10	\$539,885.97	\$3,611,237.60	\$2,380,437,499.15
Dental	\$43,265,009.18	\$1,094,946.15	\$40,744,787.70	\$5,800,040.05	\$590,458.98	\$91,495,242.06
Medi-Cal Targeted Case Management	\$1,293,561.50	\$86,199.96	\$3,843,088.09	\$639,299.87	\$86,249.66	\$5,948,399.08
Mental Health Inpatient Consolidation	\$384,509.32	\$31,905.52	\$3,175,350.31	\$407,441.76	\$40,303.00	\$4,039,509.91
Short-Doyle Community Mental Health	\$12,597,679.20	\$1,145,679.71	\$213,845,302.03	\$2,609,984.30	\$1,456,005.60	\$231,654,650.84
State Developmental Centers	\$1,059,986.01	\$0.00	\$10,118,892.25	\$299,749,621.96	\$2,792,445.68	\$313,720,945.90
State Hospital-Mentally Disabled	\$0.00	\$0.00	\$75,878.62	\$2,473,936.88	\$117,927.00	\$2,667,742.50
Total	\$1,366,516,384.84	\$88,242,080.50	\$1,938,519,082.11	\$312,475,462.05	\$8,966,894.62	\$3,714,719,904.12

Source: Created by RASS utilizing paid claims.

Table 12: Total PMPM Expenditures for Services Not Administered by DHCS By Eligibility Category and Service Category: Dual Eligibles CY 2007 Dates-of-Service

Member Months	5,368,023	138,543	4,188,132	602,886	151,343	10,448,927
Service Category	Aged	Blind	Disabled	LTC	Other	Total
Child Health and Disability Program	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DDS Targeted Case Management	\$0.20	\$9.69	\$15.72	\$0.38	\$0.53	\$6.56
DDS Waiver Services	\$2.17	\$101.88	\$140.92	\$0.04	\$1.27	\$58.97
DSS-In-Home Support Services	\$241.28	\$508.33	\$241.32	\$0.90	\$23.86	\$227.82
Dental	\$8.06	\$7.90	\$9.73	\$9.62	\$3.90	\$8.76
Medi-Cal Targeted Case Management	\$0.24	\$0.62	\$0.92	\$1.06	\$0.57	\$0.57
Mental Health Inpatient Consolidation	\$0.07	\$0.23	\$0.76	\$0.68	\$0.27	\$0.39
Short-Doyle Community Mental Health	\$2.35	\$8.27	\$51.06	\$4.33	\$9.62	\$22.17
State Developmental Centers	\$0.20	\$0.00	\$2.42	\$497.19	\$18.45	\$30.02
State Hospital-Mentally Disabled	\$0.00	\$0.00	\$0.02	\$4.10	\$0.78	\$0.26
Total	\$254.57	\$636.93	\$462.86	\$518.30	\$59.25	\$355.51

Source: Created by RASS utilizing paid claims.

VI. ANALYSIS OF THE SAMPLES

Months of Eligibility

Table 13 displays the member-months and average months of eligibility for the two samples. The average months of eligibility were 11.24 for disabled dual eligibles and 10.84 for disabled beneficiaries eligible for Medi-Cal only. This data was reflective

of the fact that the two sample populations chosen were disabled, which are generally long term Medi-Cal recipients.

Table 13: Average Months of Eligibility During CY 2007 For The Sample Populations

Sample Group	Dual Eligible	Medi-Cal Only
Number of Beneficiaries	1,000	1,000
Member Months	11,247	10,843
Average Months of Enrollment	11.25	10.84

Source: Created by RASS utilizing CINBYMOE analytic file.

Age and Gender

Analysis of the demographic characteristics of the two samples found some differences between disabled dual eligibles and disabled beneficiaries covered by Medi-Cal only. The most significant was associated with age (Table 14).

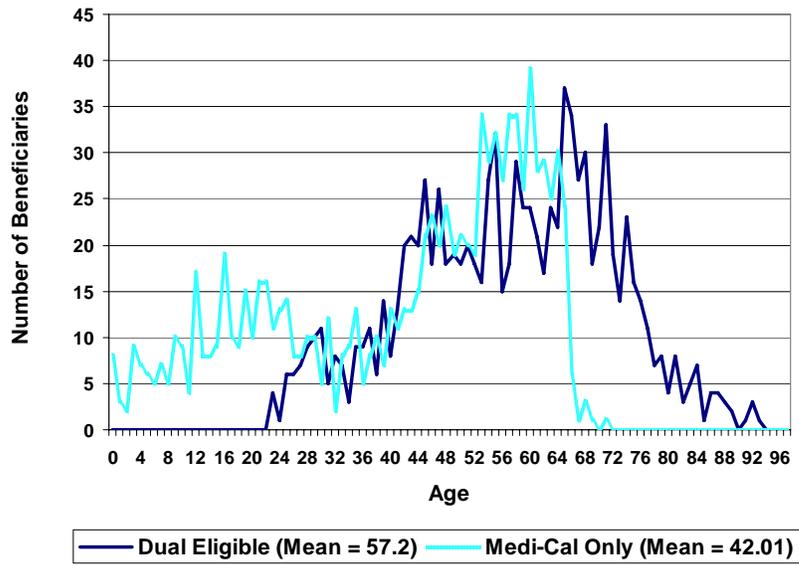
The mean age of disabled beneficiaries who were dual eligible was 15 years older than those of disabled beneficiaries covered by Medi-Cal only. Fifteen percent of disabled beneficiaries covered by Medi-Cal only were children between the ages of 0 and 18. However, there were no dually-eligible beneficiaries under the age of 23. Enrollment into Medicare by disabled beneficiaries accelerates rapidly beginning at age 60. As displayed in Figure 5, the number of disabled beneficiaries eligible for only Medi-Cal falls precipitously at age 65, as they become eligible for Medicare (Table 14).

Table 14: Age Metrics For The Sample Populations

Sample Group	Dual Eligible	Medi-Cal Only
Mean	57.1	42.1
Median	58.0	48.0
Mode	65.0	60.0
Minimum	23	0
Maximum	93	71

Source: Created by RASS utilizing the CINBYMOE analytic file.

Figure 5: Distribution of Sample Populations By Age



Beneficiaries in the Medi-Cal only sample group were more likely to be male and younger in age than those individuals in the dual eligible group. Fifty-four percent of dually eligible disabled were females compared to only forty-six percent male. Conversely, fifty-five percent of disabled beneficiaries covered by Medi-Cal only were males compared to forty-five percent female (Table 15).

Table 15: Distribution of Sample Populations By Gender

Sample Group	Dual Eligible		Medi-Cal Only	
	<i>number</i>	<i>percent</i>	<i>number</i>	<i>percent</i>
Female	540	54.0%	448	44.8%
Male	460	46.0%	552	55.2%
Grand Total	1,000	100.0%	1,000	100.0%

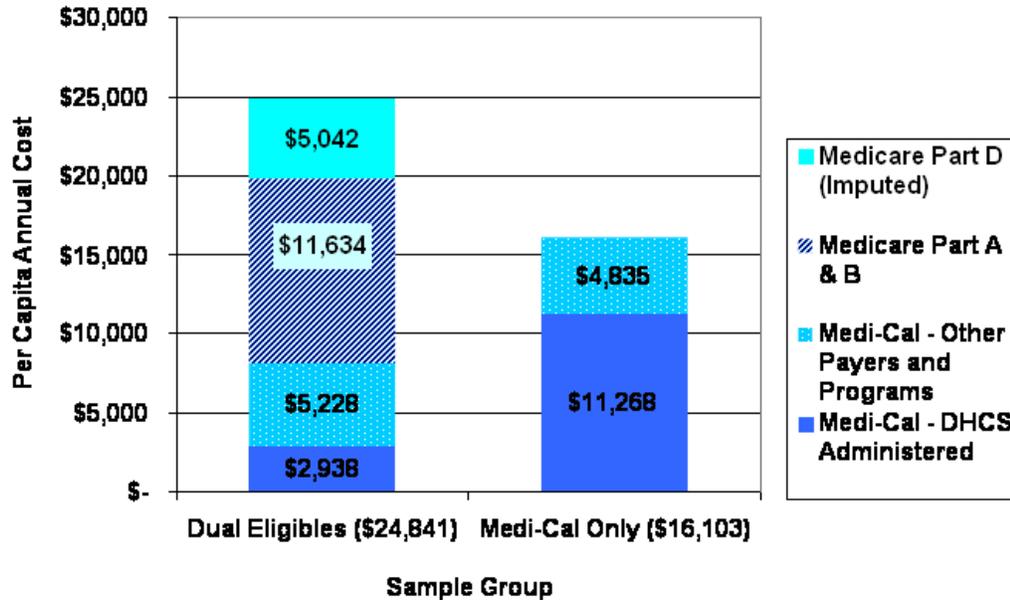
Source: Created by RASS utilizing the CINBYMOE analytic file

Comparison of Per-Capita Expenditures

Medical expenditures associated with Medi-Cal's dual eligible population are distributed between Medi-Cal and Medicare. In general, Medicare is the primary payer for many services, with Medi-Cal picking up the cost for specific services such as long term care and inpatient hospital after the Medicare benefit has been exhausted. For this analysis, RASS staff captured Medi-Cal costs that are administered by DHCS (generally referred to as EDS processed claims), Medicare costs, and Medi-Cal costs associated with programs administered by departments such as Department of Mental Health, Department of Social Services, Department of Developmental Services, etc. Programs such as Short-Doyle, Personal Care Services, etc. are included in the non-DHCS-administered programs.

Based on an analysis of these three claims sources, the disabled dual eligible average per-capita cost for all payer sources equaled \$24,841. In contrast, the Medi-Cal eligible only disabled population generated an average per-capita cost for all payer sources of \$16,103. The disabled dual eligibles generated an average per-capita cost related to DHCS administered services of \$2,938, which was considerably less than the Medi-Cal eligible only disabled population as Medicare was the primary payer. The Medi-Cal eligible only disabled population generated an average per-capita cost of \$11,268 (Figure 6).

Figure 6: Medi-Cal, Medicare, and Other Payers Expenditures Associated With the Disabled Dual and Non-Dual Medi-Cal Populations



Source: Created by RASS utilizing Medi-Cal and Medicare claims detail. The chart summarizes claims with dates-of-service between January 1, 2007 and December 31, 2007. For comparison purposes, RASS evaluated a number of studies that matched Medicare and Medicaid data sets to produce an overall per-capita spending value. KCMU and the Urban Institute produced an estimate using Medicaid Statistical Information System (MSIS) and Medicare Current Beneficiary Survey (MCBS) data in 2003 that disclosed the U.S. wide per-capita cost of \$20,902 (Coughlin, Waidmann, and O'Malley Watts).

The two sample populations generated similar per-capita costs with respect to Medi-Cal other payers, such as Department of Mental Health-Short-Doyle, Department of Social Services-In-Home Support Services, Department of Developmental Services-waivers services, etc. The average per-capita costs were \$5,228 and \$4,835 respectively. In general the expenditures associated with these “other payers” are not Medicare covered services.

Table 16 presents the medical expenditures by service category for the disabled dual eligible sample. Included in this table are per-capita and PMPM cost metrics. Some of the greatest cost drivers are In-Home Support Services, nursing home care, inpatient hospital, home and community-based waiver services, and pharmacy. This finding is consistent with the literature reviewed. For example, Coughlin, Weidman, and Watts noted that dual eligibles are “more likely than other Medicare beneficiaries to need assistance with multiple activities of daily living.” This fact is reflected in the high costs associated with In-Home Support Services (\$2,824 per-capita).

Table 16: Health Care Expenditures By Service Category: Disabled Dual Eligible Population

Payer	Service Type	Cost Per Capita	PMPM
Medi-Cal DHCS Administered	Federally Qualified Health Centers/Rural Health Clinics and Tribal Health Plan Clinics	\$99	\$8.78
	Home Health Care	\$0	\$0.03
	Hospital Care	\$79	\$7.01
	Hospital Inpatient	\$554	\$49.29
	Nursing Home Care	\$1,273	\$113.20
	Other / Ancillary	\$768	\$68.27
	Pharmacy	\$368	\$32.74
	Physician and Clinical	\$124	\$11.01
	Subtotal	\$3,265	\$290.33
Medi-Cal- Other Programs and Payers	DSS-In-Home Support Services	\$2,824	\$251.07
	DDS Targeted Case Management (TCM)	\$180	\$15.97
	DDS Waiver Services	\$1,465	\$130.24
	Dental	\$123	\$10.98
	MH Inpatient	\$5	\$0.47
	Medi-Cal TCM	\$11	\$1.01
	Short-Doyle Community Mental Health	\$40	\$3.56
	Short-Doyle(SD) Mental Health Community Hospital	\$136	\$12.08
	SD Mental Health Rehabilitation	\$431	\$38.32
Subtotal	\$5,228	\$464.81	
Medicare Part A	HOME HEALTH AGENCY	\$474	\$42.18
	HOSPICE	\$204	\$18.13
	INPATIENT	\$5,027	\$446.94
	OUTPATIENT	\$1,895	\$168.51
	SKILLED NURSING FACILITY	\$846	\$75.24
	Subtotal	\$8,447	\$751.00
Medicare Part B	DURABLE MEDICAL EQUIPMENT	\$510	\$45.30
	PHYSICIAN SUPPLIER	\$2,677	\$238.06
	Subtotal	\$3,187	\$283.36
Medicare Part D (Estimated)	\$ 5,041,837.62	\$5,042	\$457.56
GRAND TOTAL		\$24,841,053	\$24,841

Source: Created By RASS utilizing Medi-Cal and Medicare claims data. This table summarizes claims with dates-of-service between January 1, 2007 and December 31, 2007.

Table 17 presents the medical expenditures by service category for the disabled sample eligible for Medi-Cal only. Significant cost drivers among this sample population

were inpatient hospital, pharmacy, nursing home care, in-home support services, and home and community-based waiver services.

Table 17: Health Care Expenditures By Service Category: Disabled Medi-Cal Eligible Only Population

Payer	Service Type	Cost Per Capita	PMPM
Medi-Cal DHCS Administered	FQHC	\$419	\$38.62
	Home Health Care	\$259	\$23.92
	Hospital Care	\$567	\$52.32
	Hospital Inpatient	\$3,421	\$315.52
	Nursing Home Care	\$1,646	\$151.82
	Other / Ancillary	\$733	\$67.60
	Pharmacy	\$3,448	\$318.01
	Physician and Clinical	\$774	\$71.39
	Subtotal	\$11,268	\$1,039.20
Medi-Cal- Other Programs and Payers	CHDP/EPSDT	\$2	\$0.16
	DDS Dev Disabled	\$192	\$17.71
	DSS In-Home Support Services	\$1,449	\$133.64
	DDS TCM	\$228	\$21.03
	DDS Waiver Services	\$1,399	\$128.99
	Dental	\$103	\$9.46
	Mental Health (MH) Inpatient	\$181	\$16.66
	Medi-Cal TCM	\$13	\$1.23
	SD Community MH	\$122	\$11.29
	SD MH Community Hospital	\$180	\$16.56
	SD MH Rehabilitation	\$790	\$72.84
	Subtotal	\$4,835	\$445.95
GRAND TOTAL	\$16,103	\$1,485.15	

Comment [FN1]: What is this service? I see the DDS waiver and TCM. Is this the State Hospitals?

Source: Created By RASS utilizing Medi-Cal and Medicare claims data. This table summarizes claims with dates-of-service between January 1, 2007 and December 31, 2007.

Clinical Conditions Driving Cost and Utilization

To better understand the clinical conditions and disease burden for the dual eligible population, RASS staff utilized the Agency for Healthcare Research and Quality’s Clinical Classifications Software (CCS)⁶ to group both Medi-Cal and Medicare claims by diagnostic category. Our analysis found that not only was there a high

⁶ See “Healthcare Cost and Utilization Project – HCUP: A Federal-State-Industry Partnership in Health Data; CLINICAL CLASSIFICATIONS SOFTWARE (CCS) 2009. URL: <http://www.hcup-us.ahrq.gov/toolsoftware/ccs/CCSUsersGuide.pdf>

percentage of dually-eligible disabled beneficiaries suffering from costly and debilitating conditions, but also a high percentage who suffered from multiple chronic diseases.

The most prevalent diseases within the dual eligible sample group included chronic conditions such as hypertension, diabetes, high cholesterol and schizophrenia. 313 members of the dual eligible sample group, or 31%, had a diagnosis associated with diabetes, a rate nearly four times greater than that found in the U.S. general population (7.8%⁷). Other frequently occurring conditions within the sample, such as spondylosis, osteoarthritis, cancer, and vision defects, may reflect the older average age of the dual eligible population. Lastly RASS staff found conditions such as paralysis, developmental disorders and HIV that may have been associated with the assignment of some beneficiaries to a disabled status at an earlier age.

The diseases generating the greatest aggregate cost included developmental disorders, chronic renal failure, and schizophrenia. Other costly diseases were those directly associated with the aging process or physical conditions that may have been directly responsible for the beneficiaries' disabled status. Table 18 displays the most prevalent clinical classifications or conditions associated with the dual eligible sample. Roughly 37 percent of the sample population was diagnosed with essential hypertension. Diabetes, disorders of lipid metabolism, other lower respiratory disease, and spondylosis-intervertebral disorders were among the other top conditions. It should be noted that the counts of unique beneficiaries displayed in Table 18 are not mutually exclusive. An individual may be counted in more than one row. For example, a

⁷ National Diabetes Information Clearinghouse; URL: <http://diabetes.niddk.nih.gov/DM/PUBS/statistics/#allages>

beneficiary may be diagnosed with essential hypertension and disorders of lipid metabolism and be counted in both rows.

Table 18: Most Prevalent Diagnostic Conditions among Members of the Dual Eligible Sample Group of 1,000.

	Clinical Classification	Frequency	% of Total
	<i>In descending order by number of beneficiaries</i>	<i>Number of Unique Beneficiaries</i>	<i>% of Sample With the Condition</i>
1	Essential hypertension	369	37%
2	Diabetes mellitus without complication	269	27%
3	Disorders of lipid metabolism	267	27%
4	Other lower respiratory disease	255	26%
5	Spondylosis; intervertebral disorders	254	25%
6	Blindness and vision defects	245	25%
7	Other connective tissue disease	225	23%
8	Abdominal pain	217	22%
9	Mood disorders	179	18%
10	Diabetes mellitus with complications	177	18%
11	Chronic obstructive pulmonary disease	169	17%
12	Other nervous system disorders	163	16%
13	Cataract	151	15%
14	Deficiency and other anemia	150	15%
15	Coronary atherosclerosis (145)	145	15%
16	Other skin disorders	143	14%
17	Osteoarthritis	142	14%
18	Schizophrenia	133	13%
19	Cardiac dysrhythmias	126	13%
20	Other gastrointestinal disorder	125	13%
21	Other upper respiratory infection	125	13%
22	Urinary tract infections	121	12%
23	Other circulatory disease	111	11%
24	Hypertension w/ complication	108	11%
25	Other eye disorders	107	11%

Source: Created by RASS utilizing AHRQ CCS algorithm and Medi-Cal and Medicare Claims data for CY 2007 dates-of-service.

Note: Counts of unduplicated beneficiaries are not mutually exclusive. An individual beneficiary may be counted in more than one row.

Comorbidity

The RASS staff analysis found the incidence of comorbidity to be high in both sample groups of disabled beneficiaries (i.e. duals as well as non-duals). It was significantly higher, however, among the dual eligibles, which was consistent with the literature (Moon and Shin, Cough, Waidmann and Watts, O'Leary, Sloss, and Melnick). Of the 313 members of the dual eligible sample with some form of diabetes, 178 (56%) also had a diagnosis for essential hypertension. Members of the dual eligible sample with both conditions generated, on average, \$35,926.79 in expenditures, excluding pharmacy.

Over forty-five percent of the dual eligible sample group had claims coded to ten or more distinct clinical classifications, compared to twenty-three percent of the Medical only sample group. This finding was consistent with most of the literature reviewed (Health Services Advisory Group; Moon and Shin; Coughlin, Waidmann, and Watts; Holahan, Miller, and David Rousseau). Most indicated that the dual eligible population suffers from multiple chronic conditions and significantly high levels of inability to perform such tasks such as bathing, getting in or out of a chair, and walking.

In Table 19 RASS staff excluded those CCS diagnostic categories associated with general medical care for unspecified conditions and included only those conditions associated with a specific disease. Also excluded are pharmacy costs, which for dual eligibles, cannot be linked to the specific beneficiaries who generated them.

Table 19: Distribution of Sample Group Members by Number of CCS Diagnostic Conditions (Pharmacy Excluded)

Number of CCS Diagnostic Conditions	Dual Eligible		Medi-Cal Only	
	#	%	#	%
No Services	39	3.9%	111	11.1%
No Specific Disease Diagnosis	36	3.6%	51	5.1%
One Condition	54	5.4%	100	10.0%
Between 2 and 4 Conditions	154	15.4%	232	23.2%
Between 5 and 9 Conditions	265	26.5%	274	27.4%
Between 10 and 19 Conditions	318	31.8%	192	19.2%
Twenty or More Conditions	134	13.4%	40	4.0%
Grand Total	1,000	100.0%	1,000	100.0%

Comment [FN2]: Did they really receive no services or there were no claims with diagnosis codes that could be categorized. I just find it interesting that 11.1% of the sample group had no services (except maybe pharmacy). Maybe these individuals were enrolled in Medicare Advantage plans.

Source: Created by RASS utilizing Medicare and Medi-Cal paid claims data. Dates-of-service: January 1, 2007 through December 31, 2007.

Total Costs for Beneficiaries with Specific Conditions

Our analysis of clinical disease in the dual eligible sample also focused on the total costs of care for all services excluding pharmacy incurred by beneficiaries with specific disease conditions, and not just those costs linked to the specific diagnosis. Of the beneficiaries having any one of the most expensive fifteen disease conditions overall, those with hypertension, diabetes, chronic obstructive pulmonary disease, spondylosis and acute cardiovascular conditions generated the greatest aggregate expenditures. Beneficiaries suffering from septicemia, respiratory failure and pneumonia were the most expensive on a per-capita basis, followed by beneficiaries who suffered strokes, congestive heart failure and chronic renal failure (Table 20). In Table 20, RASS combined multiple clinical classifications associated with like conditions or diseases. For example, the two clinical classification categories were associated with Hypertension, Essential hypertension, and Hypertension with complication, were combined into one. Similarly, three clinical categories that were associated with Diabetes, Diabetes mellitus with complication, Diabetes mellitus without complication,

and Diabetes or abnormal glucose, were combined under one group. Because of these combinations, the Table 18 counts will not reconcile to the Table 20 counts. The Table 18 counts represent the unique clinical classification category.

Table 20: Most Expensive 15 Conditions

The chart below displays the total costs of care (excluding pharmacy) for members with the specific disease. Medicare and Medi-Cal costs are combined. Note: The disease categories below are not mutually exclusive and members may be counted under more than one category.

Disease	Number of Members	Total Cost of Beneficiaries (Excluding RX)	Cost per Beneficiary
Hypertension	414	\$11,019,613.79	\$26,617.42
Diabetes	313	\$9,080,292.11	\$29,010.52
Chronic Obstructive Pulmonary Disease	169	\$6,283,793.92	\$37,182.21
Spondylosis	254	\$6,021,722.02	\$23,707.57
Coronary atherosclerosis	145	\$5,850,115.26	\$40,345.62
Congestive Heart Failure	98	\$5,712,676.55	\$58,292.62
Mood Disorders	179	\$5,142,973.01	\$28,731.69
Pneumonia	65	\$4,717,925.23	\$72,583.47
Schizophrenia	133	\$4,053,984.96	\$30,481.09
Chronic Renal Failure	65	\$3,704,282.07	\$56,988.95
Respiratory Failure	35	\$3,461,317.55	\$98,894.79
Septicemia	30	\$3,185,592.48	\$106,186.42
Acute Cerebrovascular Disease	47	\$2,761,533.83	\$58,756.04
Developmental Disorders	58	\$2,379,284.92	\$41,022.15

Source: Created by RASS utilizing Medicare and Medi-Cal paid claims data. Dates-of-service: January 1, 2007 through December 31, 2007. Clinical Classifications were assigned by RASS utilizing the Agency for Health Care Quality and Research's Clinical Classification algorithm.

The incidence of any of the fifteen most expensive diagnostic conditions in the dual eligible sample group were significantly lower among members of the Medi-Cal only sample group. The incidence of more severe conditions such as coronary atherosclerosis, chronic renal failure, congestive heart failure and acute cerebrovascular disease was much higher among dual eligibles. Of the most expensive fifteen diagnostic conditions, the only category with a lower incidence among members of the dual eligible sample group was developmental disorders (Table 21).

Table 21: Incidence of the Fifteen Most Expensive Diseases in the Dual Eligible Sample Group Compared with Members of the Medi-Cal Only Sample Group

Disease	Dual Eligible Sample Members	Medi-Cal Only Sample Members
Coronary atherosclerosis	145	51
Chronic Renal Failure	65	23
Congestive Heart Failure	98	43
Acute Cerebrovascular Disease	47	21
Hypertension	414	221
Diabetes	313	168
Chronic Obstructive Pulmonary Disease	169	91
Spondylosis	254	168
Pneumonia	65	47
Septicemia	30	22
Schizophrenia	133	106
Respiratory Failure	35	28
Mood Disorders	179	156
Developmental Disorders	58	83

Source: Created by RASS utilizing Medicare and Medi-Cal paid claims data. The table summarizes diagnoses from claims with dates-of-service January 1, 2007 through December 31, 2007. Clinical Classifications were assigned by RASS utilizing the Agency for Health Care Quality and Research's Clinical Classification algorithm.

Members of the dual eligible sample group had a higher incidence of comorbidity and a higher incidence of expensive acute conditions compared to members of the Medi-Cal only sample group.

Per-capita costs for members of the dual eligible sample group were also higher than members of the Medi-Cal only sample group who had diagnoses for the same conditions (Table 22). A number of reasons may be responsible for this difference. The members of the dual eligibles may have had more severe episodes of the disease, which were more costly to treat due to their older average age. Another possibility is that the range of services authorized by the Medicare program may have been greater than that authorized by Medi-Cal, resulting in differences in the number of per-capita units of service provided. Lastly, the Medicare program may pay a higher reimbursement rate for the same service compared to the Medi-Cal program, resulting

in greater access. Further study is required to determine whether any or all of these may be explanations for the discrepancy in utilization for members of the two samples.

Table 22: Per Capita Costs for beneficiaries having any of the Fifteen Most Expensive Diseases. Members of the Dual Eligible Sample Group Compared with Members of the Medi-Cal Only Sample Group

Disease/Condition	Dual Eligible Sample Members (Includes Medi-Cal and Medicare Claim Expenditures)	Medi-Cal Only Sample Members (Includes Medi-Cal Claim Expenditures Only)
Spondylosis	\$23,707.57	\$11,383.89
Acute Cerebrovascular Disease	\$58,756.04	\$29,546.42
Essential Hypertension	\$26,617.42	\$14,088.74
Mood Disorders	\$28,731.69	\$20,041.72
Coronary atherosclerosis	\$40,345.62	\$28,527.48
Schizophrenia	\$30,481.09	\$22,104.98
Pneumonia	\$72,583.47	\$53,085.86
Developmental Disorders	\$41,022.15	\$30,160.05
Diabetes	\$29,010.52	\$21,405.22
Congestive Heart Failure	\$58,292.62	\$46,710.43
Chronic Obstructive Pulmonary Disease	\$37,182.21	\$29,946.59
Respiratory Failure	\$98,894.79	\$80,300.05
Chronic Renal Failure	\$56,988.95	\$58,575.05
Septicemia	\$106,186.42	\$112,183.22

Source: Created by RASS utilizing Medicare and Medi-Cal paid claims data. The table summarizes claims with dates-of-service January 1, 2007 through December 31, 2007. Clinical Classifications were assigned by RASS utilizing the Agency for Health Care Quality and Research's Clinical Classification algorithm.

VII. ADDITIONAL INFORMATION ADDED AFTER DISCUSSING INITIAL DRAFT WITH DHCS EXECUTIVE MANAGEMENT

RASS staff met with DHCS executive management to discuss the Medicare dual eligible paper first draft. The initial draft, as discussed above, focused on Medi-Cal's disabled dual eligible population. After discussing the initial findings, DHCS executive management requested additional information related to the other three eligibility categories not previously focused on. These eligibility groups consisted of: the aged dual eligibles, the blind dual eligibles, and dual eligibles residing in LTC facilities. The "other" category was not evaluated, as it represented roughly .07 percent of total

combined Medi-Cal and Medicare estimated expenditures. The summaries that follow were based on analysis of the samples drawn for each eligibility group. As noted in the methodology section, the sample size was 1,000.

Aged Beneficiaries Who Are Dually Eligible

The members of the sample of beneficiaries from the Aged eligibility category were sixty-one percent female (Table 23) and had an average age of 76 (Table 24). The most prevalent clinical conditions among these beneficiaries were manageable chronic diseases such as Hypertension, Hyperlipidemia and Diabetes (Table 25).

The greatest cost driver associated with the Aged dually eligible beneficiaries was Medicare Part A services. These services, which consisted of hospital inpatient services, generated expenditures PMPM of \$497 (Figure 7). DHCS administered services generated expenditures PMPM of \$261, which was primarily concentrated among hospital inpatient, hospital outpatient, and nursing home care. Together, these three categories accounted for 83 percent of the total DHCS administered services (Figure 8). Non-DHCS administered services generated expenditures PMPM of \$233. These expenditures were primarily associated with in-home support services, which accounted for 95 percent of the total non-DHCS administered expenditures (Figure 9).

Table 23: Aged Category Eligibles by Age Group and Gender

Age Group	Female	Male	Total	Percent
Age 65 to 74	261	180	441	44.1%
Age 75 to 84	225	158	383	38.3%
Age 85 and Older	124	52	176	17.6%
Total	610	390	1,000	100.0%
Percent	61.0%	39.0%	100.0%	

Source: Created By RASS Utilizing the CINBYMOE 2007 analytic file.

Table 24: Aged Category Age Metrics

Age			
Mean	76.3	Minimum	64
Median	76	Maximum	102

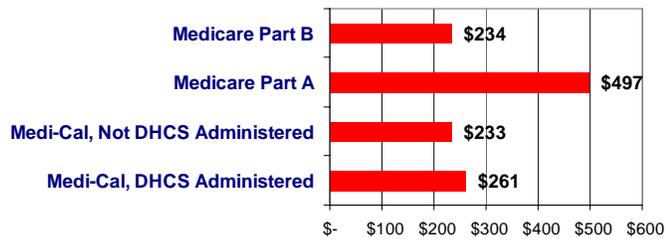
Source: Created By RASS Utilizing the CINBYMOE 2007 analytic file.

Table 25: Most Prevalent Conditions – Aged Aid Category

Most Prevalent Conditions			
	Clinical Category	Persons	Percent of Sample
1	Essential hypertension	434	43.4%
2	Disorders of lipid metabolism	263	26.3%
3	Diabetes mellitus without complication	252	25.2%
4	Blindness and vision defects	239	23.9%
5	Other lower respiratory disease	239	23.9%
6	Cataract	220	22.0%
7	Nonspecific chest pain	219	21.9%
8	Other non-traumatic joint disorders	214	21.4%
9	Spondylosis; intervertebral disease	209	20.9%
10	Other connective tissue disease	199	19.9%
11	Residual codes; unclassified	189	18.9%
12	Coronary atherosclerosis	187	18.7%
13	Osteoarthritis	182	18.2%
14	Abdominal pain	167	16.7%
15	Immunizations and screening	160	16.0%
16	Chronic obstructive pulmonary disease	154	15.4%
17	Diabetes mellitus with complication	147	14.7%
18	Deficiency and other anemia	145	14.5%
19	Cardiac dysrhythmias	140	14.0%
20	Other gastrointestinal disorders	123	12.3%

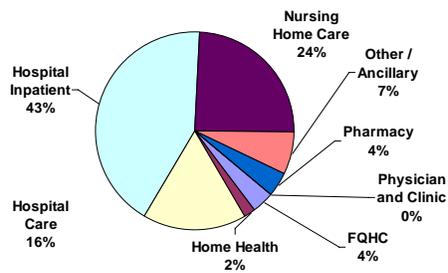
Source: Created by RASS utilizing Medi-Cal paid claims data. The table summarizes diagnoses from claims with dates-of-service from January 1, 2007 through December 31, 2007. Clinical Classifications were assigned by RASS utilizing the Agency for Health Care Quality and Research's Clinical Classification algorithm.

Figure 7: Cost of Services for Members of the Aged Aid Category Sample



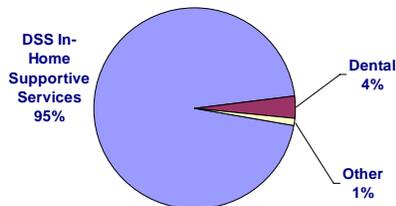
Source: Created by RASS utilizing Medicare and Medi-Cal paid claims data. Chart based on claims with dates-of-service from January 1, 2007 through December 31, 2007.

Figure 8: Expenditure Distribution of DHCS Administered Med-Cal Services – Aged Aid Category



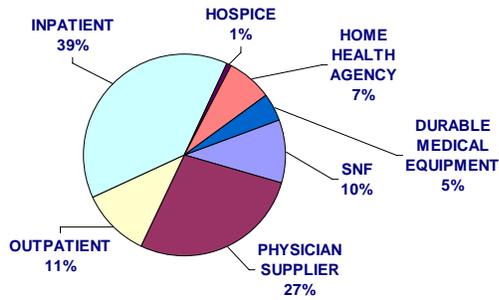
Source: Created by RASS utilizing Medi-Cal paid claims data. Chart based on claims with dates-of-service from January 1, 2007 through December 31, 2007.

Figure 9: Distribution of Non-DHCS Administered Services – Aged Aid Category



Source: Created by RASS utilizing Medi-Cal paid claims data. Chart based on claims with dates-of-service from January 1, 2007 through December 31, 2007.

Figure 10: Expenditure Distribution of Medicare A and B Services – Aged Aid Category



Source: Created by RASS utilizing Medicare claims data. Chart based on claims with dates-of-service from January 1, 2007 through December 31, 2007.

Blind Beneficiaries Who Are Dually Eligible

The members of the sample of beneficiaries from the Blind eligibility category were fifty-six percent female (Table 26) and had an average age of 65 (Table 27). The most prevalent clinical conditions among these beneficiaries were manageable chronic diseases such as Hypertension, Hyperlipidemia and Diabetes (Table 28).

Medicare Part A expenditures were the greatest cost driver among the dually eligible blind category. These expenditures are associated with hospital inpatient stays and the ancillary costs associated with these events. Medicare Part A PMPM expenditures totaled \$951 (Figure 11). The second greatest cost driver was associated with the non-DHCS administered services, where total PMPM expenditures equaled \$605 (Figure 11). Within the non-DHCS administered expenditures, in-home support services generated 83 percent of the total (Figure 13)

Table 26: Dually Eligible Blind Beneficiaries by Age Group and Gender

Age Group	Female	Male	Total	Percent
Age 19 to 44	48	77	125	12.5%
Age 45 to 54	51	69	120	12.0%
Age 55 to 64	93	84	177	17.7%
Age 65 to 74	127	103	230	23.0%
Age 75 to 84	150	73	223	22.3%
Age 85 and Older	91	34	125	12.5%
Total	560	440	1,000	100.0%
Percent	56.0%	44.0%	100.0%	

Source: Created By RASS Utilizing the CINBYMOE 2007 analytic file.

Table 27: Average Age of Blind Dually Eligible Beneficiaries

Age			
Mean	65.2	Minimum	20
Median	67	Maximum	105

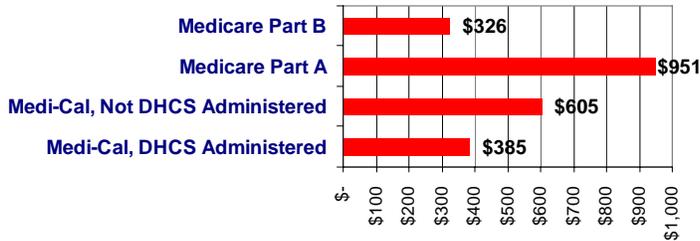
Source: Created By RASS Utilizing the CINBYMOE 2007 analytic file.

Table 28: Most Prevalent Conditions Associated With Blind Dually Eligible Beneficiaries

Most Prevalent Conditions			
	Clinical Category	Persons	Percent of Sample
1	Essential hypertension	394	39.4%
2	Diabetes mellitus w/o complication	348	34.8%
3	Diabetes mellitus with complication	254	25.4%
4	Other lower respiratory disease	252	25.2%
5	Nonspecific chest pain	237	23.7%
6	Other connective tissue disease	222	22.2%
7	Disorders of lipid metabolism	210	21.0%
8	Blindness and vision defects	209	20.9%
9	Residual codes; unclassified	209	20.9%
10	Other non-traumatic joint disorder	206	20.6%
11	Deficiency and other anemia	202	20.2%
12	Spondylosis; intervertebral disease	197	19.7%
13	Retinal detachments; defects;	186	18.6%
14	Coronary atherosclerosis	178	17.8%
15	Other skin disorders	172	17.2%
16	Other eye disorders	166	16.6%
17	Abdominal pain	165	16.5%
18	Immunizations and screenings	157	15.7%
19	Osteoarthritis	154	15.4%
20	Glaucoma	152	15.2%

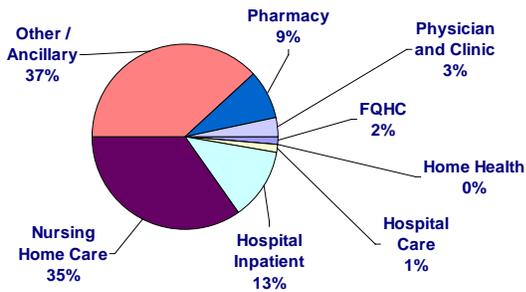
Source: Created by RASS utilizing Medi-Cal paid claims data. Chart based on claims with dates-of-service from January 1, 2007 through December 31, 2007. Clinical Classifications were assigned by RASS utilizing the Agency for Health Care Quality and Research's Clinical Classification algorithm.

Figure 11: PMPM Cost of Services for Members of the Blind Aid Category Sample



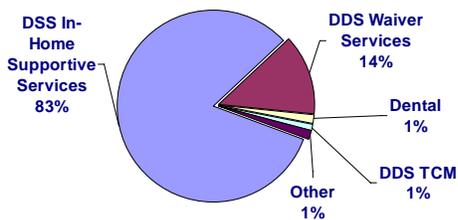
Source: Created by RASS utilizing Medicare and Medi-Cal paid claims data. Chart based on claims with dates-of-service from January 1, 2007 through December 31, 2007.

Figure 12: Expenditure Distribution for DHCS Administered Medi-Cal Services – Blind Aid Category Sample



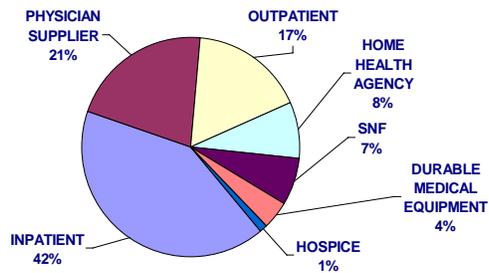
Source: Created by RASS utilizing Medi-Cal paid claims data. Chart based on claims with dates-of-service from January 1, 2007 through December 31, 2007.

Figure 13: Expenditure Distribution for Medi-Cal Services Not Administered by DHCS – Blind Aid Category Sample



Source: Created by RASS utilizing Medi-Cal paid claims data. Chart based on claims with dates-of-service from January 1, 2007 through December 31, 2007.

Figure 14: Expenditure Distribution for Medicare Part A and B Services – Blind Aid Category Sample



Source: Created by RASS utilizing Medi-Cal paid claims data. Chart based on claims with dates-of-service from January 1, 2007 through December 31, 2007.

Beneficiaries Residing In LTC Facilities

Members of the Long-Term Care sample were older in age and nearly-two-thirds female in gender (Table 29). The average age was 76 (Table 30). The most prevalent clinical conditions among these beneficiaries were Mycoses (fungal infections), Respiratory disease and Dementia (Table 31).

Medical expenditures were concentrated in the DHCS administered programs, with LTC services driving roughly 97 percent of these expenditures. The DHCS administered services for the sample totaled \$3,660 PMPM. Of this total, 97 percent was associated with the costs for LTC facilities services (Figure 16).

Among the non-DHCS administered service expenditures, the DDS-Developmentally Disabled category was the greatest cost driver. This category of expenditure was associated with state hospitals for the developmentally disabled. This category accounted for 96 percent of the total non-DHCS administered service expenditures (Figure 17).

Medicare expenditures were concentrated among three groups: hospital inpatient, LTC, and physician services. Hospital inpatient accounted for 43 percent total Medicare expenditures and skilled nursing facility expenditures accounted for 25 percent (Figure 18). Note, the expenditures presented exclude those associated with pharmaceuticals.

Table 29: Distribution of Dually Eligible Beneficiaries Residing in LTC Facilities by Age Group and Gender

Age Group	Female	Male	Total	Percent
Age 19 to 44	16	24	40	4.0%
Age 45 to 54	15	29	44	4.4%
Age 55 to 64	49	37	86	8.6%
Age 65 to 74	84	72	156	15.6%
Age 75 to 84	194	95	289	28.9%
Age 85 and Older	306	79	385	38.5%
Total	664	336	1,000	100.0%
Percent	66.4%	33.6%	100.0%	

Source: Created By RASS Utilizing the CINBYMOE 2007 analytic file.

Table 30: Average Age of Dually Eligible Beneficiaries Residing in LTC Facilities

Age			
Mean	76.3	Minimum	21
Median	80	Maximum	104

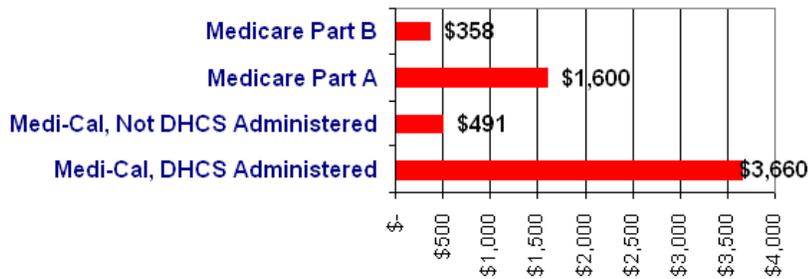
Source: Created By RASS Utilizing the CINBYMOE 2007 analytic file.

Table 31: Most Prevalent Conditions of Dually Eligible Beneficiaries Residing in LTC Facilities

Most Prevalent Conditions			
	Clinical Category	Persons	Percent of Sample
1	Mycoses	411	41.1%
2	Other lower respiratory disease	359	35.9%
3	Delirium, dementia, and Amnestic disorders	345	34.5%
4	Essential hypertension	333	33.3%
5	Other skin disorders	323	32.3%
6	Blindness and vision defects	259	25.9%
7	Urinary tract infections	255	25.5%
8	Deficiency and other anemia	243	24.3%
9	Other ear and sense organ disorders	213	21.3%
10	Diabetes mellitus w/o complication	208	20.8%
11	Congestive heart failure	204	20.4%
12	Pneumonia	204	20.4%
13	Other gastrointestinal disorders	192	19.2%
14	Cataract	187	18.7%
15	Other non-traumatic joint disorders	187	18.7%
16	Acute cerebrovascular disease	184	18.4%
17	Other connective tissue disease	176	17.6%
18	Chronic obstructive pulmonary	174	17.4%
19	Mood disorders	173	17.3%
20	Cardiac dysrhythmias	168	16.8%

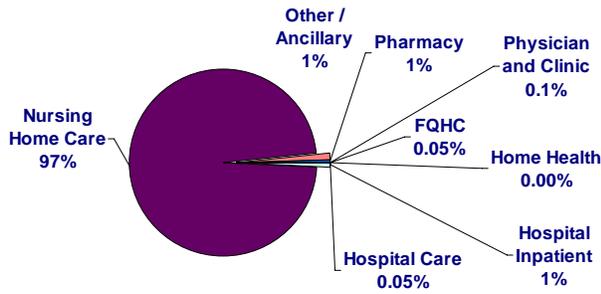
Source: Created by RASS utilizing Medi-Cal paid claims data. Table based on claims with dates-of-service from January 1, 2007 through December 31, 2007. Clinical Classifications were assigned by RASS utilizing the Agency for Health Care Quality and Research’s Clinical Classification algorithm.

Figure 15: PMPM Cost of Services for Members of the LTC Aid Category Sample



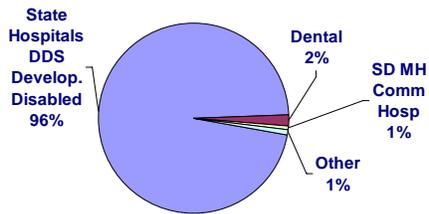
Source: Created by RASS utilizing Medicare and Medi-Cal paid claims data. Chart based on claims with dates-of-service from January 1, 2007 through December 31, 2007.

Figure 16: Distribution of Costs for DHCS Administered Services – LTC Aid Category Sample



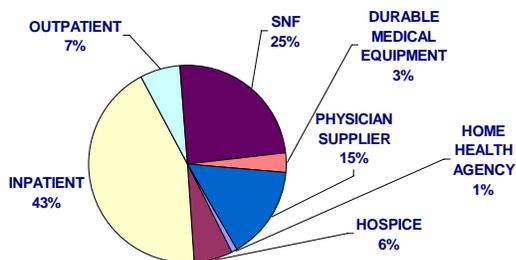
Source: Created by RASS utilizing Medicare and Medi-Cal paid claims data. Chart based on claims with dates-of-service from January 1, 2007 through December 31, 2007.

Figure 17: Distribution of Costs of Non-DHCS Administered Services – LTC Aid Category Sample



Source: Created by RASS utilizing Medicare and Medi-Cal paid claims data. Chart based on claims with dates-of-service from January 1, 2007 through December 31, 2007.

Figure 18: Distribution of Medicare Part A and B Services – LTC Aid Category Sample



Source: Created by RASS utilizing Medicare and Medi-Cal paid claims data. Chart based on claims with dates-of-service from January 1, 2007 through December 31, 2007.

VIII. ESTIMATED TOTAL COST OF MEDI-CAL'S DUAL ELIGIBLES: MEDI-CAL AND MEDICARE COMBINED

Utilizing the samples created, RASS developed an estimate of the total health care costs associated with the Medi-Cal's FFS dual eligibles. Because sampling was utilized, some error was expected. Therefore, \bar{x} cannot be expected to be equal to μ . RASS staff calculated an interval that communicates the probable magnitude of μ for the population. Table 32 below displays the point estimate and confidence interval for μ , which represents the total Medi-Cal's FFS expenditures associated with dual eligibles. Based on our estimates, total FFS health care costs, Medicare and Medi-Cal (DHCS Administered⁸) combined equaled between \$18.5 billion and \$23.4 billion. The point estimate was \$20.9 billion. RASS staff did not have access to the Medicare Part D data set; therefore, RASS staff utilized regression analysis to develop an estimate for Medicare Part D pharmaceutical expenses.

By evaluating CY 2000 through 2005, RASS staff was able to determine the PMPM pharmacy expenditures for the dual eligibles within each eligibility category prior to the implementation of Medicare Part D. Based on the trend reflected in this data set, RASS staff projected the pharmaceutical expenditures for CY 2007, assuming Medi-Cal was paying for this service instead of Medicare. In addition, because Medi-Cal continues to be liable for specific drugs not covered by Medicare Part D, an adjustment was made to reflect these expenditures. Without this adjustment, the pharmacy expenditures that continue to be paid by Medi-Cal would have been double counted.

The adjustment was based on CY 2006 actual Medi-Cal FFS claim expenditures for

⁸ Excludes Department of Mental Health-Short-Doyle, Department of Social Services-In-home support services, Delta Dental, Department of Developmental Services-Waivers, CHDP/EPST, DD-TCM, Medi-cal TCM.

pharmaceuticals associated with the disabled dual eligibles, which equaled roughly 5 percent. Based on this analysis, the estimated total expenditures for Medicare Part D was roughly \$3.5 billion. The estimate derived from this methodology may deviate from what the Medicare Part D expenditures were (during 2007), as RASS assumed that historical Medi-Cal utilization would be reflective of Medicare Part D utilization. It has been surmised in the literature that Medicare Part D utilization associated with dual eligibles may deviate from historical patterns due to specific utilization management techniques used by Medicare Part D prescription drug plans (Donohue, Huskamp, and Zuvekas).

Table 32: Estimated Total Combined Dual Eligible Health Care Expenditures: Medi-Cal and Medicare Services

Aid Category	Lower Bound Estimate Of Total Expenditures	Upper Bound Estimate Of Total Expenditures	Point Estimate Of Total Expenditures	Enrollment	Per Capita Cost
Disabled	\$4,749,317,772.76	\$6,151,440,023.12	\$5,450,377,069.58	395,808	\$13,770.25
Aged	\$9,933,370,578.12	\$12,864,978,478.59	\$11,399,212,339.48	511,030	\$22,306.35
Blind	\$215,966,753.79	\$277,204,070.69	\$246,585,584.53	12,754	\$19,333.98
LTC	\$3,527,225,896.08	\$3,974,639,544.79	\$3,750,934,726.66	67,803	\$55,321.07
Other	\$118,292,478.32	\$177,518,433.82	\$147,905,029.82	25,364	\$5,831.30
Total	\$18,544,173,479.08	\$23,445,780,551.02	\$20,995,014,750.07	985,383	\$21,306.45

Source: Created by RASS utilizing Medicare and Medi-Cal paid claims data. Table based on claims with dates-of-service from January 1, 2007 through December 31, 2007.

Appendix 1: Dual Eligibles Enrolled In Managed Care Plans For the Entire Year During 2007

Medicare Eligible	Enrollment	COUNTY	Unduplicated Beneficiaries	% Of Total	Cummulative
Y	HCP	ORANGE	21,613	28%	28%
Y	HCP	LOS ANGELES	9,814	13%	41%
Y	HCP	SANTA BARBARA	4,951	6%	47%
Y	HCP	SAN MATEO	4,630	6%	53%
Y	HCP	SOLANO	4,469	6%	59%
Y	HCP	SACRAMENTO	4,411	6%	65%
Y	HCP	MONTEREY	4,074	5%	70%
Y	HCP	SANTA CRUZ	3,031	4%	74%
Y	HCP	SAN DIEGO	2,311	3%	77%
Y	HCP	YOLO	2,173	3%	80%
Y	HCP	ALAMEDA	1,961	3%	82%
Y	HCP	FRESNO	1,834	2%	85%
Y	HCP	SAN BERNARDINO	1,731	2%	87%
Y	HCP	RIVERSIDE	1,483	2%	89%
Y	HCP	KERN	1,347	2%	91%
Y	HCP	NAPA	1,187	2%	92%
Y	HCP	CONTRA COSTA	1,171	2%	94%
Y	HCP	SANTA CLARA	1,126	1%	95%
Y	HCP	SAN JOAQUIN	1,040	1%	96%
Y	HCP	SAN FRANCISCO	964	1%	98%
Y	HCP	STANISLAUS	778	1%	99%
Y	HCP	TULARE	751	1%	100%
Y	HCP	SONOMA	142	0%	100%
Y	HCP	MARIN	83	0%	100%
Y	HCP	SAN LUIS OBISPO	6	0%	100%
Y	HCP	VENTURA	6	0%	100%
Y	HCP	SUTTER	4	0%	100%
Y	HCP	IMPERIAL	3	0%	100%
Y	HCP	MERCED	3	0%	100%
Y	HCP	COLUSA	2	0%	100%
Y	HCP	MADERA	2	0%	100%
Y	HCP	MENDOCINO	2	0%	100%
Y	HCP	DEL NORTE	1	0%	100%
Y	HCP	LAKE	1	0%	100%
Y	HCP	LASSEN	1	0%	100%
Y	HCP	MARIPOSA	1	0%	100%
Y	HCP	NEVADA	1	0%	100%
Y	HCP	PLACER	1	0%	100%
Y	HCP	SHASTA	1	0%	100%
Y	HCP	TEHAMA	1	0%	100%
	Total		77,111	100%	100%

Appendix 2: Ancillary / Other EDS Paid Services By Vendor Category

Vendor Type Description	Vendor Code	Expenditures	% of Exp.	Cumml %
Community Hemodialysis Center	78	\$ 97,915,133.44	26%	26%
Medical Transportation	42	\$ 74,410,889.52	20%	46%
Other Provider	40	\$ 68,279,883.76	18%	64%
MSSP Waiver Services	81	\$ 48,725,493.43	13%	77%
Home and Com Based Waiver	71	\$ 28,172,241.21	7%	84%
Audiologist	37	\$ 9,567,431.61	3%	87%
Optometrist	28	\$ 8,174,290.51	2%	89%
AIDS Waiver	73	\$ 7,241,695.99	2%	91%
Hearing Aid Dispenser	45	\$ 6,506,230.11	2%	93%
Fabricating Optometric Lab	11	\$ 6,463,137.62	2%	94%
Assist. Living Pilot Proj (ALWPP)	84	\$ 6,444,415.20	2%	96%
Acupuncturist	33	\$ 3,902,721.91	1%	97%
Podiatrist	32	\$ 3,041,873.18	1%	98%
Optometric Group	12	\$ 2,381,016.27	1%	99%
Dispensing Optician	29	\$ 1,350,685.79	0%	99%
Portable X-Ray Lab	19	\$ 1,095,003.89	0%	99%
Medicare Crossover Provider	2	\$ 631,941.26	0%	99%
Speech Therapist	36	\$ 547,681.58	0%	100%
Psychologist	31	\$ 311,895.56	0%	100%
Prosthetist	38	\$ 233,988.23	0%	100%
Local Education Agency (LEA)	55	\$ 224,741.62	0%	100%
Certified Pediatric Nurse Practitioner	7	\$ 71,185.73	0%	100%
Genetic Disease Testing	4	\$ 66,226.00	0%	100%
Chiropractor	30	\$ 59,346.41	0%	100%
EPSDT Supplemental Services	82	\$ 56,860.50	0%	100%
Physical Therapist	34	\$ 56,033.46	0%	100%
Nurse Midwife	5	\$ 53,106.12	0%	100%
Certified Family Nurse Practitioner	8	\$ 37,318.14	0%	100%
Nurse Anesthetist	13	\$ 30,098.79	0%	100%
Outpatient Heroin Detoxification	91	\$ 28,863.82	0%	100%
Respiratory Care Practitioner	9	\$ 25,697.53	0%	100%
Independent Rehab Facility	79	\$ 23,622.29	0%	100%
Breast Cancer Early Detection Program	53	\$ 20,572.24	0%	100%
Orthotist	39	\$ 15,281.10	0%	100%

Vendor Type Description	Vendor Code	Expenditures	% of Exp.	Cumml %
Other	XX	\$ 9,838.17	0%	100%
CCS/GHPP	3	\$ 7,098.64	0%	100%
Occupational Therapist	35	\$ 1,288.78	0%	100%
Mental Health Inpatient Consolidation	63	\$ 747.63	0%	100%
Birthing Center	49	\$ 387.31	0%	100%
Total		\$ 376,185,964.35	100%	

Works Cited

Centers for Medicare and Medicaid Services. <http://www.cms.hhs.gov/DualEligible/>.
(Accessed on July, 30th 2009).

CMS, Dual Eligible Categories and List and Definition of Dual Eligibles, 2/3/06.

http://www.cms.hhs.gov/DualEligible/02_DualEligibleCategories.asp

<http://www.cms.hhs.gov/MedicareEnRpts/Downloads/Buy-InDefinitions.pdf>

Coughlin, Teresa, Timothy Waidmann, and Molly O'Malley Watts. Where Does the Burden lie? – Medicaid and Medicare Spending on Dual Eligible Beneficiaries. Kaiser Commission on Medicaid and the Uninsured. April 2009.

Donohue, Julie M, Huskamp, Haiden A, and Zuvekas, Samuel, H. Dual Eligibles With Mental Disorders and Medicare Part D: How Are They Faring. Health Affairs, Vol. 28, No. 3. May/June 2009.

Dual Eligibles: Medicaid's Rose for Low-Income Medicare Beneficiaries, July 2005.

[http://www.kff.org/medicaid/upload/4091-04%20Final\(v2\).pdf](http://www.kff.org/medicaid/upload/4091-04%20Final(v2).pdf)

Health Assistance Partnership; Medicare and Medicaid: Dual Eligible Beneficiaries, December 2007. <http://www.hapnetwork.org/assets/pdfs/duals-overview.pdf>

Holahan, John, Dawn M. Miller, and David Rousseau. Rethinking Medicaid's Financing Role for Medicare Enrollees. Kaiser Commission on Medicaid and the Uninsured. February 2009.

Kaiser, Dual Eligibles: Medicaid Enrollment and Spending For Medicare Beneficiaries in 2005, February 2009. <http://www.kff.org/medicaid/upload/7846.pdf>

Moon, Sangho, and Jaeun Shin. Health Care Utilization among Medicare-Medicaid Dual Eligibles: a Count Data Analysis. Bio Medical Central Public Health. 6:88 (2006) (Accessed via Medline on July 30th 2009).

O'Leary, John F. Ph.D., Elizabeth M. Sloss Ph. D., and Glenn Melnick Ph.D. Disabled Medicare Beneficiaries by Dual Eligible Status: California, 1996-2001. Health Care Financing Review. 28:4 (2007).

Report to Congress: New Approaches in Medicare, June 2004. Chapter 3, Dual Eligible Beneficiaries: An Overview.

http://www.medpac.gov/documents/June04_Entire_Report.pdf

U.S. National Library of Medicine, Impact of the Medicare Savings Programs on Services Use and Out-of-Pocket Costs: How Do Effects Differ By Coverage?

<http://gateway.nlm.nih.gov/MeetingAbstracts/ma?f=103623094.html>