Study of Financing for Heart Transplant Services in Hawaii

A Report to the Governor and the Legislature of the State of Hawai'i

Report No. 92-4
January 1992

THE AUDITOR
STATE OF HAWAI'I

The Office of the Auditor

The missions of the Office of the Auditor are assigned by the Hawaii State Constitution (Article VII, Section 10). The primary mission is to conduct post audits of the transactions, accounts, programs, and performance of public agencies. A supplemental mission is to conduct such other investigations and prepare such additional reports as may be directed by the Legislature.

Under its assigned missions, the office conducts the following types of examinations:

1. *Financial audits* attest to the fairness of the financial statements of agencies. They examine the adequacy of the financial records and accounting and internal controls, and they determine the legality and propriety of expenditures.

2. *Management audits,* which are also referred to as *performance audits,* examine the effectiveness of programs or the efficiency of agencies or both. These audits are also called *program audits,* when they focus on whether programs are attaining the objectives and results expected of them, and *operations audits,* when they examine how well agencies are organized and managed and how efficiently they acquire and utilize resources.

3. *Sunset evaluations* evaluate new professional and occupational licensing programs to determine whether the programs should be terminated, continued, or modified. These evaluations are conducted in accordance with criteria established by statute.

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5. *Health insurance analyses* examine bills that propose to mandate certain health insurance benefits. Such bills cannot be enacted unless they are referred to the Office of the Auditor for an assessment of the social and financial impact of the proposed measure.

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Hawaii's laws provide the Auditor with broad powers to examine all books, records, files, papers, and documents and all financial affairs of every agency. The Auditor also has the authority to summon persons to produce records and to question persons under oath. However, the Office of the Auditor exercises no control function, and its authority is limited to reviewing, evaluating, and reporting on its findings and recommendations to the Legislature and the Governor.

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OVERVIEW

THE AUDITOR
STATE OF HAWAII

Study of Financing for Heart Transplant Services in Hawaii

Summary

In House Concurrent Resolution No. 87, S.D. 1 of 1991, the Legislature requested the Auditor to help ensure that heart transplant services are available and accessible to those who need them.

Heart transplant services include the pretransplant evaluation, transplant surgery, and followup care including medication. National experience indicates that the total cost of a patient's hospital care, physicians, and drugs can range from at least $63,000 to just under $200,000.

We studied Medicare and Medicaid coverage for heart transplants and explored options for increasing financing for heart transplants in Hawaii. The St. Francis Medical Center in Honolulu has the only heart transplant program in the state and has been averaging about three transplants a year. Most of these transplants were covered by private insurers but Medicare and Medicaid patients were not covered. This is because St. Francis does not perform a sufficient number of transplants to meet federal requirements for Medicare approval, and because the state Medicaid program, faced with growing deficits, generally does not pay for heart transplantation.

The State has several options that could improve financing for heart transplants in Hawaii. The Department of Human Services, which administers the state Medicaid program, could cover heart transplants for all Medicaid beneficiaries. Another option is for the State to try to purchase group health insurance for eligible Medicaid beneficiaries who need heart transplant services. Yet another approach, which has been used by some other states, is the establishment of a special trust fund to help heart transplant patients.

Response

The St. Francis Medical Center, the Department of Human Services, and the Department of Health did not submit responses to the draft of this report. The State Health Planning and Development Agency concurs with our recommendations.

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Study of Financing for Heart Transplant Services in Hawaii

A Report to the Governor and the Legislature of the State of Hawaii

Submitted by

THE AUDITOR
STATE OF HAWAII

Report No. 92-4
January 1992

Foreword

This report was prepared in response to House Concurrent Resolution No. 87, Senate Draft 1 of 1991, which requested the Auditor to help ensure that heart transplant services are available and accessible in Hawaii.

We wish to acknowledge the cooperation and assistance extended to us by the St. Francis Medical Center; the Department of Human Services; the Department of Health; the State Health Planning and Development Agency; the U.S. Health Care Financing Administration; and others whom we contacted during the course of the study.

Marion M. Higa
Acting Auditor
State of Hawaii

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Chapter 1
Introduction

House Concurrent Resolution No. 87, Senate Draft 1, Regular Session of 1991, requested the auditor to help ensure that heart transplant services are available and accessible to those who need them.

The request was based on legislative concerns about the denial of Medicare and Medicaid payments for several heart transplants performed by the St. Francis Medical Center. The resolution stated that the payments were denied because the medical center did not meet federal requirements for certification as a Medicare heart transplant hospital. It requested the auditor to work closely with state agencies and with the medical center in efforts to obtain an exemption from the Medicare requirements and to obtain Medicaid payment for heart transplants.

This report examines Medicare and Medicaid coverage for heart transplants, state Medicaid policies relating to heart transplantation, and some options that might help increase financing for heart transplants in Hawaii.

Background Information

Heart transplantation—the surgical replacement of a failing heart with a healthy one—is a last resort in treating end-stage heart disease or birth defects. The first human heart transplant was performed in 1967 by Dr. Christiaan Barnard and more than 140 transplants were performed worldwide in the following year.[1] But unacceptably high death rates from infection and rejection caused most hospitals to stop using the procedure in the early 1970s.[2]

Interest in heart transplantation revived after the introduction of cyclosporine, a drug used to suppress the body's rejection of transplanted organs, and the invention of a heart biopsy technique used to detect early signs of rejection.[3] Between 1985 and 1990, the annual number of heart transplants performed worldwide increased from about 1,200 to more than 3,000.[4] About 225 children under the age of 19 received new hearts in 1989, including 86 infants under the age of one.[5]

Today, 81 percent of all heart transplant patients live for one year, and 69 percent live for five years or more.[6] The survival rates for children are slightly lower: 74 percent live for one year and 60 percent for five

years or more.[7] The major causes of death after transplantation include cardiac (heart) complications, rejection, and infection.

Medicare began paying for heart transplants in 1987, and most private insurers and state Medicaid programs now cover the procedure.

Heart transplants in Hawaii

The St. Francis Medical Center operates the only heart transplant program in Hawaii. The center performed 13 heart transplants between March 1987 and July 1991, almost all for adult men between the ages of 23 and 55. Ten heart transplant patients were alive in July 1991.[8]

Nine of the center's heart transplants were covered by private insurers (HMSA, Kaiser, or the Queen's Health Plan). One transplant provided to a Medi*care* beneficiary in January 1989 was not covered because the center is not approved by Medicare for heart transplantation. Three transplants provided to Medi*caid* beneficiaries between November 1989 and August 1990 were not covered because the state Medicaid program does not pay for heart transplantation.

The lack of Medicare and Medicaid coverage for heart transplants in Hawaii concerns the medical center. Also of concern are those patients who may lose their group health insurance after becoming disabled and leaving work, either before or shortly after receiving a transplant. These patients may fall into the state Medicaid program which does not cover heart transplantation.

Objectives of the Study

The study sought to provide the Legislature with background information on heart transplantation, on federal and state coverage policies and concerns, and on activities that might help increase financing for heart transplants in Hawaii. Specific objectives were to:

1. Describe heart transplant services and the federal requirements for Medicare and Medicaid coverage of heart transplants; and

2. Examine the problems relating to coverage for heart transplant services, including the problems that arise when health insurance lapses because employment is interrupted.

Scope and Methodology

We collected information on heart transplant services by reviewing the literature and by interviewing heart transplant professionals in Hawaii and on the mainland. We identified the Medicare and Medicaid

coverage requirements by reviewing federal and state statutes, regulations, and policy statements. We also interviewed officials in the U.S. Health Care Financing Administration, which administers the federal Medicare and Medicaid programs, and the Department of Human Services, which administers the state Medicaid program.

We reviewed organ transplant statutes from other states, surveyed Medicaid officials in several states, and interviewed heart transplant professionals on the mainland to identify activities that might help increase financing for heart transplants in Hawaii.

Our fieldwork was conducted from May to September 1991.

Chapter 2
Services and Insurance

This chapter provides background on heart transplant services and the Medicare and Medicaid insurance programs. The first section describes the stages of heart transplant care. The second section describes the Medicare and Medicaid programs and their heart transplant benefits.

Stages of Heart Transplant Care

Heart transplant services range from the evaluation that determines eligibility for transplantation to the lifelong program of care that is needed to prevent, detect, and treat complications such as infection or rejection.

Pretransplant evaluation

Patients are usually referred to a heart transplant program by their cardiologist. The program reviews their medical, psychological, and financial condition before deciding whether to proceed with transplantation.[1]

The medical evaluation includes physical examinations and diagnostic testing. Programs accept patients only after all other medical and surgical interventions have been tried or considered. Patients must have end-stage heart disease, very short life expectancy without transplantation (for example, six to twelve months), and good chances of surviving the surgery and enjoying reasonably good health for a number of years. Patients with adverse conditions, such as severe hypertension in the lungs, are not good candidates for the procedure. Most programs also screen out those who cannot follow a lifelong program of medical care that will include taking immunosuppressive drugs every day and visiting the doctor regularly for heart biopsies.

The financial evaluation reviews a patient's ability to pay for heart transplant services. Those with no health insurance may be required to pay a deposit. In 1991, the St. Luke's Episcopal Hospital in Houston required deposits of $11,500 for the pretransplant evaluation and $115,000 for the transplant surgery.[2]

Waiting period

Patients who are accepted for heart transplantation must often wait a long time for a donor heart. During the waiting period, they undergo periodic testing to update their medical record. The Oregon Health

Sciences University, for example, requires its patients to visit the outpatient clinic about twice a month.[3]

Patients must live close to the transplant hospital and be ready to go in for surgery as soon as a donor heart becomes available. Because they have end-stage heart disease, many patients die during the waiting period or are too ill to undergo transplantation by the time the donor heart is located.

Transplant surgery

Patients are called to the hospital to prepare for surgery while the donor heart is evaluated. If a patient is healthy enough to undergo transplantation, and if the donor's heart is suitable, the transplant will be performed.

After several hours in surgery, patients usually spend a day or two on a respirator and then begin to participate actively in the recovery process. The hospital provides therapy and education to help patients develop breathing capacity, regain strength, and assume more responsibility for the recovery. Most patients remain in the hospital for 10 to 21 days.

In 1987, the average hospital charge for heart transplant surgery ranged from $52,000 to $121,000; transplant team charges ranged from $2,000 to $20,000.[4]

Followup care

Heart transplant programs closely monitor their patients for three or four months after discharge from the hospital. Patients make frequent outpatient visits for physical examinations, heart biopsies, and laboratory tests. The intensity of followup care gradually diminishes as the body becomes accustomed to the new heart.

To prevent rejection, heart transplant patients must take immunosuppressive drugs every day. Most patients experience one or more episodes of rejection, which are treated by increasing the dosage of immunosuppressive drugs. Some are rehospitalized.

In 1987, hospital charges for the first year of followup care ranged from $4,000 to $35,000; drug charges ranged from $5,000 to $20,000 per person.[5]

Health Insurance

Very few heart transplant patients can pay for their medical care without health insurance. In this section, we briefly describe the Medicare and Medicaid programs, which are the focus of this study, and their heart transplant benefits.

Medicare

Medicare is a federal health insurance program for persons aged 65 and older, certain disabled persons under 65, and those of any age who have permanent kidney failure. The program is administered by the U.S. Health Care Financing Administration (HCFA) under Title 18 of the U.S. Social Security Act. It includes a *hospital* insurance program and a *medical* insurance program. About 119,000 Hawaii residents had Medicare hospital insurance benefits in July 1989; 116,000 had the medical insurance benefits.[6]

In April 1987, HCFA issued Medicare criteria for covering heart transplants. The criteria permit the *hospital* insurance program to pay for inpatient services, but only when transplants are provided by a hospital approved by HCFA for heart transplants. The hospital insurance will cover followup services regardless of where the transplants are done. The *medical* insurance program pays for physician services related to the surgery itself, non-hospital services related to care before and after surgery, and one year of immuno-suppressive drugs, but this range of coverage is available only when transplants are provided by a heart transplant hospital approved by HCFA. When other hospitals perform the transplants, the program pays only for post-transplant care.

Medicaid

Medicaid is a shared federal-state program that pays for medical services provided to persons with low incomes. Title 19 of the U.S. Social Security Act authorizes states to establish their own Medicaid programs. HCFA oversees these programs and provides federal matching funds for services covered by approved state Medicaid plans.

HCFA recently determined that the U.S. Omnibus Budget Reconciliation Act of 1989 requires state Medicaid programs to cover organ transplants for certain beneficiaries under the age of 21. Federal matching funds can be used to pay for the transplants if the state's approved Medicaid plan has written standards. States are not required to cover organ transplants that are unsafe, ineffective, or experimental.

The Department of Human Services administers the state Medicaid program in Hawaii. There were about 82,000 Medicaid beneficiaries in August 1991, including 38,500 children.[7] The program does not cover heart transplants, but it will pay for immunosuppressive drugs and the treatment of complications arising from heart transplant surgery.

Chapter 3
Coverage Policies and Concerns

In this chapter, we examine some limitations in Medicare and Medicaid coverage for heart transplantation, the State's concerns about covering heart transplants under the Medicaid program, and the problems facing individuals who may lose their group health insurance after they become disabled and leave work.

Medicare Coverage

As of March 1991, there were 49 Medicare heart transplant hospitals approved by the U.S. Health Care Financing Administration (HCFA) located in 28 states on the mainland.[1] Because Medicare only covers transplants provided by these hospitals, Hawaii's beneficiaries must live on the mainland for extended periods of time. This poses a hardship for patients and their families, who must pay for travel and lodging.

HCFA developed its criteria for the approval of Medicare heart transplant hospitals to ensure that beneficiaries receive transplants under conditions that are safe and effective. (See Table 3.1 for criteria.) Hospitals seeking Medicare coverage for their heart transplant patients must submit a written application showing how the criteria have been met. Nine expert consultants in different fields of medicine and health review the applications and forward their recommendations to the administrator of HCFA, who makes the final decision.

The St. Francis Medical Center, which operates the only heart transplant program in Hawaii, has not yet applied for HCFA approval because of the experience requirement governing the minimum number of heart transplants per year.

Experience requirement

HCFA requires a hospital to have an established heart transplantation program and documented evidence of 12 or more patients in each of the two 12-month periods preceding an application, and 12 before that in the period since January 1, 1982. HCFA considers these the minimum numbers needed to estimate a heart transplant program's success in terms of survival rates. Actuarial survival rates must be 73 percent for one year and 65 percent for two years.

The St. Francis Medical Center has performed only 13 heart transplants since March 1987: three in 1991 (through July), three in

TABLE 3.1
Federal Criteria for Approval of Medicare Heart Transplant Hospitals

The facility must have:

- Adequate written patient selection criteria and an implementation plan for their application.
- Adequate patient management plans and protocols.
- Sufficient commitment of resources and planning to carry out the heart transplant program with expertise in medical, surgical, and other relevant areas.
- Overall facility plans, commitments, and resources for a program that will assure a reasonable concentration of experience; specifically, 12 or more cardiac transplantation cases per year.
- Experience and success with a clinical organ transplantation program involving immunosuppressive technique with evidence of 12 or more heart transplant patients in each of the two preceding 12-month periods, and 12 patients prior to that but since January 1, 1982.

  Actuarial survival rates of 73% for one year and 65% for two years for patients who have had heart transplants at that facility since January 1, 1982.
- Laboratory services available to meet the needs of patients.

The facility must agree to:

- Maintain and routinely submit to HCFA summary data about patients selected, protocols used, and short- and long-term outcome on all patients undergoing cardiac transplantation.
- Notify HCFA immediately of any change related to the transplant program that could affect the health or safety of patients selected for covered Medicare heart transplants.

The facility must operate or participate in an organ procurement program to obtain donor organs.

Source: *Federal Register*, vol. 51, no. 65 (April 6, 1987), pp. 10947-10948.

1990, three in 1989, one in 1988, and three in 1987. The local supply of donor hearts is limited by the state's small population and its low death rate from accidents. Donor hearts cannot be flown into the state because they must be transplanted within four to six hours of being retrieved. The medical center estimates that only about five or six hearts can be transplanted each year in Hawaii under current conditions.

Many other heart transplant hospitals in the United States cannot meet the experience requirement. The U.S. General Accounting Office reported in 1989 that a majority performed fewer than 12 heart transplants a year.[2] It also reported that the number of patients needing heart transplants was increasing more rapidly than the number of heart donors. By the end of 1990 in the United States, nearly 1,800 patients were waiting for a heart.[3]

Approval by exception

The St. Francis Medical Center believes that Hawaii's geographic isolation, the limited supply of donor hearts here, and its good record of heart transplant surgery should be sufficient to gain HCFA's approval. But the agency does not have immediate plans to change its criteria.

HCFA will make certain exceptions if there is justification and if a hospital can ensure safety and efficacy. But it will not make exceptions based on geography, and it has granted exceptions only when a hospital can show that it would *soon* be able to meet all criteria (including the experience requirement). No exceptions have been made in the last two or three years, and many hospitals with good records of heart transplant surgery have been turned down—including one that was performing 11 transplants a year with a five-year survival rate of 99 percent.[4]

The St. Francis Medical Center plans to apply for HCFA approval of its heart transplant program based on conditions that are unique to Hawaii, such as the limited supply of donor hearts. If the request is granted, Medicare beneficiaries will be covered for heart transplants performed in Honolulu. The Legislature, the Department of Human Services, and the State Health Planning and Development Agency support the medical center's plans, but whether HCFA will make an exception to the experience requirement is yet uncertain.

Medicaid Coverage

The Hawaii Medicaid program does not cover heart transplant evaluations, surgery, or routine followup care. It will pay only for complications following surgery and for immunosuppressive drugs.

The Department of Human Services, which administers the program, will be extending heart transplant coverage to certain beneficiaries under 21 years of age, but it is concerned about the cost of covering the procedure for other beneficiaries at a time when Medicaid's overall expenditures are rapidly rising.

Coverage for EPSDT children

The U.S. Omnibus Budget Reconciliation Act of 1989 requires state Medicaid programs to pay for services that are needed to treat health problems discovered through the Early and Periodic Screening, Diagnostic, and Treatment Program (EPSDT). The EPSDT program provides screening and related health care services for many Medicaid children under 21 years of age.

HCFA recently issued guidelines requiring state Medicaid programs to cover medically necessary organ transplants under the EPSDT mandate.[5] Federal matching funds are available if a state's approved Medicaid plan includes written standards for transplants. States have flexibility in determining which transplants to cover. They need not cover those deemed experimental, unsafe, or ineffective.

The Department of Human Services has drafted regulations and amendments to the state plan permitting Medicaid to cover non-experimental organ transplants for children in the EPSDT program. When the new policies are finalized, federal funds will be available to help pay for them. In the meantime, the department will use other funds to pay for heart transplants for EPSDT children. It recently offered to pay for the procedure for one boy, but he passed away before the surgery could be performed.

Concern about cost

The department will cover heart transplants for children participating in the EPSDT program, but because of fiscal concerns, coverage for other Medicaid beneficiaries remains an unsettled issue. Some in the department question the idea of extending heart transplant coverage to other beneficiaries. The procedure is very expensive, Medicaid costs are escalating, and the state program does not have the money to cover new services.

The state Medicaid program had a $26 million deficit in FY1990-91 due to higher utilization and an increase in the number of beneficiaries.[6] These and other factors such as the rising cost of health care could lead to a $73 million deficit in FY1991-92.[7] Federal financial participation in the Hawaii Medicaid program, which is based on the state's per capita income, is declining.[8]

Faced with the EPSDT mandate and escalating costs, the department is looking for ways to cut, rather than extend, services. In the current fiscal climate, it may not be willing to cover heart transplants for all beneficiaries.

Cost of heart transplantation

The department has not yet developed a firm estimate of the cost to the State in covering heart transplantation. To fully assess this cost, it must estimate provider charges, decide how providers will be reimbursed, and determine if federal matching funds can be used to help pay for the service.

Heart transplantation is indeed expensive. The average charge in 1987 was about $115,000, and charges for the first year of hospital followup care ranged from $4,000 to $35,000.[9] However, Medicaid pays only 60 percent of the fees charged by private practitioners, and it negotiates hospital reimbursement for low-volume procedures such as heart transplants. Since federal matching funds can be used when a service is covered by an approved state Medicaid plan, the actual cost to the State in covering heart transplantation could be substantially lower than charges made by providers.

Cost of mainland travel and lodging

The department's Medicaid officials were under the impression that federal matching funds could be used only when heart transplants were provided by a HCFA-approved Medi*care* heart transplant hospital. They thought they would have to send beneficiaries to Medicare-approved hospitals on the mainland and pay travel and lodging costs, putting an additional strain on the Medicaid budget.

The HCFA Medicaid Bureau in Maryland, however, clarified that federal matching funds could be used as long as the hospital met the organ transplant standards of an approved state Medicaid plan. The standards need not limit coverage to transplants provided in heart transplant hospitals approved by Medi*care*. The department's proposed standards for EPSDT organ transplants will permit Medicaid to cover heart transplants provided by the St. Francis Medical Center in Honolulu.

Some heart transplant patients may still want to travel to the mainland to increase their chances of obtaining a suitable donor heart. The department may be able to offset the cost of travel and lodging by negotiating a good price for medical services provided on the mainland.

Coverage When Patients Become Disabled

Some heart transplant patients lose their group health insurance when they become disabled, are unable to work, and cannot continue paying their insurance premiums. These patients can qualify for Medi*care* benefits after receiving Social Security disability payments for two years. But during the waiting period they may fall into the Medi*caid* program, which does not cover heart transplants. When this happens, it may be worthwhile to enroll the beneficiaries in group health plans that cover heart transplant services.

Medicaid purchase of group health insurance

The U.S. Omnibus Budget Reconciliation Act of 1990 (OBRA 1990) requires state Medicaid programs to enroll eligible beneficiaries in group health plans when this is cost-effective. Federal matching funds can be used to help pay the insurance premiums and any cost-sharing obligations (such as deductibles or coinsurance) for services that are covered by the approved state Medicaid plan.

States that already enroll Medicaid beneficiaries in group health plans include Connecticut, Montana, Texas, and Washington. Other states, such as Maine and New York, are developing policies and procedures to comply with the new federal mandate. The state Medicaid program in Maine will probably include heart transplant services as one diagnosis to consider when making the enrollment decision.

In Hawaii, the Department of Human Services is planning to implement the OBRA 1990 mandate by enrolling Medicaid beneficiaries with a diagnosis of AIDS in group health plans, when cost-effective. It may be worthwhile for the department to also consider purchasing the insurance for beneficiaries needing heart transplant services. The insurance would cover most of the transplant costs, and the beneficiaries could raise funds to meet any cost-sharing obligations that are not covered under the state Medicaid plan.

Medicaid continuation of group health insurance

OBRA 1990 also permits state Medicaid programs to pay group health insurance premiums, when cost-effective, for certain beneficiaries who are eligible to continue their coverage after leaving work. Federal matching funds can be used to help pay the insurance premiums.

Connecticut, Montana, and Washington already purchase the continuation coverage when cost-effective. Other states, such as Indiana, Maine, and New York are planning to implement the option. It may be worthwhile for the Department of Human Services to explore the cost-saving potential of purchasing the continuation coverage for Medicaid beneficiaries needing heart transplant services.

Financing Examples From Other States

Some states have developed other financing mechanisms to help individuals pay for heart transplant services. One mechanism that might work in Hawaii is described below.

Special trust funds

Florida, Massachusetts, and Rhode Island have established special trust funds to help families pay for unreimbursed *organ* transplant expenses. The Florida Transplant Lifeline for Children blends private donations with state revenues to make financial support for organ transplants available to all children residing in the state—regardless of their family income. The fund can be used for in-state or out-of-state transplants. It is administered by the Florida Department of Health and Rehabilitative Services.

The Massachusetts Organ Transplant Fund helps state residents with fairly high family incomes pay for all or part of the costs associated with organ transplants. It is administered by the Office of Transplant Services in the Department of Public Health. An advisory committee helps develop standards and guidelines for the fund, which assisted about 350 people between 1983 and 1990. Most of the moneys in the fund come from voluntary and memorial contributions.

The Rhode Island Organ Transplant Fund helps defray organ transplant expenses incurred by state residents and their families. It covers unreimbursed costs associated with organ transplants—including hospital and medical care, out-of-state living expenses for up to 60 days, and post-transplant drugs. It is administered by the Department of Human Services, and supported through state tax refund donations, and by gifts, grants, and private donations.

The Massachusetts and Rhode Island funds both operate as a "payer of last resort," and patients are reimbursed only for costs not covered by other sources.

Private trust fund

Another approach is for private organizations to establish trust funds for the same purpose. This is being attempted in Seattle, where heart transplant patients are developing a tax-exempt foundation to solicit grants from corporations to help cover medical and related expenses.

Conclusions

The State has several options that could improve financing for heart transplants in Hawaii.

The Department of Human Services could cover heart transplants for all Medicaid beneficiaries, using federal matching funds to pay for services included in an amended state Medicaid plan. The St. Francis Medical Center could furnish the transplants in Hawaii if the department does not limit coverage to Medi*care*-approved heart transplant hospitals.

The department could also explore the feasibility of purchasing group health insurance for eligible Medicaid beneficiaries needing heart transplant services. Federal matching funds could be used to pay the insurance premiums and, in some cases, the cost-sharing obligations for services covered by the state Medicaid plan.

Finally, a special trust fund could be established to provide heart transplant patients with some financial support.

Notes

Chapter 1

1. Douglas Considine, et al., *Van Nostrand's Scientific Encyclopedia,* 5th ed., New York, Van Nostrand Reinhold Company, 1976, p. 1243.

2. Ibid.

3. Denton Cooley, M.D., "Pediatric Heart Transplantation in Historical Perspective," *The Journal of Heart and Lung Transplantation,* vol. 10, no. 5, pt. 2, September/October 1991, p. 787.

4. Jolene Kriett, M.D., and Michael Kaye, M.D., "The Registry of the International Society for Heart and Lung Transplantation: Eighth Official Report—1991," *The Journal of Heart and Lung Transplantation,* vol. 10, no. 4, July/August 1991, p. 492.

5. M.P. Kaye, M.D., and Jolene Kriett, M.D., "Pediatric Heart Transplantation: The Worldwide Experience," *The Journal of Heart and Lung Transplantation,* vol. 10, no. 5, pt. 2, September/October 1991, p. 856.

6. Jolene Kriett, M.D., and Michael Kaye, M.D., "The Registry of the International Society for Heart and Lung Transplantation: Eighth Official Report—1991," p. 493.

7. M.P. Kaye, M.D., and Jolene Kriett, M.D., "Pediatric Heart Transplantation," p. 858.

8. Information provided by the St. Francis Medical Center, Honolulu, August 1991.

Chapter 2

1. U.S., General Accounting Office, *Heart Transplants: Concerns About Cost, Access, and Availability of Donor Organs,* GAO/HRD-89-61, Gaithersburg, Maryland, May 1989, p. 25.

2. Letter to Whom it May Concern from Renita Killam, Financial Counselor/Transplants, St. Luke's Episcopal Hospital, Houston, June 3, 1991.

3. Oregon Health Sciences University, untitled brochure for heart transplant patients, Portland, July 1991.

4. U.S., General Accounting Office, *Heart Transplants*, p. 30.

5. Ibid., p. 31.

6. Hawaii, Department of Business, Economic Development, and Tourism, *The State of Hawaii Data Book*, Honolulu, 1990, p. 301.

7. Hawaii, Department of Human Services, "Active Recipient Summary," Honolulu, August 26, 1991.

Chapter 3

1. U.S., Department of Health and Human Services, "Medicare Heart Transplant Centers," Office of Coverage Policy, Health Care Financing Administration, Baltimore, March 15, 1991.

2. U.S., General Accounting Office, *Heart Transplants: Concerns About Cost, Access, and Availability of Donor Organs*, GAO/HRD-89-61, Gaithersburg, Maryland, May 1989, p. 16.

3. Fred Cate and Susan Laudicina, "Transplantation White Paper," The Annenberg Washington Program and The United Network for Organ Sharing, (no location), 1991, p. 4.

4. Telephone interview with Ron Milhorn, Office of Coverage Policy, U.S. Health Care Financing Administration, June 17, 1991.

5. Medicaid Regional Memorandum No. 91-64 to All State Title XIX Medicaid Agencies from the Associate Regional Administrator, Division of Medicaid (Region IX, San Francisco), Subject: Coverage of Organ Transplants under the Medicaid Program, June 21, 1991.

6. Hawaii, *The Variance Report for Fiscal Years 1991 and 1992*, vol. 2, Honolulu, December 1991, pp. 474-75.

7. Ibid.

8. Federal financial participation in the Hawaii Medicaid program is scheduled to decline from about 54 percent in FY1990-91 to 50 percent in FY 1992-93.

9. U.S., General Accounting Office, *Heart Transplants*, pp. 28 and 31.

Responses of the Affected Agencies

Comments on Agency Responses

We transmitted a draft of this study to the St. Francis Medical Center, the Department of Human Services, the Department of Health, and the State Health Planning and Development Agency on January 8, 1992. A copy of the transmittal letter to the St. Francis Medical Center is included as Attachment 1. The State Health Planning and Development Agency submitted a written response which is included as Attachment 2. The St. Francis Medical Center, the Department of Human Services, and the Department of Health did not respond.

The State Health Planning and Development Agency concurs with our recommendations and suggests that it be given the opportunity to develop strategies with the funding departments.

ATTACHMENT 1

STATE OF HAWAII
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January 8, 1992

C O P Y

Sister Beatrice Tom
Chief Executive Officer
St. Francis Medical Center
2230 Liliha Street
Honolulu, Hawaii 96817

Dear Sister Beatrice:

Enclosed are three copies, numbered 15 through 17, of our draft report, *Study of Financing for Heart Transplant Services in Hawaii*. We ask that you telephone us by Monday, January 13, 1992, on whether you intend to comment on our recommendations. If you wish your comments to be included in the report, please submit them no later than Friday, January 17, 1992.

Copies of our report have been transmitted to Mrs. Winona E. Rubin, Director of Human Services; Dr. John C. Lewin, Director of Health; and Ms. Kina'u Boyd Kamali'i, Administrator, State Health Planning and Development Agency. The Governor and presiding officers of the two houses of the Legislature have also been provided copies of this draft report.

Since this report is not in final form and changes may be made to it, access to the report should be restricted to those assisting you in preparing your response. Public release of the report will be made solely by our office and only after the report is published in its final form.

Sincerely,

Marion M. Higa
Acting Auditor

Enclosures

STATE HEALTH PLANNING
AND DEVELOPMENT AGENCY

JOHN WAIHEE
GOVERNOR OF HAWAII
KINA'U BOYD KAMALI'I
ADMINISTRATOR

Mailing Address: P. O. Box 3378, Honolulu, HI 96801 Phone: ~~548-4050~~ 587-0788

January 17, 1992

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OFC. OF THE AUDITOR
STATE OF HAWAII

Ms. Marion M. Higa
Acting Auditor
Office of the Auditor
465 S. King Street, Room 500
Honolulu, Hawai'i 96813

Dear Ms. Higa:

I appreciate the opportunity to comment on the draft Study of Financing for Heart Transplant Service in Hawaii.

I would like to stress the need for the immediate availability of life-saving medical services for Hawaii's people. It should be imperative that the problems of being an island state be considered when developing policies which impact the quality of life expectations of our citiziens. Further, it is necessary to insure that accessibility to these services is provided to all and not only to those who have the means and capacity to seek those services.

Recognition by and professional participation with United Network for Organ Sharing (UNOS) are critical requisites for any transplant program. Hawaii through the efforts of St. Francis Medical Center has an established link via Hawai'i Organ Procurement Organization (HOPO). Again, it is imperative that these services and programs continue to be available to our people and our unique island cultures.

I concur with recommendations provided in the report and suggest that this Agency be afforded the opportunity to develop strategies with the funding departments. SHPDA is set up to provide a ready forum for private and public review, evaluation and assessment of healthcare issues.

Please let me know if there is any way I can be of further assistance to you.

Me ke aloha,

Kina'u Boyd Kamali'i

KINA'U BOYD KAMALI'I
Administrator