

# A Look At The SPD Population Costs, Diseases, and Utilization

Department of Health Care  
Services

## Which Aid Codes Are Targeted?

Aid Code	Benefits	SO C	Description
10	Full	No	Aid to the Aged – SSI/SSP.
14	Full	No	Aid to the Aged – Medically Needy.
16	Full	No	Aid to the Aged – Pickle Eligibles.
1E	Full	No	<u>Craig v. Bonta</u> Aged Pending SB 87 Redetermination. Covers former Supplemental Security Income/State Supplementary Payment recipients who are aged, until the county re-determines their Medi-Cal eligibility.
1H	Full	No	Federal Poverty Level – Aged (FPL-Aged). Covers the aged in the Aged and Disabled FPL program.
20	Full	No	Blind – SSI/SSP – Cash.
24	Full	No	Blind – Medically Needy.
26	Full	No	Blind – Pickle Eligibles.
2E	Full	No	<u>Craig v. Bonta</u> Blind – Pending SB 87 Redetermination. Covers former Supplemental Security Income/State Supplementary Payment recipients who are blind, until the county re-determines their Medi-Cal eligibility.
36	Full	No	Aid to Disabled Widower's
60	Full	No	Disabled – SSI/SSP – Cash.
64	Full	No	Disabled – Medically Needy.
66	Full	No	Disabled – Pickle Eligibles.

*There are 20 aid codes that profile the targeted population.*

*The population include FFS beneficiaries who are persons with disabilities, 18 years of age or older, not eligible for Medicare, have no share of costs, do not have other health care coverage, or are participating in a waiver program.*

## Which Aid Codes Are Targeted?

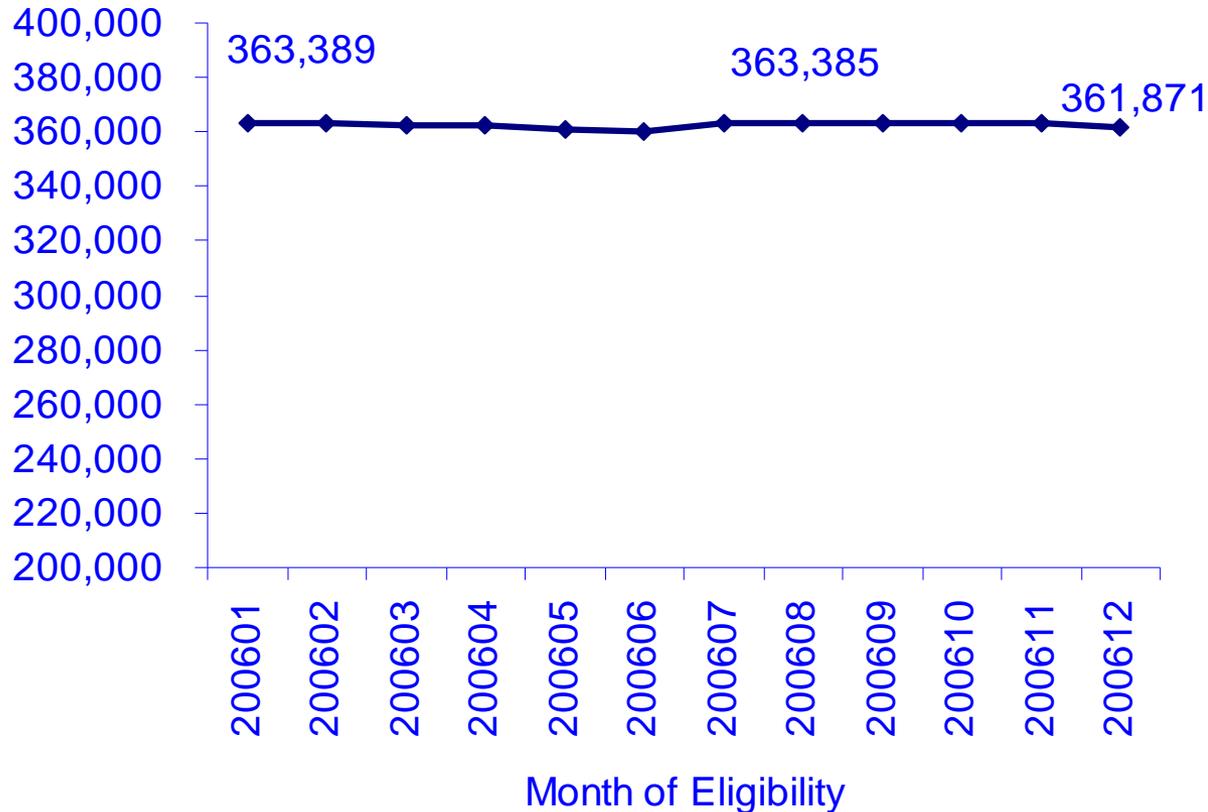
Aid Code	Benefits	SOC	Description
6A	Full	No	Disabled Adult Child(ren) (DAC) Blind.
6C	Full	No	Disabled Adult Child(ren) (DAC) Disabled.
6E	Full	No	<u>Craig v. Bonta</u> Disabled – Pending SB 87 redetermination. Covers former Supplemental Security Income/State Supplementary Payment recipients who are disabled, until the county re-determines their Medi-Cal eligibility.
6H	Full	No	Disabled – FPL. Covers the disabled in the Aged and Disabled Federal Poverty Level program.
6N	Full	No	Former SSI No Longer Disabled in SSI Appeals Status.
6G	Full	No	250 Percent Working Disabled Program.
8G	Full	No	Severely Impaired Working Individual (SIWI).

## How Did We Arrive At the Population?

	Number of Beneficiaries, as of July 1, 2006	Balance
Beneficiaries in Selected Disabled Aid Codes (10, 14, 16, 1E, 1H, 20, 24, 26, 2E, 36, 60, 64, 66, 6A, 6C, 6E, 6H, 6N, 6G, 8G)		1,595,250
<i>Less:</i>		
Medicare Eligible	(940,818)	654,432
Enrolled in Health Plan	(174,534)	479,898
Other Health Care Coverage	(32,006)	447,892
Waiver, LTC, TCM, 18 years of age or older	(36,869)	411,023
Waiver, LTC, TCM and under 18 years of age	(17,492)	393,531
Other Beneficiaries under 18 years of age	(30,146)	<b>363,385</b>

*After adjusting for specific program exclusions, the target population constitutes roughly 23 percent of the total eligible population associated with the 20 aid codes.*

## What is the Trend in Enrollment for Beneficiaries

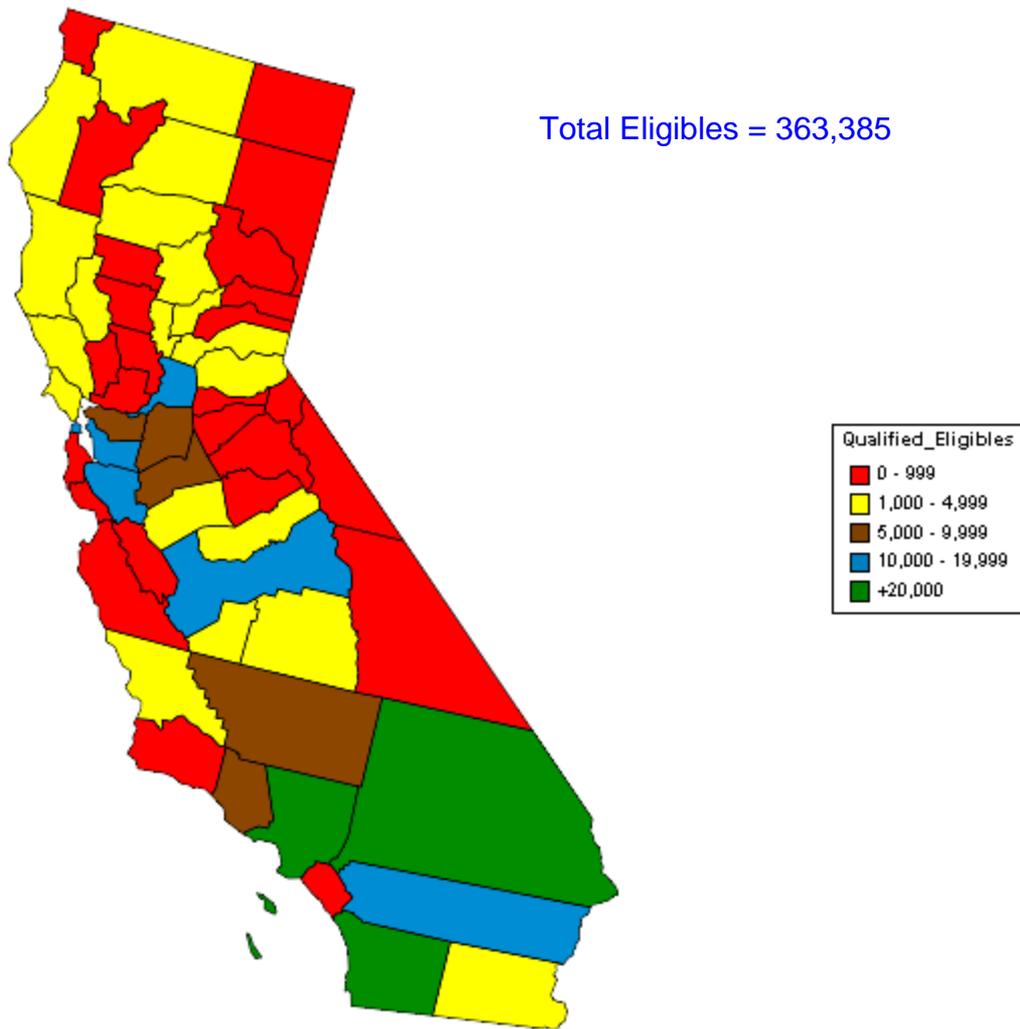


*The trend in enrollment for this population was relatively flat during CY 2006.*

*The potential target population excludes beneficiaries that are eligible for Medicare, have other health care coverage, a share of cost, or participating in a waiver.*

Source: Created by the DHCS Medical Care Statistics Section using MEDS data. Data reflects a 6-month lag.

## How Are Beneficiaries Distributed By County?

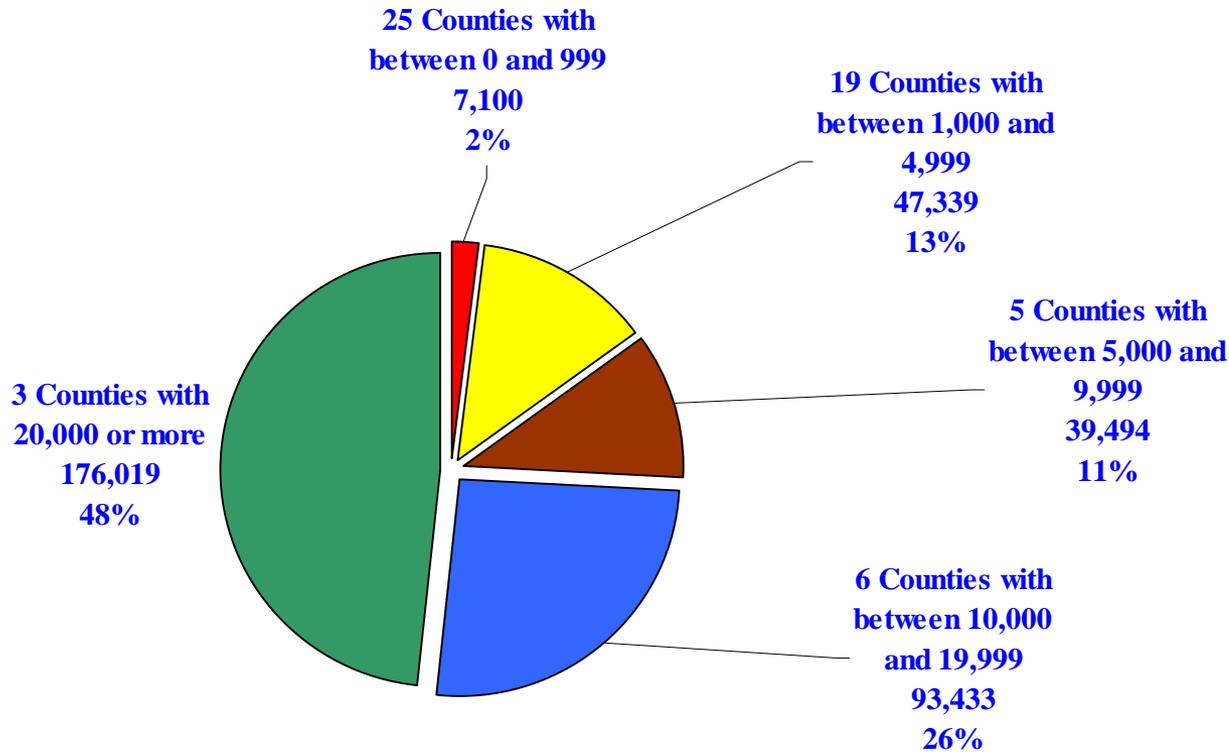


*Twenty-five Counties displayed a target population less than 1,000.*

data. Data reflects a 6-month lag. MOE was July 2006.

# How Are Beneficiaries Distributed By County?

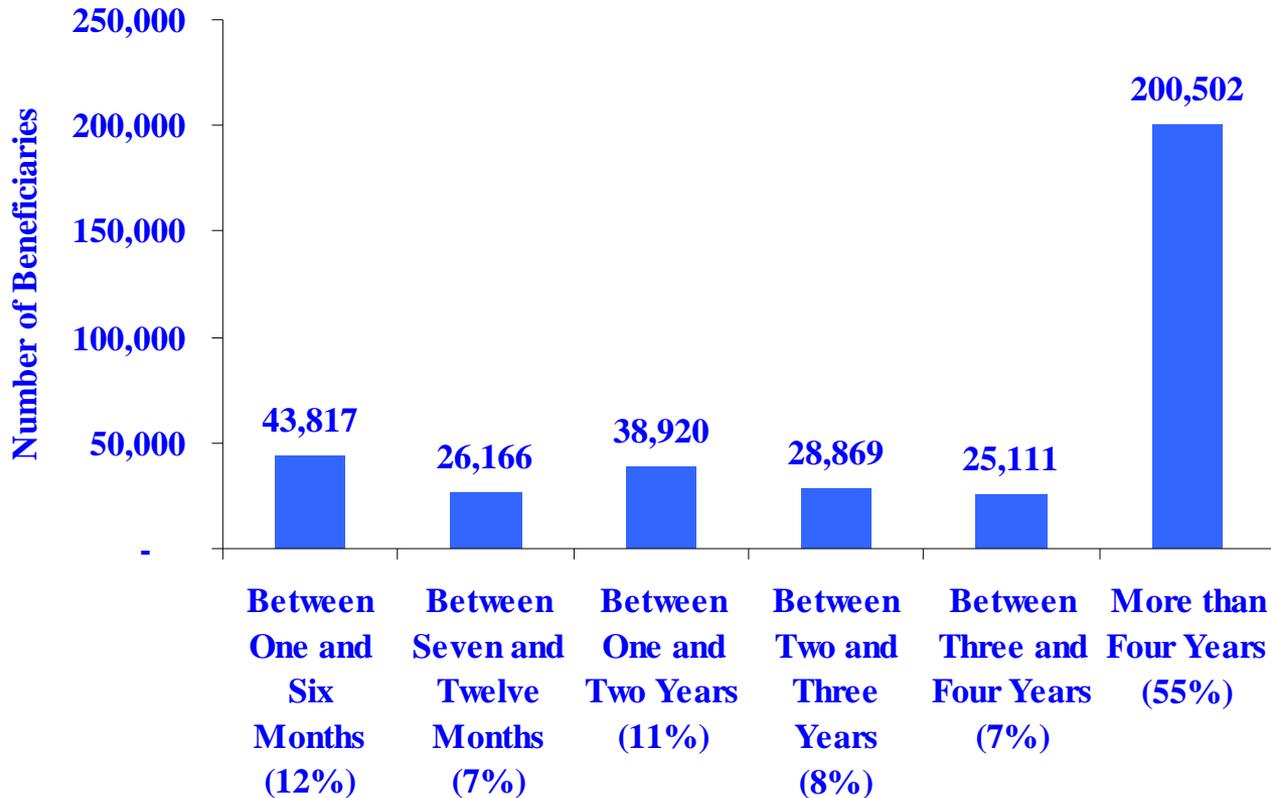
Total Eligibles = 363,385



*Several Counties displayed a target population less than 1,000.*

Source: Created by the DHCS Medical Care Statistics Section using MEDS data. Data reflects a 6-month lag. MOE was July 2006.

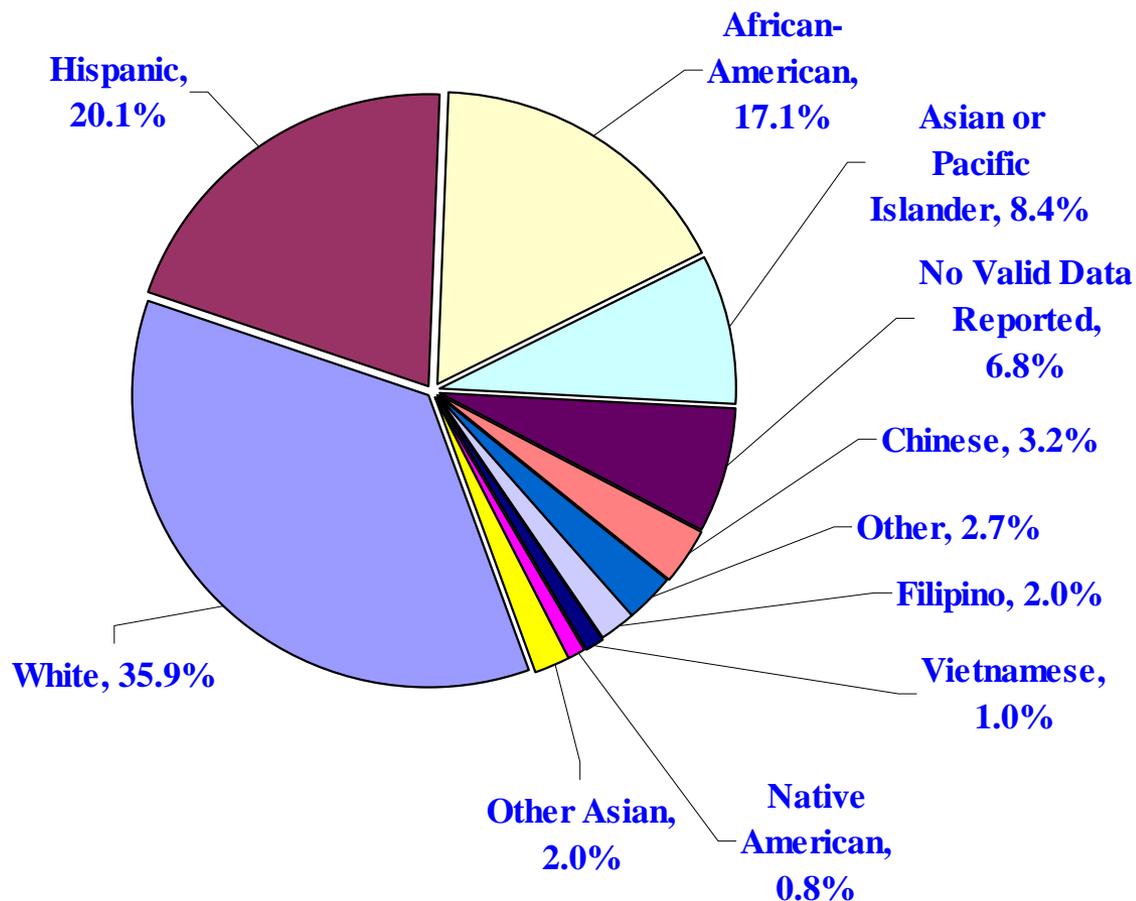
## How long Are Beneficiaries Generally Enrolled In the Medi-Cal Program?



*Fifty-Five percent of the population has been enrolled in Medi-Cal for more than four years.*

Source: Created by the DHCS Medical Care Statistics Section using MEDS data. Data reflects a 6-month lag. MOE was July 2006.

## How Is the Target Population Distributed by Ethnicity?



*White, Hispanic, and African American constituted 73 percent of the total population.*

Source: Created by the DHCS Medical Care Statistics Section using MEDS data. Data reflects a 6-month lag. MOE was July 2006.

## How were the Beneficiaries distributed by Age Group and Gender?

Gender	Male	Female	Total	Percent
<b>Age Group</b>				
Age 18 - 34 Years	28,815	20,615	49,430	13.6%
Age 35 - 60 Years	96,654	113,123	209,777	57.7%
Age 61 - 64 Years	18,043	26,731	44,774	12.3%
Age 65 - 79 Years	19,029	32,378	51,407	14.1%
Age 80+ Years	3,144	4,853	7,997	2.2%
<b>Grand Total</b>	165,685	197,700	363,385	100.0%
<b>Percent</b>	45.6%	54.4%	100.0%	

*Roughly 57 percent of the target population is between 35 and 60 years of age.*

Source: Created by the DHCS Medical Care Statistics Section using MEDS data. Data reflects a 6-month lag. July 2006 MOE.

## Social Security Administration Disabilities: CY 2006

Disability Condition	% of Total
Congenital Anomalies	0.4%
Endocrine, Nutritional, and metabolic diseases	3.5%
Infections and parasitic diseases	1.6%
Injuries	3.6%
Mental Retardation	12.6%
Other Mental Diseases	30.3%
Neoplasms	2.2%
Diseases-blood and blood forming organs	0.3%
Circulatory system	7.2%
Digestive System	1.3%
Genitourinary System	1.4%
Musculoskeletal System & Connective Tissue	19.4%
Nervous System and Sense Organs	9.1%
Respiratory System	2.6%
Skin and Subcutaneous Tissue	0.2%
Other	0.2%
Unknown	4.1%
Total	100%

*Roughly 30 percent of the disabled beneficiaries receiving Social Security, SSI, or both were found disabled due to a mental health disease.*

*SOURCES: Social Security Administration, Disabled Beneficiaries and Dependents Master Beneficiary Record file, 100 percent data, and Supplemental Security Record file, 100 percent data.*

*NOTE: Supplemental Security Income (SSI) counts include recipients of federal SSI, federally administered state supplementation, or both. Social Security beneficiaries who are entitled to a primary and a secondary benefit (dual entitlement) are counted only once in this table.*

*File available from:  
U.S. Social Security Administration, Office of Policy*

*Annual Statistical Report on the Social Security Disability Insurance Program, 2006  
[http://www.socialsecurity.gov/policy/docs/sta\\_tcomps/di\\_asr/2006/](http://www.socialsecurity.gov/policy/docs/sta_tcomps/di_asr/2006/)*

# Selecting The Population

- Specific Diseases
- High Risk, High Cost, High Utilization Members
- Population Based Approach

*How have other states targeted populations for enrollment?*

*Agency For Health Care Research and Quality (AHRQ).*

## Which Populations Are Generally Excluded From Care Management Programs?

State	TANF FFS/PC CM	SSI FFS/PC CM	Managed Care	Dual Eligible	Long-Term Care	Waivers
Arkansas	N	N	Y	Y	Y	Y
Illinois	N	N	Y	Y	Y	Y
Indiana	N	N	Y	Y	Y	Y
Iowa	N	N	Y	Y	Y	Y
Kansas	N	N	Y	Y	Y	Y
North Carolina	N	N	Y	Y	Y	Y
Oklahoma	N	N	Y	Y	Y	Y
Pennsylvania	N	N	Y	Y	Y	Y
Rhode Island	N	N	Y	N	Y	Y
Texas	N	N	Y	Y	Y	Y
Virginia	N	N	Y	Y	Y	N
Washington	Y	N	Y	N	Y	Y
Wyoming	N	N	Y	N	N	N

Source: Agency For Healthcare Research and Quality, Designing and Implementing Medicaid Disease and Care Management Programs: A User's Guide. U.S. Department of Health and Human Services.

*Some States have opted to exclude certain individuals from their programs.*

*States exclude waiver beneficiaries because they already receive management through the waiver.*

## Which Chronic Diseases Are Generally the Focus of Care Management Programs/PCCM?

State	Asthma	Diabetes	CHF	CAD	COPD	High Risk Ob
Arkansas						X
Illinois	X	X	X	X	X	
Indiana		X	X			
Iowa	X	X	X			
Kansas						
North Carolina	X	X	X			
Oklahoma						
Pennsylvania	X	X	X	X	X	X
Rhode Island						
Texas	X	X	X	X	X	
Virginia	X	X	X	X		
Washington	X	X	X			
Wyoming	X	X	X	X	X	X
<b>Total</b>	<b>8</b>	<b>9</b>	<b>9</b>	<b>5</b>	<b>5</b>	<b>3</b>

Source: Agency For Healthcare Research and Quality, Designing and Implementing Medicaid Disease and Care Management Programs: A User's Guide. U.S. Department of Health and Human Services.

*Some states have chosen to focus on populations diagnosed with specific chronic diseases. The most common being asthma, diabetes, congestive heart failure (CHF), coronary artery disease (CAD), and chronic obstructive pulmonary disorder (COPD).*

# Specific Diseases

- **Asthma**
- Asthma is a highly prevalent disease among the TANF population, but its costs are relatively low compared with other conditions. Moreover, asthma is relatively easy to manage. With monitoring, proper use of medications, control of the environment, and avoidance of triggers, such as pet dandruff or second-hand smoke, most children and families can be relieved of the burden of asthma. Care management could help prevent ER visits and hospitalizations, but the savings might be lower for this disease than others because its overall costs are lower. An evaluation of North Carolina's program projected cost savings for asthma at \$3.3 million in the program's first 3 years. The projected asthma savings increased every year.
- **Diabetes**
- Diabetes is a difficult disease to manage, because it requires behavior change by the member. Furthermore, because many of the outcomes associated with diabetes care management are seen much later, when complications (e.g., kidney failure) are avoided, diabetes management is unlikely to generate cost savings in the short term. However, evidence suggests that care management programs can reduce members' HbA1c levels and increase their compliance in getting recommended exams. North Carolina's evaluation projected cost savings at \$2.1 million in the program's first 3 years. The projected diabetes savings increased after the first year, similar to asthma. An evaluation of Indiana's program found no statistically significant cost savings for diabetes after its first 17 months. Specifically, the data showed an increase in cost among high-risk members and a decrease in cost among low-risk members. Indiana expected no cost savings at such a short time interval, based on articles in the literature on diabetes care management and its evaluator's consulting.

*When Choosing diseases, AHRQ recommends that states consider the timeframe in which it needs outcomes. If a state requires outcomes within a short period of time, it should choose a set of diseases that provide initial outcomes quickly. For example, programs focusing on asthma can expect to see outcomes and savings in a relatively short period of time compared to diabetes.*

# Specific Diseases

- **Congestive Heart Failure**
- Indiana's program evaluation found statistically significant cost savings for CHF in its random-control trial and time series evaluation. Members in the disease management program had lower hospital and care management services costs but higher drug costs. The net savings found were \$720 PMPM, or \$36 million annually, for 4,300 members statewide. An evaluation of Washington's care management program targeting CHF found no significant benefits.
- **Coronary Artery Disease (CAD)**
- Highly prevalent among the Medicaid population, CAD is targeted consistently by care management programs. Research indicates that care management interventions for CAD can potentially reduce LDL levels and increase the use of aspirin, beta blockers, and ACE inhibitors. Additionally, the Congressional Budget Office literature review found that most studies of care management programs for CAD reported improvements in contrary risk factors. However, improvements did not necessarily translate into lower mortality or cost-effectiveness.
- **Chronic Obstructive Pulmonary Disease (COPD)**
- COPD is the general term for chronic bronchitis or emphysema. Prevalent in the United States, COPD is the fourth leading cause of death. Evidence suggests that care management programs for COPD could decrease members' ER utilization and potentially save programs significant amounts of money. In-person care management and decision support for providers are the main interventions employed to decrease ER utilization and increase savings.

## Which Clinical Conditions were most Prevalent Among the Population?

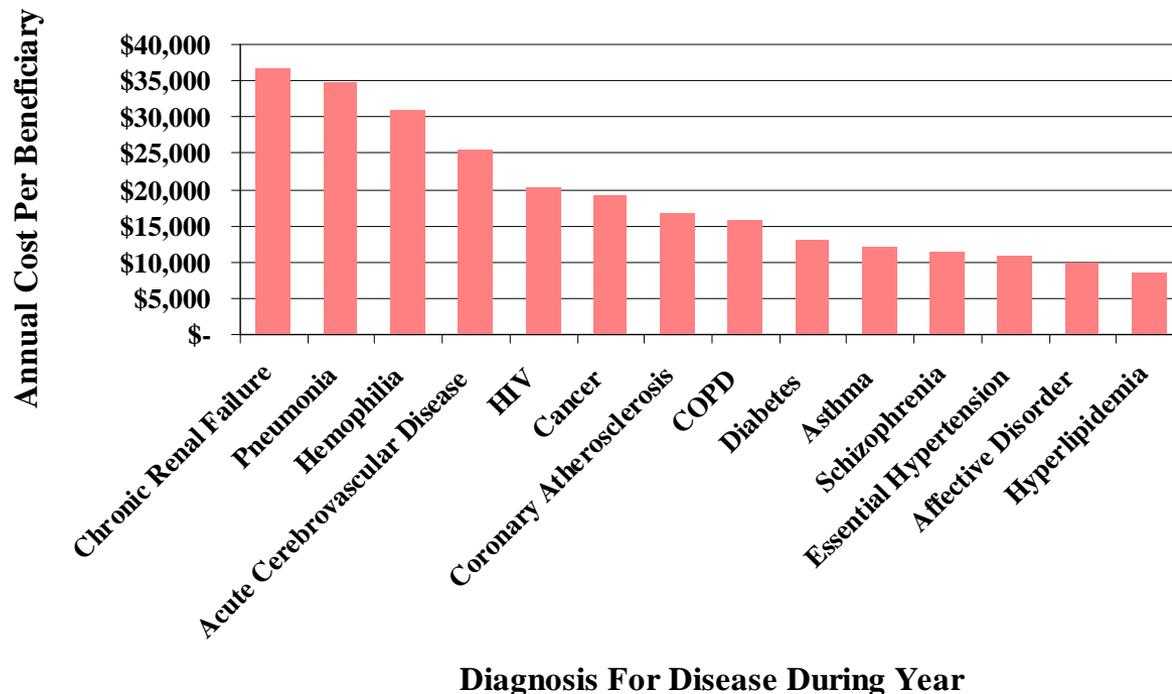
Clinical Condition	Number of Beneficiaries	Percent of Population.
Essential hypertension	103,835	25.0%
Blindness and vision defects	83,148	20.1%
Spondylosis; intervertebral disc disorders;	72,967	17.6%
Diabetes mellitus without complication	67,722	16.3%
Other lower respiratory disease	67,449	16.3%
Disorders of lipid metabolism	65,425	15.8%
Affective disorders	49,463	11.9%
Other upper respiratory infections	44,970	10.8%
COPD	38,029	9.2%
Diabetes mellitus with complications	37,038	8.9%
Schizophrenia and related disorders	35,489	8.6%
Osteoarthritis	33,768	8.1%
Coronary atherosclerosis	29,547	7.1%
Cardiac dysrhythmias	27,781	6.7%
Anxiety	25,094	6.1%
Asthma	24,866	6.0%
Hypertension with complications	20,971	5.1%
Substance related mental disorders	18,150	4.4%
Congestive heart failure; non-hypertensive	16,775	4.0%
Epilepsy; convulsions	16,392	4.0%
Chronic renal failure	10,575	2.6%
Acute cerebrovascular disease	10,283	2.5%
HIV infection	7,050	1.7%
Coagulation and hemorrhagic disorders	3,467	0.8%

***Hypertension, Diabetes and Hyper-Lipidemia, which all help trigger more acute conditions, were prevalent among the eligible population.***

***Additionally, 120,436 beneficiaries, representing nearly 29%, had a diagnosis for a mental health condition.***

Source: Created by the DHCS Medical Care Statistics Section using MEDS data. Data reflects a 6-month lag.

## What Clinical Cohorts were the Most Expensive to Treat?



The chart above displays the average total cost for all expenditures associated with the beneficiary, not just the disease.

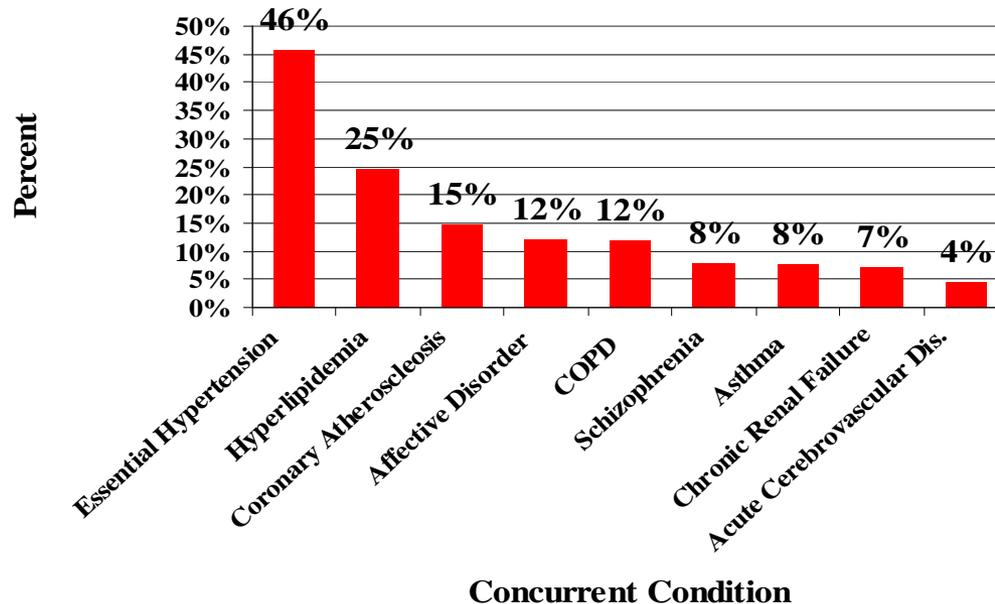
Source: Created by the DHCS Medical Care Statistics Section using MEDS data. Data reflects a 6-month lag.

**Beneficiaries who developed Chronic Renal Failure, Pneumonia, Hemophilia, Acute Cerebrovascular Disease and HIV were the most costly to treat.**

*Chronic renal failure occurs when the kidneys are slowly damaged over a long period of time. Chronic renal failure may be may be classified as early or end-stage renal failure. Chronic renal failure in the early stages may be controlled by specialized diet, management of fluid intake and blood pressure control. The early stage may last for several years depending on the level of kidney functioning. When the kidneys have a low or no level of functioning, more aggressive treatments such as dialysis are necessary.*

## Over 16 Percent of the Population Suffers from Diabetes, Compared to 7percent\* for the US Population Overall

Rate of Comorbidities Among Diabetics in the Population



\* – Source: Web MD” US Diabetes Rate Soars”,  
<http://diabetes.webmd.com/news/20070625/us-diabetes-rate-soars>

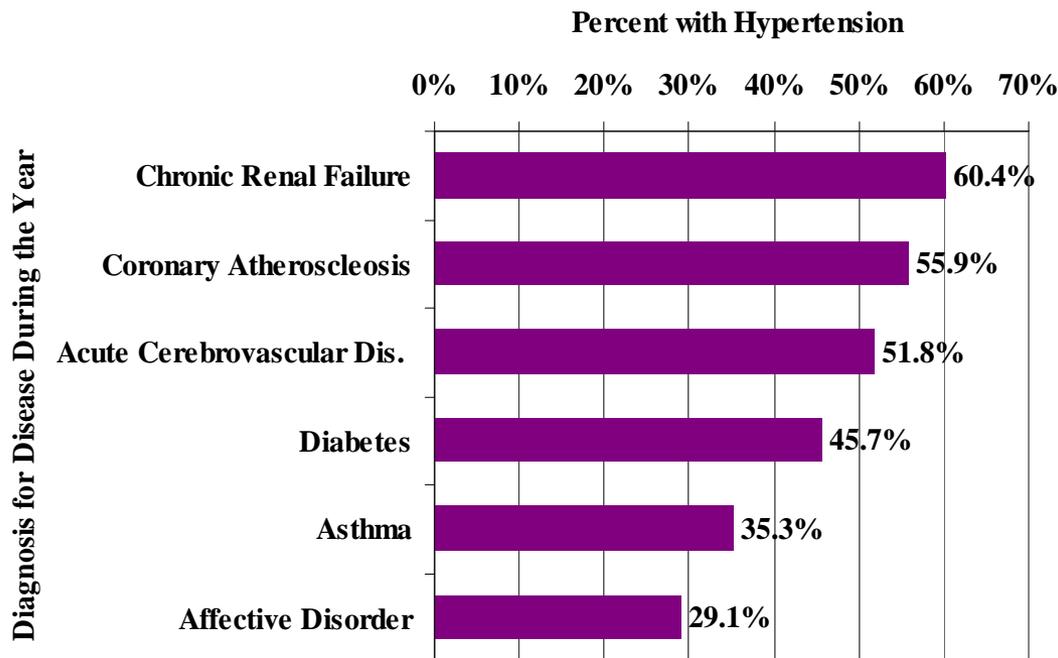
Source: Created by the DHCS Medical Care Statistics Section using MEDS data. Data reflects a 6-month lag.

*Rates of Hypertension, a condition which may often lead to complications of Diabetes, were very high among Diabetics in the Population.*

*Rates of Hyperlipidemia and Atherosclerosis were also very high.*

## High Rates of Hypertension are found Among Eligible Beneficiaries With Many Major Chronic Conditions

### Concurrent Hypertension Among Beneficiaries With Major Chronic Disease Conditions



*Uncontrolled Hypertension, is also a precursor for stroke and heart and kidney and failure.*

*High rates of hypertension were found among beneficiaries in the Population with Chronic Renal failure, Atherosclerosis and Acute Cerebrovascular Disease.*

Source: Created by the DHCS Medical Care Statistics Section using MEDS data. Data reflects a 6-month lag.

## Which Diseases Among Eligible Beneficiaries Resulted in the Greatest Aggregate Cost

Clinical Condition	Number of Beneficiaries	Total Paid Amount	Average Cost
Chronic renal failure	10,610	\$ 127,603,847	\$12,026.75
Respiratory failure; insufficiency; arrest	8,770	\$ 96,786,851	\$11,036.13
Septicemia (except in labor)	5,692	\$ 56,131,261	\$ 9,861.43
Congestive heart failure	16,876	\$ 51,750,396	\$ 3,066.51
Pneumonia	15,090	\$ 49,250,698	\$ 3,263.80
Essential hypertension	104,239	\$ 46,630,793	\$ 447.34
Diabetes mellitus with complications	37,146	\$ 43,319,631	\$ 1,166.20
Acute cerebrovascular disease	10,369	\$ 42,989,104	\$ 4,145.93
Chronic obstructive pulmonary	38,186	\$ 39,016,925	\$ 1,021.76
Skin and subcutaneous tissue infections	28,287	\$ 38,040,838	\$ 1,344.82
Complication of device; implant or graft	7,354	\$ 34,821,019	\$ 4,734.98
Coronary atherosclerosis /other heart disease	29,651	\$ 34,518,027	\$ 1,164.14
Diabetes mellitus without complication	67,964	\$ 34,348,923	\$ 505.40
Spondylosis; intervertebral disc disorders	73,320	\$ 32,754,245	\$ 446.73
Coagulation and hemorrhagic disorders	3,488	\$ 32,027,466	\$ 9,182.19
Nonspecific chest pain	63,991	\$ 31,525,421	\$ 492.65
Schizophrenia and related disorders	16,316	\$ 29,306,921	\$ 1,796.21
Rehabilitation care	8,752	\$ 28,396,313	\$ 3,244.55
Epilepsy; convulsions	16,504	\$ 25,372,153	\$ 1,537.33
Paralysis	5,551	\$ 24,695,977	\$ 4,448.92
Other liver diseases	16,914	\$ 23,558,711	\$ 1,392.85
Urinary tract infections	33,231	\$ 23,486,483	\$ 706.76
HIV infection	7,122	\$ 22,620,648	\$ 3,176.17

**Note: Expenditures Displayed Above are Disease-Specific**

Source: Created by the DHCS Medical Care Statistics Section using MEDS data. Data reflects a 6-month lag.

**Treatment of Chronic Renal Failure Respiratory Failure Septicemia and Congestive Heart Failure produced the greatest aggregate expenditures for beneficiaries in the Population.**

## Which Diseases Among Eligible Beneficiaries Greatest Cost Per Beneficiary

Disease Condition	Number of Beneficiaries	Total Paid Amount	Average Cost
Sickle cell anemia	637	\$ 14,462,834	\$ 22,704.61
Cystic fibrosis	149	\$ 2,839,121	\$ 19,054.50
Chronic renal failure	10,610	\$ 127,603,847	\$ 12,026.75
Leukemia	985	\$ 10,883,108	\$ 11,048.84
Respiratory failure; insufficiency; arrest	8,770	\$ 96,786,851	\$ 11,036.13
Multiple myeloma	394	\$ 3,975,440	\$ 10,089.95
Septicemia (except in labor)	5,692	\$ 56,131,261	\$ 9,861.43
Coagulation and hemorrhagic disorders	3,488	\$ 32,027,466	\$ 9,182.19
Cancer of bronchus; lung	1,645	\$ 14,512,136	\$ 8,821.97
Aspiration pneumonitis; food/vomitus	940	\$ 7,712,561	\$ 8,204.85
Maintenance chemotherapy; radiotherapy	2,170	\$ 16,571,700	\$ 7,636.73
Non-Hodgkin`s lymphoma	1,314	\$ 9,920,352	\$ 7,549.73
Cancer of colon	1,699	\$ 12,136,998	\$ 7,143.61
Cancer of pancreas	278	\$ 1,956,884	\$ 7,039.15
Respiratory distress syndrome	91	\$ 614,994	\$ 6,758.17
Fracture of neck of femur (hip)	1,246	\$ 8,319,031	\$ 6,676.59
Cancer of head and neck	1,335	\$ 8,317,316	\$ 6,230.20
Hodgkin`s disease	280	\$ 1,714,399	\$ 6,122.85
Cancer of esophagus	243	\$ 1,485,474	\$ 6,113.06
Intrauterine hypoxia and birth asphyxia	15	\$ 91,656	\$ 6,110.41
Multiple sclerosis	1,468	\$ 8,964,936	\$ 6,106.90

**Note: Expenditures Displayed Above are Disease-Specific**

Source: Created by the DHCS Medical Care Statistics Section using MEDS data. Data reflects a 6-month lag.

***Sickle –cell Anemia was the most expensive condition on average.***

## As Expected, Utilization Patterns Differ Greatly By Disease Category

Breakdown of Total Costs by Resource Component

(SCH = Schizophrenia, AD = Affective Disorder, DIA = Diabetes, HYT= Hypertension, REN = Chronic Real Failure, COR = Coronary Atherosclerosis, COPD = Chronic Obstructive Pulmonary Disease)

Clinical Condition	SCH	AD	DIA	HYT	REN	COR	COPD
<b>Number of Beneficiaries</b>	<b>35,489</b>	<b>49,463</b>	<b>77,865</b>	<b>113,194</b>	<b>10,575</b>	<b>29,547</b>	<b>38,029</b>
<i>Expenditures (Note: EDS-Paid Expenditures Only. Figures represent total payments for beneficiaries and may be duplicated across clinical conditions )</i>							
FQHC	\$18,964,882	\$31,810,239	\$47,627,577	\$62,708,688	\$ 5,950,614	\$14,758,907	\$ 25,942,327
Home Health Care	\$424,627	\$1,129,256	\$4,255,850	\$3,915,421	\$1,499,656	\$1,699,962	\$ 3,352,012
Hospital Care	\$10,221,605	\$20,708,222	\$38,163,790	\$48,050,081	\$14,810,526	\$ 19,566,165	\$ 23,024,933
Hospital Inpatient	\$46,067,145	\$79,402,902	\$242,157,615	\$266,349,073	\$111,972,997	\$160,777,219	\$ 194,228,194
Nursing Home Care	\$72,629,898	\$50,989,628	\$98,068,134	\$116,836,489	\$21,345,233	\$ 35,808,682	\$ 74,219,514
Other EDS Paid	\$25,348,161	\$28,270,044	\$106,635,290	\$133,468,057	\$118,854,997	\$ 49,671,172	\$ 45,619,993
Physician and Clinical	\$26,847,644	\$47,542,793	\$109,818,947	\$144,717,267	\$41,404,403	\$ 66,060,894	\$ 64,517,024
Prescription Drugs	\$82,800,346	\$152,443,406	\$325,805,755	\$378,986,478	\$66,228,086	\$126,921,704	\$ 158,133,195
Other							
Prescription Drugs- Psycho-Therapeutic	\$178,364,965	\$120,408,898	\$69,611,856	\$ 92,870,241	\$3,913,616	\$ 19,523,820	\$ 53,282,245
<b>Total</b>	<b>\$461,669,272</b>	<b>\$532,705,387</b>	<b>\$1,042,144,814</b>	<b>\$1,247,901,795</b>	<b>\$385,980,129</b>	<b>\$494,788,527</b>	<b>\$ 642,319,437</b>
<b>Percent</b>							
FQHC	4%	6%	5%	5%	2%	3%	4%
Home Health Care	0.1%	0%	0%	0%	0.4%	0.3%	1%
Hospital Care	2%	4%	4%	4%	4%	4%	4%
Hospital Inpatient	10%	15%	23%	21%	29%	32%	30%
Nursing Home Care	16%	10%	9%	9%	6%	7%	12%
Other EDS Paid	5%	5%	10%	11%	31%	10%	7%
Physician and Clinical	6%	9%	11%	12%	11%	13%	10%
Prescription Drugs	18%	29%	31%	30%	17%	26%	25%
Other							
Prescription Drugs- Psycho-Therapeutic	39%	23%	7%	7%	1%	4%	8%
<i>(Note: EDS-Paid Expenditures Only. Figures represent total payments for beneficiaries and may be duplicated across clinical conditions )</i>							

Source: Created by the DHCS Medical Care Statistics Section using MEDS data. Data reflects a 6-month lag.

## How Have States Identified High Cost and High Utilization members?

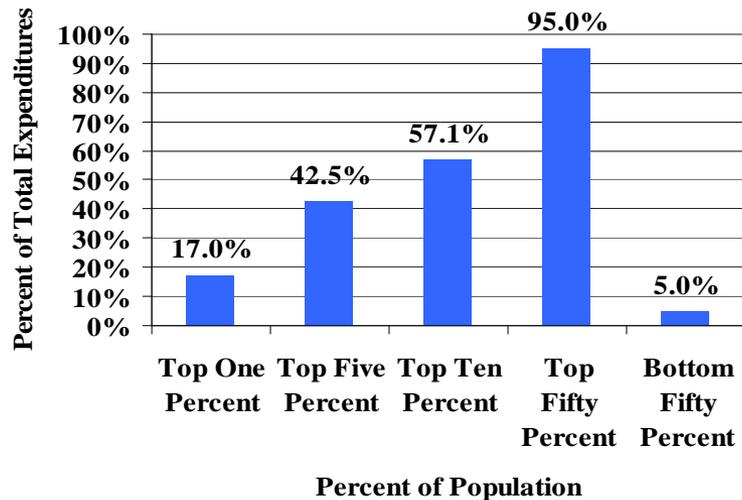
- Some states focus on high-utilization members, which are typically among the highest-cost members, and frequently visit the ER for care because of their uncontrolled condition or conditions
- Oklahoma focuses on beneficiaries that have four or more visits to the ER in a quarter
- Beneficiaries with co-morbidities are typically the highest-cost beneficiaries in a Medicaid program
- Of the most expensive 10 percent of the Medicaid beneficiaries, more than three-quarters are diagnosed with multiple chronic conditions
- Nearly one-third of these members have an associated mental health disorder, such as schizophrenia, bipolar disorder, or depression.

*Many of the factors listed are used as a means for targeting populations for care management in the legislation proposed by Senator Steinberg.*

# How Were Costs Distributed Throughout the Eligible Population?

	Top One Percent	Top Five Percent	Top Ten Percent	Top Fifty Percent	Bottom Fifty Percent
<b>Number of Beneficiaries</b>	4,146	20,730	41,460	207,298	207,298
<b>Member Months</b>	45,429	223,623	450,490	2,241,691	1,670,139
<b>Total Amt. Paid</b>	\$499,176,029.66	\$1,245,697,031	\$1,676,029,079	\$2,787,194,666	\$146,031,933
<b>Percent of Total</b>	17.0%	42.5%	57.1%	95.0%	5.0%
<b>PMPM</b>	\$10,988.05	\$5,570.52	\$3,720.46	\$1,243.34	\$87.44

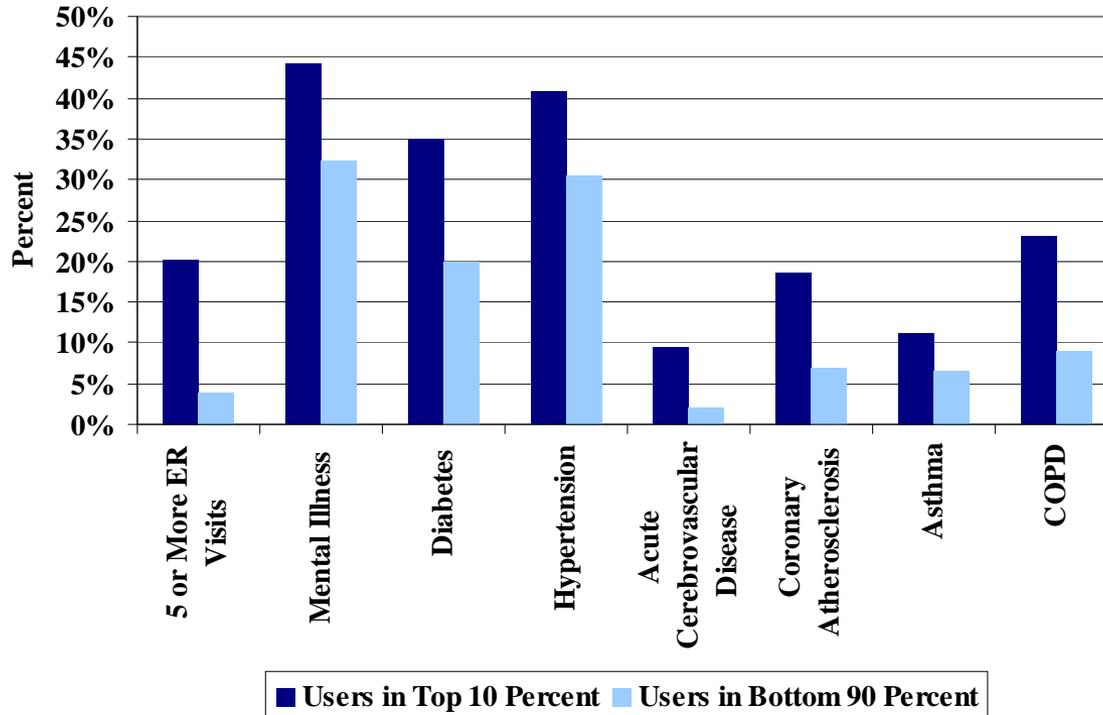
Cost Distribution of Eligible Population



Although skewed, costs throughout the Eligible Population were less concentrated than would be found among the general population. This reflects the more general prevalence of illness and greater use of services by the Disabled.

Source: Created by the DHCS Medical Care Statistics Section using MEDS data. Data reflects a 6-month lag.

## How Were Members of the Top Ten Percent Most Costly beneficiaries Compare to the Bottom Ninety Percent?



**Forty-One percent of the beneficiaries with Five or More Emergency Room Visits Were Among the Top Ten Percent Most Costly Beneficiaries**

**Rates of Stroke, Atherosclerosis and COPD were also significantly higher in the Top Tenth Percentile.**

Source: Created by the DHCS Medical Care Statistics Section using MEDS data. Data reflects a 6-month lag.

## Which Pairs of Concurrent Conditions were the Most Expensive to Treat?

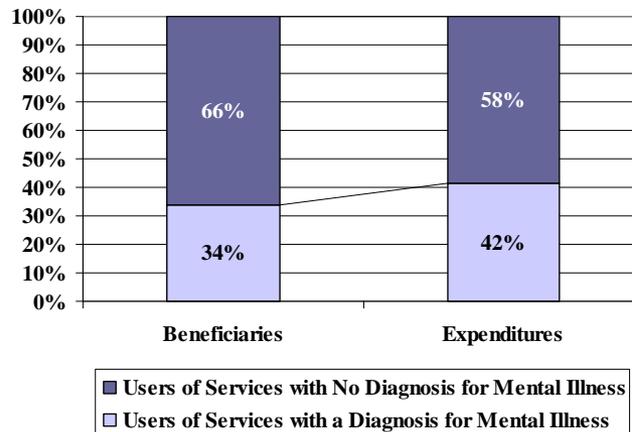
Disease Pairs	Number of Beneficiaries	Average Annual Cost
Chronic Renal Failure / Diabetes	5,468	\$ 40,748
Chronic Renal Failure / Hypertension	6,383	\$ 37,965
COPD / Pneumonia	5,682	\$ 37,810
Acute Cerebrovascular Disease / Coronary Atherosclerosis	1,960	\$ 34,267
Acute Cerebrovascular Disease / Diabetes	3,468	\$ 32,274
Diabetes / Acute Cerebrovascular Disease	3,468	\$ 32,274
Acute Cerebrovascular Disease / Asthma	596	\$ 31,907
Acute Cerebrovascular Disease / Affective Disorder	1,083	\$ 28,431
Acute Cerebrovascular Disease / Hypertension	5,331	\$ 26,382
COPD / Coronary Atherosclerosis	5,646	\$ 25,742
Coronary Atherosclerosis / COPD	5,646	\$ 25,742
Asthma / Coronary Atherosclerosis	2,682	\$ 23,074
COPD / Diabetes	9,314	\$ 22,589
Diabetes / Coronary Atherosclerosis	11,417	\$ 21,735
Coronary Atherosclerosis / Affective Disorder	3,615	\$ 19,879
Asthma / COPD	8,448	\$ 18,659
Diabetes / Asthma	5,862	\$ 17,894
Coronary Atherosclerosis / Hypertension	16,522	\$ 17,875
Diabetes / Schizophrenia	6,226	\$ 17,184
Diabetes / Affective Disorder	9,496	\$ 15,579
Diabetes / Hypertension	35,561	\$ 15,036
Asthma / Hypertension	8,775	\$ 14,835
Asthma / Affective Disorder	4,864	\$ 13,705
Affective Disorder / Hypertension	14,389	\$ 13,273
Schizophrenia / Affective Disorder	8,959	\$ 13,013
Diabetes / Hyper-lipidemia	19,221	\$ 11,897

***Chronic Renal Failure and Acute Cerebrovascular Disease paired with Diabetes and/or Hypertension were the most costly co-morbidities found among the eligible Population***

Source: Created by the DHCS Medical Care Statistics Section using MEDS data. Data reflects a 6-month lag.

## Beneficiaries with Mental Illness were More Expensive to Treat

	Number of Users	Expenditures	Average Cost per User
Users of Services with a Diagnosis for Mental Illness	120,436	\$1,218,875,471	10,120.52
Users of Services with No Diagnosis for Mental Illness	237,503	\$1,714,351,128	7,218.23
<b>Total</b>	<b>(1) 358,094</b>	<b>\$2,933,226,599</b>	<b>8,191.22</b>

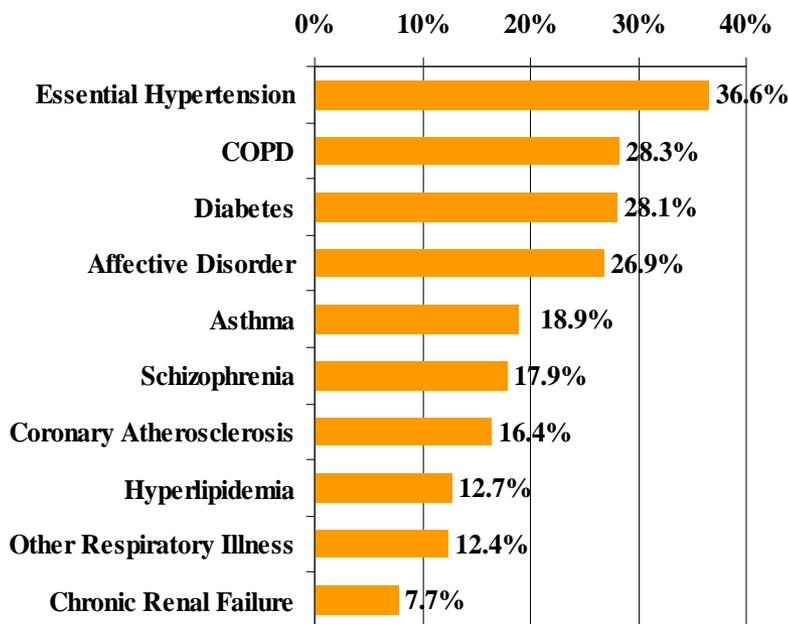


*Beneficiaries with a diagnosis for a mental health condition were 1.24 times more expensive than average and 1.4 times more expensive than users of services without a mental health diagnosis*

Source: Created by the DHCS Medical Care Statistics Section using MEDS data. Data reflects a 6-month lag. (1) Beneficiaries with at least 1 month of eligibility during CY 2006

## What Were Some Characteristics of Eligible Beneficiaries With 5 or More Emergency Room Visits?

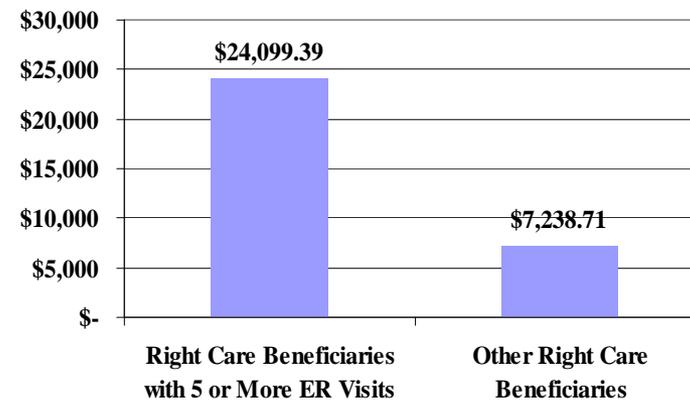
**Prevalence of Major Disease Among Beneficiaries With 5 or More Emergency Dept. Visits**



Source: Created by the DHCS Medical Care Statistics Section using MEDS data. Data reflects a 6-month lag.

*In CY 2006, there were 20,296 Eligible Beneficiaries With 5 or More Emergency Room Visits. They were 3.3 times more expensive than other Eligible Beneficiaries .*

**Average Annual Cost**



## What Were The Demographic Characteristics For the “High ER” Users?

Age Group	Gender		Total	
	F	M		
Age 18 - 34	1,738	1,431	3,169	16%
Age 35 - 60	8,200	6,322	14,522	72%
Age 61 - 64	1,080	778	1,858	9%
Age 65 - 79	387	236	623	3%
80 + Years	79	45	124	1%
Total	11,484	8,812	20,296	100%

*Most were between the ages of 35 and 60.*

*Eighty-nine percent of the high ER users were associated with aid code 60 (SSI/SSP Disabled).*

Source: Created by the DHCS Medical Care Statistics Section using MEDS data. Data reflects a 6-month lag.

## How Much Was Incurred on IP Expenditures for ACSCs By The Target Population In CY 2006?

Total Expenditures For ACSC	\$ 129,855,449.78
Unique Beneficiaries	13,625
Total Number of Inpatient Days	101,715
Number of ACSC IP Admissions	22,736
Average Cost Per Day	\$ 1,276.66
Average Number of Admission Per ACSC Population	1.67
Average Number of Days Stay Per Admission	4.47
Number of Beneficiaries with 3 or more	1,363
Number of Beneficiaries with 4 or more	681

Source: MCSS summary based on paid claims with dates of service CY 2006

*Ambulatory care—sensitive conditions are those "for which good outpatient care can potentially prevent the need for hospitalization, or for which early intervention can prevent complications or more severe disease" (AHRQ 2004). Although hospitalization rates are influenced by socioeconomic factors such as poverty (Blustein et al. 1998), high or increasing rates of potentially preventable hospitalizations might indicate inadequate access to high-quality ambulatory care, including preventive and disease management services (Bindman et al. 1995).*

# What Were the Top ACSC Admissions by Clinical Classification For CY 2006 Dates-of-Service?

CCS_C AT	DIAG_CAT_LABEL	Admissions	Total Paid	Average Cost/ Admission
108	Congestive heart failure; non-hypertensive	5,458	\$32,373,583.70	\$5,931.40
122	Pneumonia (except that caused by tuberculosis or s	3,826	\$25,300,472.03	\$6,612.77
50	Diabetes mellitus with complications	3,944	\$24,879,678.61	\$6,308.23
127	Chronic obstructive pulmonary disease and bronchie	2,622	\$13,682,927.72	\$5,218.51
128	Asthma	2,410	\$11,377,872.37	\$4,721.11
159	Urinary tract infections	1,994	\$11,037,713.92	\$5,535.46
99	Hypertension with complications and secondary hype	680	\$4,092,862.63	\$6,018.92
55	Fluid and electrolyte disorders	738	\$3,123,748.90	\$4,232.72
101	Coronary atherosclerosis and other heart disease	595	\$1,612,685.41	\$2,710.40
142	Appendicitis and other appendiceal conditions	123	\$1,203,856.89	\$9,787.45
98	Essential hypertension	320	\$864,716.01	\$2,702.24
2	Septicemia (except in labor)	8	\$119,499.01	\$14,937.38
	11 Other CCS All Less than 5 Admissions Each	18	\$185,832.58	\$10,324.03
	Total	22,736	129,855,450	\$5,711.45

## How Were ACSCs Distributed By Aid Code: CY 2006 Dates of Service?

Aid Code	Total Paid	Unique Beneficiaries	Admissions
10	\$1,294,140.46	173	211
14	\$9,119,387.69	1272	1,755
1H	\$1,393,600.62	190	264
20	\$3,116,871.55	249	441
24	\$261,060.14	25	40
36	\$6,510.00	1	3
60	\$101,953,518.62	10453	17,612
64	\$7,351,298.98	785	1,265
66	\$51,146.62	9	10
6C	\$1,900.00	1	1
6G	\$51,850.31	8	8
6H	\$5,254,164.79	507	754
Total	\$129,855,449.78		22,363

*Roughly 79 percent of the total Medi-Cal expenditures associated with ACSCs were generated by beneficiaries assigned to aid code 60 (PA-Disabled SSI/SSP)*

Source: Created by the DHCS Medical Care Statistics Section using MEDS data. Data reflects a 6-month lag. July 2006 MOE.

## What Is The Impact to Total Expenditures Assuming A Change In ACSCs?

ACSC Admission Rate Per User		1.67
Assume A 10% Reduction in This Rate		10%
Reduction factor		0.17
Revised ACSC Admission Rate Per User		1.50
Revised ACSC Admissions For The Same Population		20,462
Average Cost Per IP Day	\$	1,276.66
Assume Same ALOS		4.47
Revised ACSC IP Days		91,544
Total ACSC IP Expenditures Revised	\$	116,869,904.80
Savings or Change in Expenditures	\$	12,985,544.98

*A 10 percent reduction in the number of ACSC admissions for the ACSC users will result in \$13 million in program savings.*

*Instead of 1.67 admissions per ACSC user, the revised rate would drop to 1.50 ACSC admissions per user.*

## What Is The Impact to Total Expenditures Assuming A Change In Both the Average ACSC Admission Rate and ALOS?

ACSC Admission Rate Per User	1.67
Assume A 10% Reduction in This Rate	10%
Reduction factor	0.17
Revised ACSC Admission Rate Per User	1.50
Revised ACSC Admissions For The Same Population	20,462
Average Cost Per IP Day	\$ 1,276.66
Assume ALOS Drops From 4.55 to 3.00	3.00
Revised ACSC IP Days	61,387
Total ACSC IP Expenditures Revised	\$ 78,370,569.40
Savings or Change in Expenditures	\$ 51,484,880.38

*A 10 percent reduction in the number of ACSC admissions for the population as well as a reduction in the ALOS from 4.55 to 3.0 will result in a Program savings of \$51 million.*

## Are Beneficiaries Frequenting Hospitals For ACSCs (i.e., 3 or more) More Costly Than the Average beneficiary in the Target Population?

Unduplicated Beneficiaries	1,808
Member Months	19,350
Total Amount Paid	\$103,153,840.42
PMPM	\$ 5,330.95
PMPM Total Population (average)	749.83

*Beneficiaries frequenting the hospital inpatient setting for ACSCs 3 or more times during the year were 7 times more expensive than the average target population beneficiary.*

## How Were CY 2006 Expenditures Distributed by Service Category?

Service Category	Public Hosp	Paid	Total Member Months	PMPM	PMPM Excluding PH	% Of Total Expenditures
FQHC		\$ 154,630,894.96	3,911,830	\$ 39.53	\$ 39.53	5%
Home Health Care		\$ 10,268,121.30	3,911,830	\$ 2.62	\$ 2.62	0%
Hospital Care		\$ 128,655,837.54	3,911,830	\$ 32.89	\$ 32.89	4%
Hospital Care	PH	\$ 10,848,994.00	3,911,830	\$ 2.77	\$ -	0%
Hospital Inpatient		\$ 576,401,106.67	3,911,830	\$ 147.35	\$ 147.35	20%
Hospital Inpatient	PH	\$ 153,874,320.34	3,911,830	\$ 39.34	\$ -	0%
Nursing Home Care		\$ 307,296,310.06	3,911,830	\$ 78.56	\$ 78.56	10%
Other EDS Paid		\$ 238,866,208.96	3,911,830	\$ 61.06	\$ 61.06	8%
Physician and Clinical		\$ 312,101,684.16	3,911,830	\$ 79.78	\$ 79.78	11%
Prescription Drugs Other		\$ 902,224,444.28	3,911,830	\$ 230.64	\$ 230.64	31%
Prescription Drugs Psychotropic		\$ 302,781,991.29	3,911,830	\$ 77.40	\$ 77.40	10%
Total		\$ 3,097,949,913.56	3,911,830	\$ 791.94	\$ 749.83	100%

## How Were CY 2006 Hospital IP Expenditures Distributed by Aid Code?

Aid Code	Public Hosp	IP Days	Total Paid	% of Total Paid	Unduplicated Beneficiaries
60		324857	\$445,433,306.31	61.0%	34,400
60	PH	89344	\$109,586,582.20	15.0%	9,388
64		29757	\$39,908,599.47	5.5%	2,512
14		31497	\$38,705,348.13	5.3%	3,975
6H		18671	\$27,399,427.83	3.8%	1,723
64	PH	17101	\$20,401,191.03	2.8%	1,386
14	PH	8154	\$10,009,869.64	1.4%	1,201
6H	PH	7848	\$9,765,793.16	1.3%	640
20		7097	\$9,026,112.79	1.2%	650
1H		5295	\$7,954,159.10	1.1%	699
10		4530	\$6,014,826.74	0.8%	607
1H	PH	1312	\$1,531,821.02	0.2%	163
20	PH	1057	\$1,345,488.47	0.2%	111
24		723	\$879,045.27	0.1%	55
10	PH	575	\$748,793.30	0.1%	86
6G		376	\$594,267.02	0.1%	41
6 Other Aid Codes All < \$400,000 Each		903	\$970,795.53	0.1%	85
Total		549097	\$730,275,427.01	100.0%	

## Top 10 Hospital Inpatient Admissions By Dollars Paid: CY 2006?

CCS_CAT	DIAG_CAT_LABEL	Total Paid	Admits	Unique Beneficiaries
2	Septicemia (except in labor)	\$44,912,362.86	3100	2527
108	Congestive heart failure; nonhypertensive	\$34,554,782.57	5640	3157
122	Pneumonia (except that caused by tuberculosis or s	\$33,013,649.75	4445	3564
131	Respiratory failure; insufficiency; arrest (adult)	\$30,181,657.68	1967	1520
237	Complication of device; implant or graft	\$26,051,266.25	2970	2040
50	Diabetes mellitus with complications	\$25,133,426.61	3971	2527
197	Skin and subcutaneous tissue infections	\$23,073,318.12	3798	2930
101	Coronary atherosclerosis and other heart disease	\$17,045,584.62	3343	2601
127	Chronic obstructive pulmonary disease and bronchie	\$16,591,562.00	3214	2171
109	Acute cerebrovascular disease	\$15,195,672.32	1764	1420