

# A profile of Hawaiians in the Medicaid Fee-For-Service program

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## Abstract

In Hawai'i, the Medicaid Fee-For-Service (FFS) program enrolled approximately 39,000 individuals in fiscal year (FY) 1999. This program specifically provides healthcare services to enrollees classified as aged, blind, disabled, in-state foster children, and children who live out-of-state in subsidized adoptions. The total expenditure associated with this program was over \$300 million in FY 1999. Nearly 4,600 enrollees in the Medicaid FFS program were self-identified as Native Hawaiians or part-Hawaiians. Although the proportion of Hawaiians in the Medicaid program was a fair representation of Hawaiians in the state, the distribution by recipient category within the program was in sharp contrast. Aged Hawaiians appeared to be under-represented in the program while disabled Hawaiians were over-represented. Foster children and children under subsidized adoption accounted for 1% of the total Hawaiian population. Excluding the foster children and children under subsidized adoption, recipients of Hawaiian ancestry in the Medicaid FFS program

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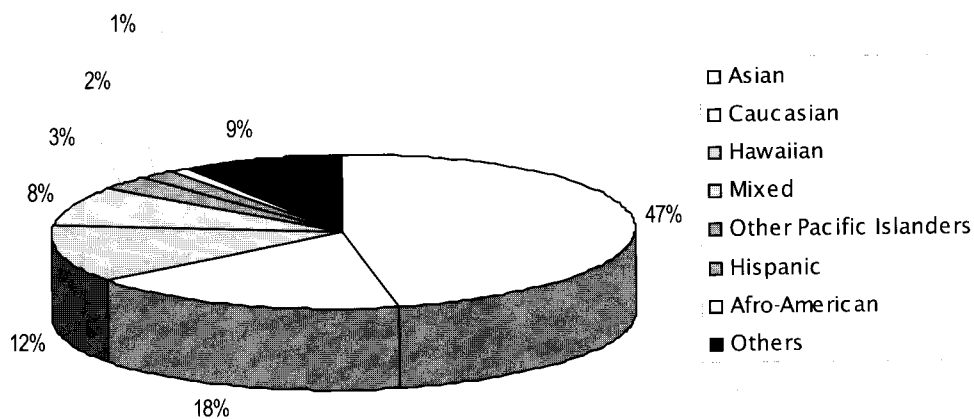
(aged, blind, and disabled) obtained health care services amounting to approximately \$34 million in FY 1999. Females in this population received more services, with total Medicaid payments amounting to \$18.7 million. A higher proportion of Hawaiian recipients were on the neighbor islands. In this FFS Hawaiian population, the top three disease-states by dollar volume in FY 1999, were Alzheimer's disease, acute cerebrovascular disease, and profound mental retardation. A total of \$3 million in services were provided to recipients with these primary disease-states. The five leading disease-states facing Hawaiians were generally comparable to those confronting the overall FFS population.

## Introduction

In Hawai'i's contemporary multi-ethnic society, Hawaiians (includes Native Hawaiians and part-Hawaiians) are generally believed to have the highest health risk of all major ethnic groups. Studies have indicated that Hawaiians have the highest proportion of multiple risk factors linked to illness, disability, and premature death<sup>1</sup>. In 1995, Blaisdell documented that the age-adjusted mortality rate of 1,062.7 per 100,000 Native Hawaiians continued to be highest among the different ethnic groups in 1990<sup>2</sup>. Individuals with mixed Hawaiian ancestry had half the age-adjusted mortality of Native Hawaiians with a rate to 449.6 per 100,000. However, this lower rate was still much higher than the 281.4 per 100,000 age-adjusted mortality rate for all other ethnic groups in Hawai'i. In a separate 1996 Hawai'i Department of Health Survey, Hawaiians were identified as the highest uninsured ethnic group (11.1%)<sup>3</sup>. In contrast, ethnic Japanese and Chinese have uninsured rates of 4.6% and 4.3%, respectively.

Despite the growing volume of research studies devoted to Hawaiian healthcare issues, there remains a lack of information on the health status of Hawaiians relating to health insurance—both private and public. Information on the healthcare status of low income Hawaiians with chronic conditions—some of whom are individuals in Medicaid's fee-for-service (FFS) program—is absent in the existing healthcare literature. The majority of enrollees in

**Fig. 1. Medicaid Fee For Service recipient distribution, by ethnic self-identification, for fiscal year 1999**



**Notes**

*Asian:* Includes Chinese, Filipino, Japanese, Korean and other Asians.

*Other Pacific Islanders:* Includes Samoan

*Hispanic:* Includes Puerto Rican

*Others:* Includes American Indian and non-identified ethnic preferences.

the FFS program are aged and disabled. This research effort is an attempt to fill that information gap. In this paper, we examine two core issues: (1) profile and characteristics of the Hawaiian FFS population, and (2) utilization of health care services by Hawaiians in the FFS program.

**Medicaid Fee-For-Service Program**

Hawai'i's Medicaid FFS program provides medical assistance to eligible individuals under Title XIX of the Social Security Act. This program delivers medical, dental, prescription drugs, and long-term care services to eligible individuals. Payments to participating providers are made on the basis of services rendered (fee-for-service). In its current form, the FFS program is state-administered with the state receiving federal matching funds for over 50% of its expenditures. In Hawai'i, approximately 39,000 individuals were enrolled in the Medicaid FFS program at some time during the state fiscal year (FY) 1999 (i.e., July 1, 1998 to June 30, 1999). This program specifically provides healthcare services to enrollees classified as aged (65 years of age or older), blind, disabled (under 65 years of age), in-state foster children, and children who live out-of-state in subsidized adoption. The total expenditure associated with this program was over \$300 million in FY 1999.

**Methods**

**Participants**

This study was based on participants' data from two primary Medicaid data systems. Recipient information

such as ethnicity, gender, island of residence, Medicaid category, and age originated from the Hawai'i Automated Welfare Information (HAWI) system. Data on utilization of health care services for FY 1999 was extracted from the comprehensive claims payment database, known as the Medicaid Management Information System (MMIS). Information such as recipient identifier, primary diagnosis codes, and amount paid, were available from this system.

**Data analyses**

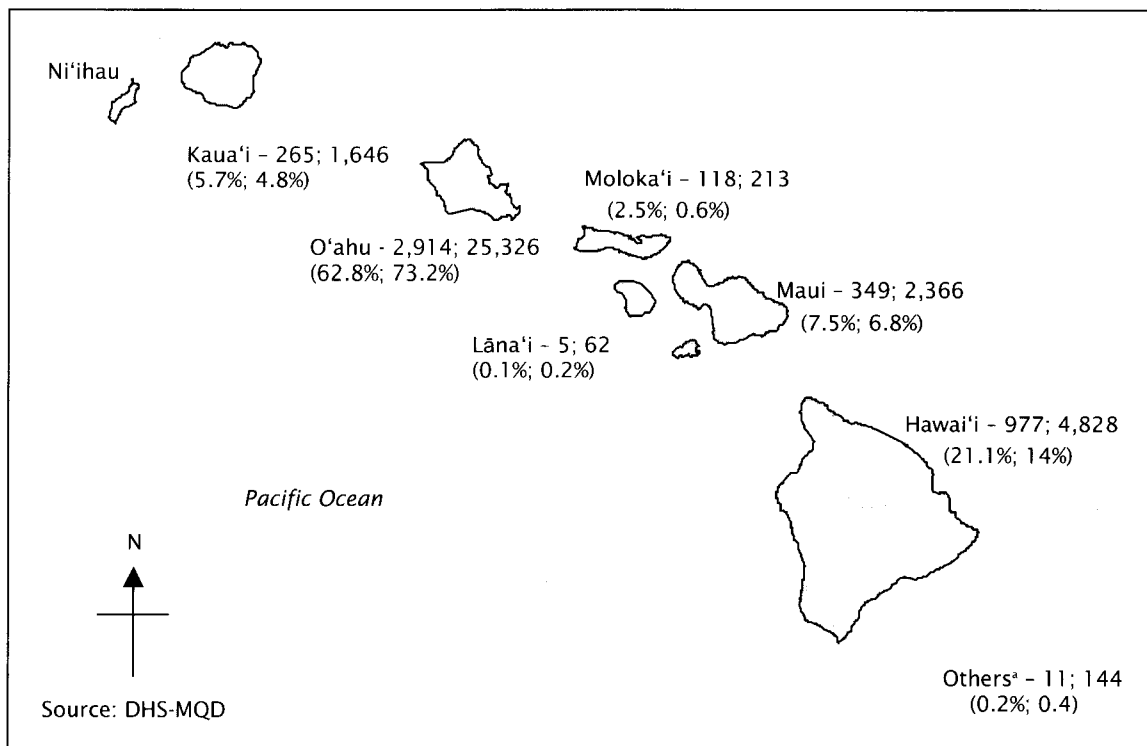
Descriptive statistics were utilized for the demographic profile of the Hawaiian population in the Medicaid FFS program. Comparisons were made between the Hawaiian and non-Hawaiian populations. Analyses were subsequently performed on utilization patterns of health care services of various Hawaiian sub-populations within the Medicaid FFS program. Finally, contrasts were made on the leading disease-states between the Hawaiian and overall population.

**Results**

**Demographic**

In FY 1999, nearly 4,600 enrollees in the Medicaid FFS program were self-identified as Native Hawaiians or part-Hawaiians. This figure represented approximately 12% of all individuals enrolled in the Medicaid FFS program. This proportion is comparable to the racial composition of Hawaiians (12.5%) within the state as indicated by the U.S. Census Bureau in 1990, which determines ethnicity by self-identification as well<sup>1</sup>. In sharp contrast, Caucasians

**Figure 2. Medicaid Fee-for-Service Hawaiian and Non-Hawaiian, distribution by island, for fiscal year 1999**



Note: Island - number of Hawaiian; non-Hawaiian (% Hawaiian; % non-Hawaiian).  
<sup>a</sup> Others include recipients who failed to state their island of residence or have an address outside the state.

were under-represented in the FFS population, accounting for only 18% of total Medicaid FFS enrollees, while representing nearly 33.4% of total population in the state<sup>1</sup>. Figure 1 shows the distribution of enrollees in the Medicaid FFS program by expressed ethnic self-identification.

Although the proportion of Hawaiians in the Medicaid program was a fair representation of Hawaiians in the state, the distribution by recipient category within the program was in sharp contrast. Aged Hawaiians comprised only 22% of all Hawaiians in the Medicaid FFS program. Disabled Hawaiians accounted for 77%. Foster children and children under subsidized adoption accounted for 1% of the total Hawaiian population. There were fewer than five blind Hawaiian recipients in the Medicaid FFS program in FY 1999. In the disabled category, 11.2% of the 3,554 disabled Hawaiian enrollees were below 21 years of age.

Overall, in comparison, aged individuals from all ethnic groups accounted for 48% of the total Medicaid FFS population. The proportion of disabled recipients in the program was 50% in FY 1999. This illustrates a divergence of participation rates between Hawaiians and the overall population in the Medicaid FFS program. Aged Hawaiians appeared to be under-represented in the program while disabled Hawaiians were over-represented.

The gender distribution for enrollees in the Medicaid FFS program was also slightly different between Hawaiians and non-Hawaiians. The ratio of females to males in the Hawaiian category was 1.14 while that for non-Hawaiians was 1.26. This indicated that Hawaiian participation by gender in the FFS program was more equally distributed compared to that for non-Hawaiians. In the entire FFS population, the female to male ratio was 1.25 (i.e., five females for every four males participating in the FFS program in FY 1999).

Hawaiians in the Medicaid FFS population were more likely to live on O'ahu than on a neighbor island. However, the proportion of Hawaiians residing on neighbor islands was greater than that for non-Hawaiians residing on neighbor islands, and greater than the overall population in the FFS program. This uneven distribution of Hawaiians on the neighbor islands creates the appearance of a rural-urban access divide to health care services because rural areas have fewer Medicaid providers as compared to urban O'ahu. Medicaid FFS recipients on O'ahu have far greater access to medical and dental specialty providers. Anecdotal evidence points to an opposing scenario on the neighbor islands. Figure 2 shows the distribution of Hawaiians and non-Hawaiians by island. The islands of O'ahu and Hawai'i are home to the majority of Hawaiians and non-Hawaiians in the Medicaid FFS program.

**Table 1. Medicaid Fee-for-Service Hawaiian population:  
Ten leading disease-states, by dollar volume, for fiscal year 1999**

Rank	Diagnosis Code	Description	Payment (\$)
1	331.0	Alzheimer's disease	1,258,332
2	436	Acute, but ill-defined, cerebrovascular disease	1,003,769
3	318.2	Profound mental retardation	722,438
4	290.0	Senile dementia, uncomplicated	534,522
5	428.0	Congestive heart failure	473,783
6	332.0	Paralysis agitans	431,143
7	585	Chronic renal failure	425,194
8	38.9	Septicemia NOS <sup>a</sup>	421,437
9	294.8	Organic brain syndromes (chronic) NEC <sup>b</sup>	388,514
10	682.6	Other cellulitis and abscess of leg, except foot	374,699

Source: DHS-MQD

<sup>a</sup> NOS=Not otherwise specified.

<sup>b</sup> NEC=Not elsewhere classified.

**Utilization of services**

Excluding the foster children and children under subsidized adoption, recipients of Hawaiian ancestry in the Medicaid FFS program (aged, blind, and disabled) obtained health care services amounting to approximately \$34 million in FY 1999. Hawaiian females in this population received more services than males with total Medicaid payments amounting to \$18.7 million. Disabled Hawaiians received services amounting to \$23.9 million and aged Hawaiians received services costing \$10.3 million in FY 1999. These findings indicated that disabled Hawaiians who comprised 77% of all Hawaiians in the Medicaid program consumed only 70% of all incurred expenditures. In contrast, aged Hawaiians consumed \$10.3 million in services, a disproportionately higher amount of dollars, considering that 22% of aged recipients utilized 30% of total expenditures in the same time period. This higher spending can be attributed to costly long-term care services provided to the aged Hawaiians.

Table 1 shows the 10 leading disease-states facing Hawaiians in the Medicaid FFS program by dollar volume in FY 1999. In this FFS Hawaiian population, the single leading disease-state by dollar volume in FY 1999 was Alzheimer's disease. A total of \$1.26 million was expended to aged recipients with Alzheimer's as the primary diagnosis. The second most costly disease-state was acute, but ill-defined cerebrovascular disease with total payments of \$1 million. Medicaid payments to treat this disease-state were distributed evenly between aged and disabled recipients. The third most costly disease-state was profound mental retardation with total payments of \$722,000. Of this total amount, approximately 79% were used to serve the disabled population. Senile dementia was the fourth leading disease-state by dollar volume. This condition was exclusively restricted to elderly Hawaiians with over \$500,000 in expenditures for FY 1999. Finally, congestive heart failure was the fifth leading disease-state by dollar volume for FFS Hawaiian recipients. A total of \$474,000 was paid out in FY 1999 with over 80% spent on recipients in the disabled category.

**Table 2. Medicaid Fee-for-Service overall population:  
Ten leading disease-states, by dollar volume, for fiscal year 1999**

Rank	Diagnosis Code	Description	Payment (\$)
1	436	Acute, but ill-defined, cerebrovascular disease	11,389,793
2	331.0	Alzheimer's disease	11,014,090
3	290.0	Senile dementia, uncomplicated	8,588,321
4	318.2	Profound mental retardation	5,611,367
5	428.0	Congestive heart failure	4,739,316
6	820.8	Fractured neck of femur, NOS <sup>a</sup>	4,130,781
7	486	Pneumonia, organism NOS <sup>a</sup>	3,824,969
8	318.1	Severe mental retardation	3,777,667
9	438	Late effects of cerebrovascular disease	3,458,106
10	332.0	Paralysis agitans	3,317,814

Source: DHS-MQD

<sup>a</sup> NOS=not otherwise specified

Table 2 shows the 10 leading disease-states facing individuals in the overall Medicaid FFS program by dollar volume in FY 1999. In the broader FFS population, the single leading disease-state by dollar volume was acute, but ill-defined cerebrovascular disease. Medicaid spent about \$11.4 million on this single disease state. Alzheimer's disease was the second-most costly disease-state with payments of \$11 million. The third most costly disease-state was senile dementia uncomplicated, with total payments of \$8.6 million. The fourth and fifth were profound mental retardation and congestive heart failure. The top five disease-states facing the overall FFS population were similar to that experienced by the Hawaiian FFS population.

## Discussion

The Medicaid FFS program provides comprehensive health care services to eligible individuals (with categorical restrictions and with incomes up to 100% of the federal poverty level). Recipients in this program are aged (over 65 years old), blind, disabled, in-state foster children, and/or children who live out-of-state in subsidized adoptions. Historically, the aged and disabled require substantially more medical services than the typical Medicaid recipient who is enrolled in the managed care, waiver program (QUEST). In this initial study of Hawaiians in the Medicaid FFS program, the profile established at this juncture is as follows:

- The proportion of self-identified Hawaiians in the Medicaid FFS program is a fair representation of the general composition of Hawaiians in the state;
- The proportion of aged Hawaiians is sharply lower than that for all recipients in the Medicaid FFS program. In contrast, the proportion of disabled Hawaiians is over-represented in the same program;
- The disabled Hawaiian population is more than three times larger than the aged Hawaiian population;
- The gender ratio of female to male is 1.14;
- Appearance of a rural-urban access divide to health care services exists due to unequal distribution of health care providers across the Hawaiian islands; and

- Chronic conditions dominate the 10 leading disease-states by dollar volume for FY 1999, with the five highest being the same for Hawaiians and the overall Medicaid FFS population (i.e., Alzheimer's, cerebrovascular disease, profound mental retardation, senile dementia, and congestive heart failure).

The above findings lead to other issues pertinent to the delivery of health care services for Hawaiians in the Medicaid FFS program. Foremost is whether we can obtain more measures on access to health care services, utilization of services, and quality of health care services provided. Questions that warrant further research investigation include: What are the leading disease-states by frequency (as opposed to dollars)? What are the leading prescription drugs and their effectiveness for this population? Within the broader perspective, and given the substantially higher health risk factors facing the Hawaiian population, are there sufficient resources to prevent or to delay the onset of prevalent chronic disease states for this vulnerable population?

The Hawai'i Medicaid program remains committed to developing and implementing new strategies to expand screening and other preventive services. It will continue to monitor and evaluate whether appropriate health care services are provided to the FFS population, including all Hawaiian recipients.

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3. Office of Health Status Monitoring, Department of Health, State of Hawai'i. *Hawai'i Health Survey 1996*. State of Hawai'i, Honolulu, Hawai'i, USA, 1997. ■

*E imi i ke ola mawaho*

Seek life outside

*Consult a kahuna to see what is causing the delay in healing.  
Said when a person is sick, and recovery is slow*