

AUDIT REPORT
NO. 71-2
MARCH 1971

AUDIT
OF THE
COUNTY/STATE
HOSPITAL PROGRAM

CONDUCTED BY: HALDI ASSOCIATES, INC.

OFFICE COPY

A REPORT TO THE GOVERNOR
AND THE LEGISLATURE
OF THE STATE OF HAWAII



SUBMITTED BY THE LEGISLATIVE AUDITOR OF THE STATE OF HAWAII

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5. Conducting special studies and investigations as may be directed by the legislature.

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**LEGISLATIVE AUDITOR
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COPY

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March 3, 1971

Mr. Clinton Tanimura
Legislative Auditor
State Legislature of Hawaii
State Capitol
Honolulu, Oahu, Hawaii 96813

Dear Mr. Tanimura:

On behalf of Haldi Associates, Inc., I am pleased to submit herewith our final audit report on the County/State Hospital Program in the Department of Health.

May we express our thanks to you, to your staff, and to the many other people who gave fullest cooperation to us throughout the entire period of this study.

We hope that the recommendations contained in this audit report will significantly improve the capability of the County/State Hospital Program to deliver uniform high-quality health care more effectively and more efficiently. We appreciate the opportunity to have participated with you in this most important effort.

Very truly yours,

HALDI ASSOCIATES, INC.

/s/ John Haldi
JOHN HALDI
President

JH:rb
Enclosure

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Maui County

Kula Hospital

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Kauai Veterans Memorial Hospital

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William Goodhue, M.D.	Member of the Staff
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Management Advisory Council

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Mary Daniels	Director of Nursing

Oahu County

Maluhia Hospital

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February 8, 1971

John Haldi, Ph.D., Project Director
Jerome B. Gordon, Project Manager

PART 1

CHAPTER I

SUMMARY OF RECOMMENDATIONS

\$4,000,000 in general revenue funds for reapplication to other more pressing public needs.

A. Reorganization (Chapter IV)

Create a Hawaii Health Facilities Authority

- . To assume complete responsibility for the County/State Hospital Program.
- . Within two years, to be financially self-sustaining through federal, state and private health plan reimbursement.
- . To be managerially autonomous when it achieves financial self-sufficiency.

Primary benefits of this proposal are:

- . First, it will consolidate managerial functions and decision-making, and thereby establish a more well-defined responsibility center for the effective delivery of inpatient health care.
- . Second, it will maximize currently underutilized potential for greater third-party reimbursements which will make available approximately

B. Policy, Planning, Management and Control (Chapter III)

Several functional improvements should be implemented *immediately*, regardless of the adoption of the reorganization proposal. These remedial measures will have immediate payoff *and* they will also facilitate any subsequent reorganization. The Director of Health should:

1. Establish a standing Policy Committee to develop systemwide policies for the County/State Hospital Program.
2. Assign responsibility for areawide planning for inpatient and outpatient care to the County/State Hospital Program.
3. Assign additional personnel to the County/State Hospital Program to implement the above planning responsibility.
4. Establish countywide hospital systems in all counties.
5. Promote identification, design and

installation of improved managerial and operational controls on a system and subsystem basis (see related Item C below).

Objectives of these recommendations are to (1) establish systemwide policies which will upgrade all county/state hospitals to the highest prevailing level, (2) provide a sound basis for decisions regarding new facilities, (3) achieve more efficient operations and backup administrative capability within each county, and (4) provide a basis for more effective managerial and operational control of the County/State Hospital Program.

C. Information Systems (Part 3, Chapters V-X)

Recommendations concerning information system support for management planning and control are divided into two sequenced plans: Immediate Action and Deferred Action. Each contains several major tasks.

1. *Immediate Action*

- . Upgrade internal administrative and professional personnel capabilities.
- . Exploit existing professional and statistical services.
- . Establish standard reporting

throughout the County/State Hospital System.

The objectives of the immediate action proposals are to

- . Utilize information already in the system more effectively.
- . Develop an internal capability which can implement the deferred action plan.

This immediate action plan does not depend on any of the organization proposals. However, successful implementation is an absolute prerequisite to the deferred action plan.

2. *Deferred Action*

- . Establish an information system pilot project in a major county/state hospital.
- . Extend the pilot project to all other hospitals.
- . Expand scope of original pilot project to encompass all remaining information processing activities.
- . Computerize and expand the pilot project to all hospitals and the County/State Hospital Administration Office.

The deferred action plan will improve management planning and control regardless of the organization structure by truly systematizing *in gradual steps* the entire information handling

function. It will also provide a base for the proposed new organizational structure which, if adopted, will demand more and better information than present capability can provide.

PART 2

CHAPTER II

STRUCTURE OF THE COUNTY/STATE HOSPITAL PROGRAM

A. Introduction and Overview

Part 2 of this report is concerned with various organizational problems related to the County/State Hospital Program. As Chapter I indicated, recommendations concerning the organization fall broadly into two categories: (1) a group of "piecemeal" recommendations in the functional areas of policy, planning, management and control; and (2) a total reorganization plan which has been carefully structured and tailored for the County/State Hospital Program's existing situation.

The basic findings and rationale for these two groups of recommendations are contained in Chapters III and IV. In order to lay a groundwork for the discussion which follows, this chapter contains

- . Brief historical background material
- . A description of the current organization and program.

For those who desire, a considerable amount of

additional information on these subjects is available in Working Papers No. I and II, available in the Office of the Legislative Auditor.

B. Historical Background on the County/State Hospital Program¹

As medical costs began to escalate during the period 1950-65, the three smaller counties of the State of Hawaii were faced with painful decisions concerning the financing of their public hospitals. On the one hand, powerful local political forces opposed rate increases which would have been adequate to hold down mounting deficits; on the other hand, strong forces opposed tax increases. At some juncture the State began assisting the county hospitals with small annual subsidies; these the counties gladly accepted since they provided a convenient "out" that satisfied both opposing local political forces. Thus began a chain of events which eventually led to complete takeover of the hospitals by the State.

Fundamental economic forces continued to escalate medical expenses, and the State's share of total cost continued to grow. Finally, in

¹More detail on the history of the County/State Hospital Program is given in our Working Paper No. I, on file with the Office of the Legislative Auditor.

1965, the Legislature passed Act 97, which declared that public hospitals would henceforth be a State responsibility. At the operating level of the individual hospital the immediate impact of Act 97 probably did not appear particularly significant. The counties continued operating the hospitals while the State paid the difference between total operating cost and reimbursements. During the period of Act 97 (1966-67), the counties continued to provide administrative services locally—that is, purchase orders, vouchers, payroll checks and the like were processed through the county. Under Act 97 the counties ran the hospitals for the State. The State provided no leadership and established very little control over the hospitals. Hospitals were run by Hospital Managing Committees appointed by the County Board of Supervisors. Most important decisions relating to the hospitals continued to be made at the county level.²

In 1967 the Legislature passed Act 203, which moved considerably further in the direction of establishing State control over the hospitals. Under Act 203 (1968-69) various functions began to shift from the counties to the State. Employees were put on the State payroll and were placed under the State civil service

²The hospitals had to look exclusively to the State for money for capital improvements. In the years immediately preceding Act 97, capital improvement money from the counties had been so scarce that even if the State were not especially generous the hospitals probably did not perceive any real change. The hospitals' fiscal 1967 budget was the first one to be reviewed by the Department of Budget and Finance.

system. Similarly, the Department of Budget and Finance (B&F) and the Legislature began to review annual budgets *in detail*. The Director of Health was made the Governing Authority, County Hospital Managing Committees were abolished and, instead, County Hospital Advisory Councils were appointed to *advise* the Director of Health.³ The cumulative effect of this series of events now began to be felt at the local level. In 1969, while the hospitals were operating under Act 203, the Board of Supervisors of Hawaii County passed a series of resolutions, the cumulative effect of which was to place all public hospitals in Hawaii County under a single county administrator or superintendent, thus creating a "Hawaii County Hospital System."

In 1969 the Legislature passed Act 265, which finalized complete State take-over of the hospitals (effective January 1, 1970). Under Act 265 the Director of Health was clearly made the sole "Governing Authority" of the county/state hospitals, with no intermediary council or other body with any authority. He received full authority for establishing and changing rates charged by the hospitals, with the restriction of mandatory public hearings. After passage of Act 265 the Director of Health reaffirmed the

³Certain confusion persisted, however. In February 1968 the Office of the Legislative Auditor stated that "the Act (203) is vague as to the management relationships which were intended between the State and the several counties. This vagueness and absence of specific directions as to the legislative intent has resulted in divergent interpretations of the Act regarding the respective role of the counties in the management of county hospitals" *Status Report on the Implementation of Act 203, Session Laws of Hawaii, 1967* (p. 23).

systematization of Hawaii County. Thus, under Act 265 the County/State Hospital Program now consists of one county hospital system plus a number of relatively autonomous hospitals in the other three counties.

The County Hospital Advisory Councils established under Act 203 were replaced by Management Advisory Committees (MACs), whose official roles are, upon request, (1) to recommend to the Governor a person to become Administrator of the hospital, and (2) to advise the Director of Health. Unofficially they also attempt to influence key legislators and the community.

C. Description of the Current County/State Hospital Organization and Program

1. *Organizational framework.* The term County/State Hospital Program in this report refers specifically to the County/State Hospitals Administration Office in the Department of Health (DOH) and to the eleven Act 97 hospital facilities. In carrying out its primary objective of providing inpatient care, the County/State Hospital Program is impacted on by a broad "system" encompassing a number of organizational entities and other programs. These are shown in Figure II-1. The Legislature, with its traditional separation and independence from the executive branch, has no line relationship with either DOH or the County/State Hospital Program. The Legislature does, of course, deliberate and approve all funding for both operations and capital improvements.

Within the executive branch, State agencies with major impact on resource planning and allocation are the Departments of Budget and Finance (B&F) and Planning and Economic Development (PED). The Department of Social Services (DSS) is a major third party payer to the program by virtue of its position as the financial intermediary for the State-Federal Medicaid program. Certain routine administrative services are performed by the Department of Accounting and General Services (DAGS), and all employees are civil servants under the rules and regulations of the Department of Personnel Services (DPS). Although not shown in Figure II-1, DOH includes several public health, regulatory and service groups that interact with the County/State Hospital Program in the conduct and control of its operations.

In addition to the various organizational entities shown in Figure II-1, a number of other agencies which are external to State government either audit certain aspects of the care provided by the program or impact on the manner in which funds are received by the program.

The organizational and management relationship of the individual hospitals in the County/State Hospital Program (Act 97) is depicted in Figure II-2. The Director of Health is the Governing Authority of all the hospitals. The four MACs shown in Figure II-2 advise the Director of Health in operating matters and recommend to the Governor a candidate for hospital administrator (when a vacancy occurs).

Figure II-1
COUNTY/STATE HOSPITAL PROGRAM—
SYSTEM OF ORGANIZATION AND MANAGEMENT

STATE
LEGISLATURE

EXECUTIVE AGENCIES

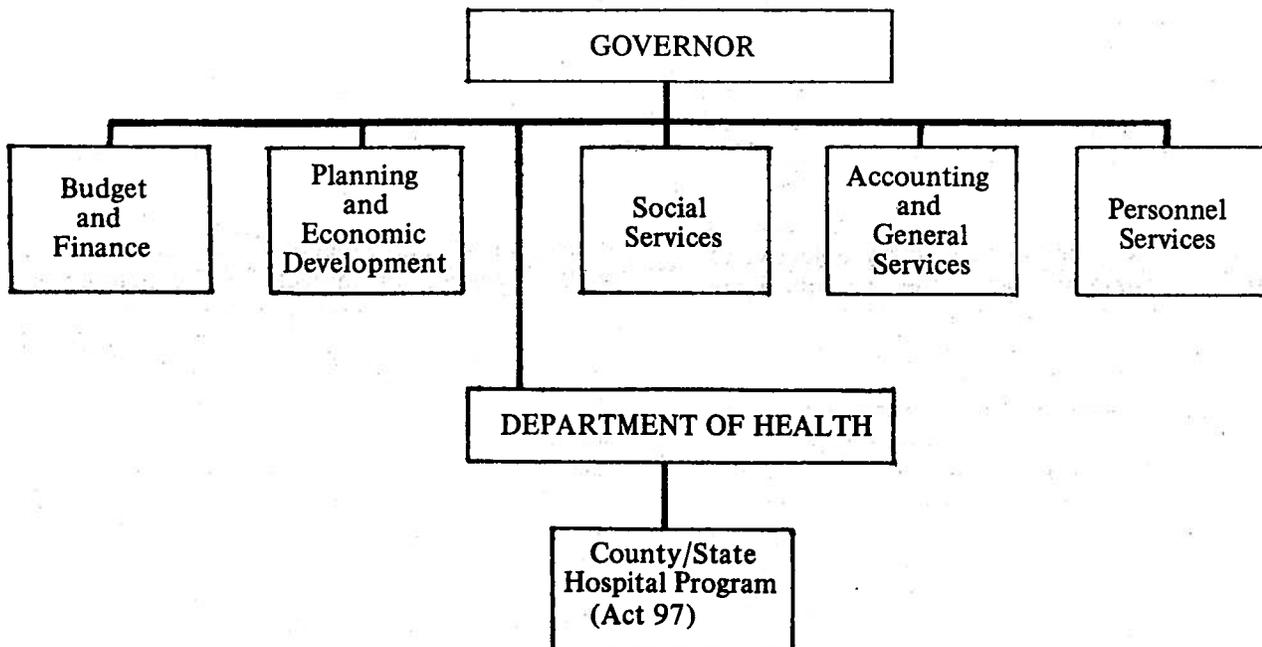
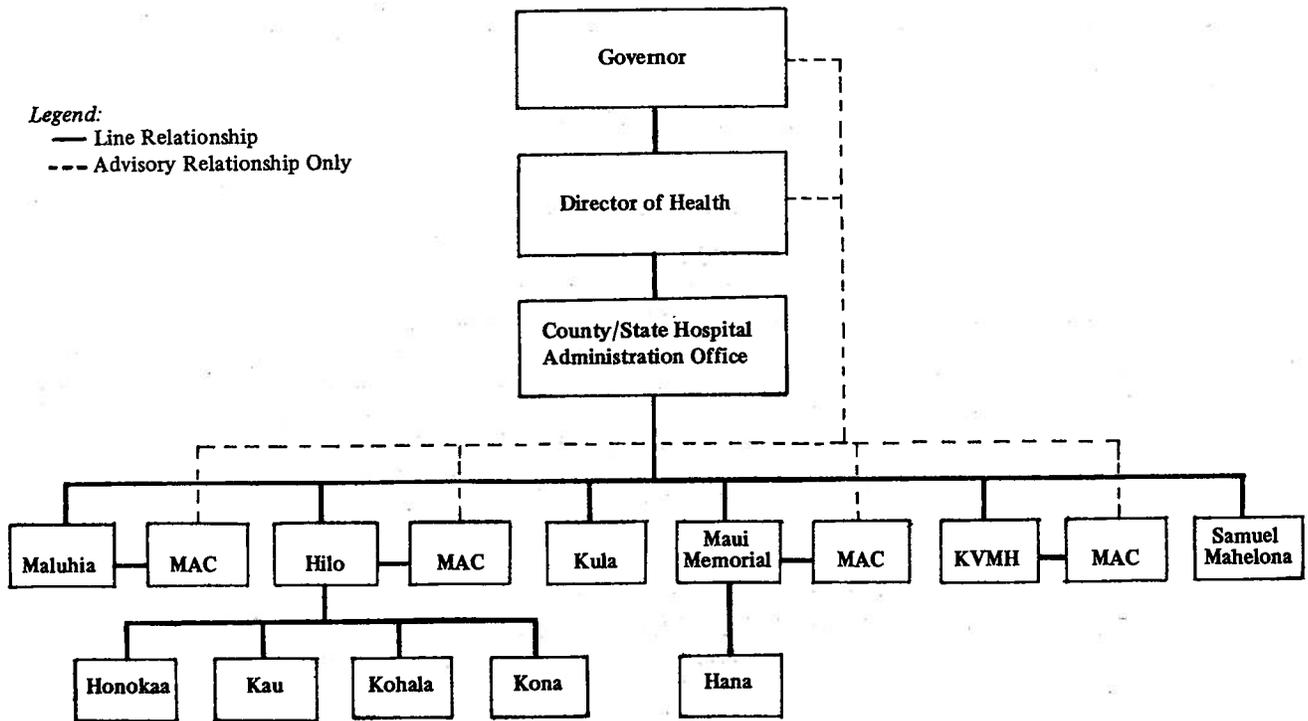


Figure II-2

The Organizational and Management Relationship of the County/State (Act 97) Hospitals



2. *The hospitals.* Act 97 hospital units fall into two groups: (a) the Hawaii County Hospital System, which consists of five operating units at Hilo, Honokaa, Kohala, Kona plus a new facility at Kau which in March or April of 1971 will replace the present overaged hospital at Pahala; and (b) the independent general hospitals, extended care facilities and one emergency care outpatient facility. This latter group includes Maluhia Hospital, the system's largest long-term care facility, in Honolulu; Maui Memorial Hospital, that island's only general hospital, situated at the county seat of Wailuku; Kula Sanatorium, a former State TB treatment facility, is located on the lower slopes of Mount Haleakala on Maui; Hana Diagnostic and Emergency Treatment Center, situated on the eastern tip of Maui County; Kauai Veterans Memorial Hospital (KVMH), a small general hospital situated on the southwestern tip of Kauai at Waimea; and Samuel Mahelona, a former TB sanatorium, located on the northeast coast of Kauai at Kapaa, which has been converted into a psychiatric treatment center.

a. *Range of services and bed capacities.* Table II-1 depicts the range of services and specific bed capacities of all Act 97 hospitals. Overall, close to half (45 percent) of the total capacity (1103 beds) is devoted to long-term chronic care. Slightly over one-third of total bed capacity is allocated for general hospital care requirements. Of the 495 beds devoted to long-term care, 30, 28, and 16 percent are provided by Maluhia, Hilo, and Kula Sanatorium, respectively. In the case of general care beds, Hilo and Maui Memorial Hospitals

combined have over 77 percent of the system's capacity in that category. In the third most predominant category, psychiatric beds, Samuel Mahelona has over half total system capacity, with one-third of the balance at Kula Sanatorium.

From a geographical viewpoint, counties with the largest shares of total bed capacity in the County/State Hospital Program are Hawaii with 47 percent, and Maui with 28 percent. The remaining 25 percent is split nearly evenly between the two Kauai facilities combined and the lone Oahu hospital, Maluhia.

b. *Population served.* Act 97 hospitals constitute the entire supply of beds on the islands of Hawaii and Maui. The two Act 97 hospitals on Kauai constitute about 60 percent of that island's total beds, while the Maluhia facility is but a small fraction (about 3-4 percent) of the total number of beds of Oahu. An estimate of the total population served is shown in Table II-2.

Thus, through its ten hospitals and one emergency/outpatient treatment center, the 1100 beds of county/state hospitals meet inpatient requirements of a significant portion—nearly 20 percent—of Hawaii's resident population. On the islands of Hawaii and Maui, Act 97 hospitals account for 100 percent of all inpatient facilities. On Kauai, the two Act 97 units supply over half of that county's hospital beds.

3. *Funding of hospitals.* Under the

Table II-1
RANGE OF SERVICES
ACT 97 HOSPITALS PROGRAM

	General	TB	Psychiatric	Long-Term	Other*	Total	Percent
Hawaii							
Hilo	172	36	20	140	0	368	33.1
Honokaa	42	0	0	0	0	42	3.8
Kohala	0	0	0	22	4	26	2.3
Kona	0	0	0	52	0	52	4.7
Kau	0	0	0	35	0	35	3.2
Subtotal	214	36	20	249	4	523	47.1
Maui							
Maui Memorial...	113	0	0	0	32	145	13.1
Hana	0	0	0	0	4	4	.4
Kula	6	17	45	80	0	148	13.4
Subtotal	119	17	45	80	36	297	26.9
Oahu							
Maluhia	0	0	0	146	0	146	13.6
Kauai							
Samuel Mahelona	0	12	68	20	0	100	9.1
Kauai V.M.H. ...	37	0	0	0	0	37	3.3
Subtotal	37	12	68	20	0	137	12.4
<hr/>							
Total	370	65	133	495	40	1103	100.0
Percent	34	6	12	45	3	100.0	

*Chiefly obstetrical beds.

State's fiscal management system, some hospitals' receipts go into the general fund and some go into special funds. There are four general fund and six special fund hospitals (how the new Kau facility will be treated has not yet been determined). The general fund hospitals are: Honokaa, Kohala, Kona, and Maluhia. The special fund hospitals are Samuel Mahelona, Kauai Veterans, Hilo, Maui Memorial, Hana Medical Center and Kula Sanatorium. A general fund hospital's operating costs are paid entirely from general appropriations. Hospital receipts are not used for operations, but instead are deposited into the general fund as part of general revenue.

Special fund hospitals pay for their operations from a fund earmarked for that purpose. All receipts are deposited directly into the special fund and are used to help pay the

hospital's costs. The Legislature appropriates an amount to cover the difference between estimated expenditures and anticipated revenues.

Table II-3 indicates the extent to which special fund hospitals cover operating expenditures through direct reimbursements. Of the six hospitals in this classification, only Maui Memorial comes close to being virtually self-sustaining, with 90 percent of total expenses met through reimbursement. Kauai Veterans Memorial and Hilo Hospital follow in second and third positions with 80 and 77 percent recovery, respectively. Hana Medical Center and Samuel Mahelona have been least able to recover a substantial measure of their operating expenses through this method.

D. Concluding Remarks

As indicated in Chapter I, the recommendations concerning organization of the County/State Hospital Program fall into two major groups. One group consists of a number of recommendations in the functional areas of policy, planning, management and control. These recommendations will be discussed first (Chapter III) because they can be implemented administratively and relatively quickly. The second group recommends reorganization of the County/State Hospital Program into a Hawaii Health Facilities Authority (HHFA). Appendix A contains proposed draft legislation to create the authority as well as additional detailed information pertinent to the authority.

Table II-2
POPULATION SERVED BY ACT 97 HOSPITALS

Island	1970 Population*	Percent	Population Served
Hawaii . . .	63,468	100	63,468
Kauai	29,524	60	17,714
Maui	38,691	100	38,691
Oahu	<u>629,176</u>	<u>3</u>	<u>18,875</u>
Total . . .	<u>760,859</u>	<u>18</u>	<u>135,748</u>

*Source: U.S. Department of Commerce, Bureau of Census, final 1970 tabulations.

The recommendations pertaining to the functional areas are independent of the proposal to create a Hawaii Health Facilities Authority, and they should be implemented regardless of whether the reorganization into an authority is adopted. It should be clearly understood,

however, that the recommendations in the functional areas are entirely complementary to the reorganization proposal. To the extent that these recommendations are implemented they will improve and strengthen the authority when it comes into existence.

Table II-3
Special Fund Hospitals Direct Reimbursements
as Percent of Total Fiscal Requirements
(In thousand \$)

Hospitals	Total 1971 Appropriation	Direct Reimbursements	Direct Reimbursements as Percent Total Appropriation
Hawaii			
Hilo	\$ 4,272.0	\$3,281.0	77.0
Maui			
Maui Memorial	2,617.4	2,350.0	90.0
Hana	93.5	28.0	30.0
Kula Sanatorium	1,750.5	840.0	48.0
Kauai			
Kauai V.M.H.	734.0	589.0	80.0
Samuel Mahelona ...	1,025.3	172.8	17.0
Total	<u>\$10,492.7</u>	<u>\$7,260.8</u>	69.2

CHAPTER III

POLICY, PLANNING, MANAGEMENT AND CONTROL—IMMEDIATE ACTION RECOMMENDATIONS

A. Overview

With passage of Act 265 the former county hospitals became in fact State hospitals not only with respect to part of their financing but also implicitly with respect to management and control. The fragmentary, piecemeal transition from county to State has made difficult the tasks of managing the loose collection of individual hospitals and integrating them into a "system." The deficiencies alluded to in this report can in large part be traced to the "pains" of this evolutionary process. Recommendations included in this report are designed to aid in systematizing this group of hospitals and filling the natural void that comes about from severance from one level of government and attachment to another.

Because these hospitals had not previously been viewed as a statewide or countywide *system* of hospitals, the usual systems for accomplishing the management, planning and control functions are non-existent. This includes *system* policy, *system* planning and budgeting, *system* financial management, and *system* managerial and operational control. In addition to this, because State subsidy to the hospitals has been assured since passage of Act 97,

performance measures at the hospital level have not been developed or used to any degree. In other words, there has been little attempt to improve or develop incentives to perform more effectively and efficiently. Poor performance has not been punished nor has good performance been rewarded.

B. Summary of Recommendations

In the preceding chapter a number of pivotal areas of the organization and management of the County/State Hospital Program were diagnosed as requiring immediate remedial action. In this chapter the audit team will address these areas and prescribe specific recommendations for correcting them. These recommendations are directed at immediate implementation and are not constrained by adoption of the reorganization proposals discussed in Chapter IV. Briefly, the major recommendations discussed and analyzed here are:

Policy

The Director of Health establish and appoint 5–7 man standing committee with specific responsibilities, assignments and schedule for developing an initial set of systemwide policies for the County/State Hospital Program.

This policy committee should be established not later than 30 days

after formal acceptance of this audit report.

Planning

Responsibility for areawide planning for inpatient and outpatient care should be assigned to the County/State Hospital Program within 30 days after formal acceptance of this report.

DOH should assign *capability for executing* this planning responsibility to the County/State Hospital Program within 60 days after formal acceptance of this report.

Management and Control

Establish countywide hospital systems.

C. Policy

1. *Principal recommendation.* The County/State Hospital Program should immediately establish an institutional process for initiating, establishing, reviewing, changing, and communicating systemwide policies pertaining to many aspects of operation and health care delivery in the County/State Hospital Program.

To accomplish this, it is recommended that

The Director of Health should establish and appoint a 5-7 man standing committee with specific responsibilities, assignments and schedule for developing an initial set of systemwide policies for the County/State Hospital Program.

This policy committee should be established not later than 30 days after formal acceptance of this audit report.

2. *Available guides for development of policy.* A body of policy has a cohesive effect on any large organization. Good policy is an indication of leadership; it gives direction to the organization. There appears to exist an urgent need for a number of definite, well-thought-out policies to provide the County/State Hospital Program with leadership and direction to fill the existing void. It is not an exaggeration to say that the county/state hospitals are now only a loose federation of autonomous hospital units. The need for consistent policies throughout the County/State Hospital Program is probably the single most important missing link for organizing the county/state hospitals into a true statewide system.

It should not be inferred from the preceding that the hospitals are run without any guidelines whatsoever. The County/State Hospital Program has adopted and uses the

JCAH¹ manual as a policy guide for each individual hospital. In view of the apparent difficulty which DOH has in issuing formal written policies, it is indeed fortunate to have such a ready-made policy package available.

The JCAH manual alone, however, is not adequate for organizing and promoting uniformly high standards within a statewide system of hospitals. This policy manual is intended for virtually any kind and size of hospital—public, private, government, veterans administration, etc.—offering a narrow or wide range of services. In effect, the JCAH guidelines establish a sort of “minimum threshold” which allows for wide latitude—much more latitude than the State deems desirable—in standards *between* hospitals. In sum, the JCAH manual provides *necessary* policy guides for individual hospitals but these do *not* constitute *sufficient* policy guidelines for *the statewide system of hospitals*.

3. *Existing policies.* DOH has established virtually no systemwide policies or standards to assure that the County/State Hospital Program will meet any kind of *statewide* minimum standards for delivery of institutional health care. Such DOH policies as do exist deal almost exclusively with minor administrative “housekeeping” matters and *not* with statewide standards or goals of the system. Solutions to problems or issues that do arise (and for which

policy is needed) seem to be typically handled by the Director of Health writing an individual letter to the individual hospital *with no formal communication of this “policy” to any other hospital in the system.*

A letter from the Director of Health to the Administrative Director of the Hawaii County Hospital System offers a good illustration of important policy being set by “rapier-like” thrusts. On October 25, 1969, in anticipation of Act 265 becoming effective on January 1, 1970, the Director of Health wrote

“This is to inform you that it is the intention of the Department of Health to continue the Hawaii County Hospital System in its present status.

“By this I mean that the hospitals operated by the County/State Hospitals Administration Office on the Island of Hawaii will be a system of hospitals operated by a superintendent. He will also function as the superintendent of Hilo Hospital and will be assisted in his management duties at the branches (rural hospitals) by local managers.

“The system’s manager or superintendent will be responsible for reviewing all budget and manpower submissions from each of the units in the system. He will be responsible for requisition review, purchasing, personnel actions, and the provision of consultation services to all system units. He will be

¹Joint Commission on Accreditation of Hospitals.

assigned such other duties as the Director of Health deems appropriate and will be authorized to delegate as much of his authority to his system administrators as he deems appropriate.

"He will meet with the Management Advisory Committee, providing them with appropriate meeting space and clerical assistance.

"It is our current intention to treat the Hawaii County Hospital System as a single hospital with satellites. Further, it is our intention to suggest that a single Management Advisory Committee be appointed for the system."

It might appear from this letter that the Director was setting a policy of countywide systems but nothing concerning this policy position was communicated *officially* (i.e., in writing) to any administrator of any other Act 97 hospital. Any communication to them was "through the grapevine." Although such an informal process may be effective in "putting out fires" on an individual basis, it is not an efficient system for running large government agencies. Indeed, as the already wide span of control of the Director of Health continues to increase, all time spent on a number of *individual* problems which could be covered by a single policy is time not available for such important management functions of planning, innovating and appraising. Additionally, solving problems quickly and on a crisis basis is risky; policies should be carefully studied prior to the implementation.

Proper overall direction cannot be given under the existing organization structure of the Department of Health for one basic reason: it is too large. In 1965, the Director of Health had a total of 1,458 personnel conducting activities and 9 programs to be concerned with. By 1970, as a result of growth in the already existing programs plus the addition of the County/State Hospital Program, the total complement of departmental personnel increased by over 218 percent to 3,178 and the number of programs had expanded to 10. The net result has been an absolute decline in the Director's effectiveness due to the widening of the span of control and a reduction in the amount of time which he has available to devote to any one program. A number of important issues and problems relating to the County/State Hospital Program demand the attention of the "Governing Authority"—i.e., the Director of Health—and seemingly cannot be delegated. Thus, the current organizational structure is not conducive to effective managerial decisionmaking for the County/State Hospital Program.

The prevailing practice in the policy area is at best a stop-gap process. In the short run it may help to cope with the vacuum left by the severance from close-at-hand county decisionmaking and control, but over a longer run there must be more direction and leadership from a systemwide or statewide source.

4. *Policies should be written.* "Oral tradition" in a large organization such as DOH is both undesirable and ineffective. In view of the fact that the County/State Hospital Program is

directed, guided and controlled from scattered and fragmentary factors such as (a) specific State agency rules and procedures; (b) State statutes; (c) DOH letters; (d) medical staff rules and preferences; (e) elected official preferences; (f) federal government rules; (g) JCAH policy manual; (h) policy and procedure statement signed by the State Director of Health and the Governor; and (i) traditions emanating from former County Board of Supervisor Managing Committees and County Hospital Advisory Councils; it is important that the Director of Health clarify as many matters as possible, not add to the confusion. As a minimum improvement these fragmentary elements should be codified and communicated throughout the organizational components of the system. Top priority should be given to this area.

5. *Areas where policy is needed.* Some suggested areas in which systemwide policy should be formulated are as follows:

Rates – Individual hospital rate schedules now used cause different prices to be charged for the same type of service within the County/State Hospital Program. Delivery room rates vary as much as 90 percent.

Quality of Care – Professional nursing care per patient per day varies widely from hospital to hospital thus raising doubts about the quality of care one gets in one institution as compared to others.

Quantity of Care – Number of beds available for acute or term care (per 1000 population served) varies among the county/state hospitals largely due to historical factors. Current planning criteria for facility development is desirable.

Personnel Management – Staff capabilities for managing personnel matters vary widely among county/state hospitals. Provisions for supplemental administrative support are particularly evidenced in such areas as training and supervisory practices so as to promote effective utilization of manpower resources.

Relationships among Hospitals – Communications between hospitals in the County/State Hospital Program are unstructured and very limited in scope.

Range of Services – Again, historical development during pre-State takeover has influenced the range of services available to local patients. To what extent should the State make inpatient and related medical services available, and how do current services tie-in to the overall health care delivery plan of the State?

Staffing Patterns – Staffing patterns vary among hospitals largely due to the lack of common guidelines.

Receivable Collection Procedures — There are no policies and procedures to assure that all hospitals are consistent and active in their efforts to collect past-due accounts.

Purchasing — Each hospital effects its own purchase of supplies from vendors (some utilizing the same vendor) without fully exploring cost-saving potentials as through consolidated purchasing.

Managerial Duties — Although hospital administrators are under one jurisdiction now, in contrast to the period when counties operated the subject hospitals, there is need to further clarify the roles and relationships of local administrators to the statewide County/State Hospital System and, particularly, the relationship to other local health services of the Department of Health.

Advisory Committees — While Act 265 which, in part, provides for the establishment of management advisory committees, is of general applicability, it has been subjected to different interpretations thus causing uncertainty among these committees as to their roles, responsibilities and duties.

Utilization Review — Although utilization reviews are intended to

promote some consistency in the kinds of medical care which ought to be provided to patients of similar circumstance, data upon which such decisions are made differ from hospital to hospital, thus negating meaningful comparisons.

Staff Privileges — Each hospital applies different standards for granting medical staff privileges, thus effectively resulting in instances where a medical practitioner may enjoy staff privileges in one hospital but not in others notwithstanding the fact that all county/state hospitals are technically governed by the same authority.

Planning and Budgeting — The budgetary process as now practiced does not result in a cohesive program budget. Rather, it merely results in the consolidation of individual hospital requests. If program budgeting is to become the rule, then explicit policy statements and directions as to program goals, objectives and strategy need to be developed and communicated.

6. *Membership of the County/State Policy Committee.* In view of the virtual nonexistence of statewide policies for governing the County/State Hospital Program, the task of filling this void is an imposing one. It would require concerted and continual attention which

the Director of Health and his immediate staff cannot accomplish alone. Many viewpoints need to be listened to and considered in development of sound policies. Because policy should be anticipatory, and not wait for a crisis to develop, and because *responsibility for initiating* system policy should be fixed, it is therefore recommended that a standing, working committee (a County/State Hospital System Policy Committee, or "Committee") of 5-7 members be charged with responsibility for initiating policy for promulgation by the governing authority on an ongoing basis. This committee should report to the Administrator. The committee should have at least 5 members, in order to have broad representation, but no more than 7, in order to be an efficient working committee. The Director of Health has substantial resources at his disposal to draw on in forming such a committee. These include

- . Members of the Board of Health
- . Representatives from the management advisory committees (MACs) of the various hospitals
- . Hospital administrators
- . Medical staff members
- . DOH planning and research specialists.

D. Planning

1. *Summary of recommendations.* With the aid of various consultant reports on

adequacy of facilities, the hospitals are generally doing an adequate job of planning *for their existing facilities*. Vision of the individual hospital administrators tends, however, to be focused on their existing facilities serving their existing community, patients or clientele. On a total countywide basis someone needs to plan for presently nonexistent facilities for non-patients—i.e., people or growing communities not adequately served by existing facilities. For this reason the principal recommendations in the functional area of planning relate to *areawide* planning.

- . *Responsibility* for areawide planning for inpatient and outpatient care should be assigned to the County/State Hospital Program within 30 days after formal acceptance of this report.
- . DOH should assign *capability for executing* this planning responsibility to the County/State Hospital Program within 60 days after formal acceptance of this report.

2. *Areawide planning.* From approximately 1963 to 1968 areawide (countywide) planning was performed capably by the *ad hoc* Health Facilities Planning Council of Hawaii which, since 1968, has been defunct. Areawide planning for inpatient and outpatient care is extremely important for overall long-term effectiveness of health care delivery. Lack of this kind of planning can have serious consequences in the form of risks of constructing health

facilities which are untimely, illogically situated geographically, and which result in expensive, unneeded capacity.

Health facilities become increasingly expensive each year. For example, the current cost of providing one acute or general care hospital bed is estimated to lie somewhere in the range of \$60,000–\$70,000² plus the annual cost of staffing and maintenance. The Legislature and the public want and deserve adequate health care facilities. Because of the high cost, however, it is important that such facilities not be overbuilt. It is important, therefore, to have a carefully considered plan which will indicate when existing facilities are becoming inadequate and, at the same time, will serve to help avoid overbuilding expensive, unnecessary bed capacity.

At the present time neither the County/State Hospital Program, DOH, nor any other organization is engaged in this type of needed planning activity. Local efforts by interested community leaders, in some cases, may help fill this gap. However, such efforts are irregular, unreliable and are always suspect of being highly parochial. It is therefore recommended that the Director of Health assign this important responsibility to the County/State Hospital Program on a permanent, continuing basis, as soon as possible, and in no case later than 30 days after formal acceptance of this report.

²As reported to us by the Hospitals Executive Officer of the County/State Hospital Administration Office.

It should be possible for staffing requirements for this assignment to be readily filled by reallocating one or two existing positions in DOH to the County/State Hospital Program. This should be done within sixty days after formal acceptance of this report.

3. *Operating and CIP budgets.* The existing practice of initiating both operating budget and capital improvement requests within individual hospitals is good management practice. The present *systemwide* budgetary review of these requests at the departmentwide level, however, is perfunctory at best and merely involves the compilation and consolidation of hospital budgets. Within the County/State Hospital Program there should be *systemwide* analysis and ranking of priorities for the programs in the budget by the Administrator. To force this, B&F should provide tentative budget allocations for the County/State Hospital Program so that budget making can proceed under realistic financial constraints. Ranking of priorities and tradeoffs within the system should work toward optimum system performance in terms of more uniform system standards, policies and coordinated objectives. If necessary, the managerial authority of the Administrator should be strengthened to make the priority ranking process effective.³

It is recognized that no additional manpower will be required because the budget

³The Administrator will probably need more relevant information than is now provided to make the priority ranking process possible. This is discussed in Part 3 of this report.

review is intermittent (biennial) and can only be made by the Administrator himself.

E. Management and Control

For expository convenience the management process is divided here into two parts: (1) *managerial control*, which assures that resources are obtained for meeting objectives and used effectively and efficiently in accomplishing the objectives; and (2) *operational control*, which assures that specific tasks are carried out effectively and efficiently.⁴ These two parts will be discussed in order. Principal recommendations relating to management and control are:

- More of the process of assuring that resources are being used to meet objectives should be built into the County/State Hospital Program and less in external agencies.

- Better assurance that resources are used effectively and efficiently should be accomplished through improvements in the management information system.⁵

⁴Anthony, Robert N. *Planning and Control Systems: A Framework for Analysis*, Division of Research, Graduate School of Business Administration, Harvard University, Boston, Mass., 1965, pp. 17-18.

⁵Specific recommendations relating to improvements in the management information system are contained in Part 3, Chapters IX and X.

1. *Managerial control*. Control over the amount and nature of resources available to the County/State Hospital Program now resides chiefly at State level and primarily outside the County/State Hospital Program (B&F, PED, DPS, Legislature, etc.). The audit team feels that the County/State Hospital System could be managed more effectively and efficiently under certain conditions (e.g., self-financing) if detailed decisions over these resources (manpower, money) were made *within* the County/State Hospital System. Reorganization alternatives for doing this are included elsewhere in this report.

The placement of such decisions within the county/state system should be accompanied by a management information system which would, incidentally, be of great value even in the present situation in which the making of optimum decisions by the responsible agencies is thwarted by lack of adequate, relevant information.

Manpower control systems, such as that administered by B&F, are justified for control when there exists no system of internal discipline within the "controlled" organization. Conversely, when effective managerial and operational control systems do exist within an organization, external controls are less necessary. Furthermore, it should be fully recognized that detailed restrictions such as those imposed by B&F represent control only in the most ordinary sense of "to curb, to enforce, to forestall, to hinder, to inhibit, to restrain or to watch."

All too often the current B&F type of detailed control is actually more dysfunctional than goal congruent—that is, it causes *less effective* and *less efficient* performance as related to achievement of final program objectives. Exercising control at a fine level of detail, as is now done, frequently amounts to management *in absentia*.⁶ At times the existing budget review/control process seems to obscure completely program objectives and accomplishments, whereas, in fact, this is where attention most needs to be focused.⁷ Development and implementation of the PPB system will hopefully accomplish much more in this direction.⁸

This above discussion should not be interpreted as meaning that central controls are

⁶Looked at in the large, the whole budget-control situation is somewhat paradoxical. Each year (henceforth to be every two years) the Governor forwards to the legislature a recommendation for increased appropriations, but with retention of all the existing controls (this is implied). However, if all program managers were as inept or dishonest as the existing control process implies, the Governor should recommend that either (1) all program managers be fired, or (2) most programs be drastically reduced.

⁷Stated alternatively, attention needs to be focused on the nonexistent statements of objectives and program non-accomplishments. It is probably too strong a statement to say that the existing control process perpetuates conditions of non-policy, nonplanning, nonperformance—but it certainly does little to expose and terminate these situations when they exist.

⁸B&F should identify its own objectives and ascertain the extent to which either (1) the justifications which they require, or (2) their detailed review and approval process contribute to or are necessary for achievement of their major fiscal objectives.

unnecessary. Quite the contrary; controls are both necessary and desirable. *It should be recognized, however, that there exist other control systems* which (a) do more to assure that resources are used effectively and efficiently to accomplish desired program objectives and (b) provide all the controls and safeguards necessary to assure that fiscal and manpower limitations are not exceeded. In lieu of the existing system, for example, *aggregate* manpower controls can be developed which would decentralize the management process down to the level of the County/State Hospital Program. An average grade level or an average salary level plus a ceiling on the number of employees within the County/State Hospital Program would constitute effective *aggregate* controls. Decisions about individual positions, grade and salary within grade could be made by the management of the County/State Hospital Program, *with freedom to change, reallocate or redesignate positions so long as aggregate controls are not exceeded.*

Considering the present paucity of information, standards, performance measures, etc., available to B&F and to appropriations committees, the risk of manpower resource misallocation couldn't be much greater using aggregate controls rather than detailed specific ones. On the contrary, an information system properly used by the management of the County/State Hospital System offers hope of providing the internal discipline which would justify aggregate manpower controls rather than detailed specific ones. Substitution of one control device for another is not the same as

relinquishing control. Furthermore, substitution of one *type* of control for another *type* may indeed improve effectiveness and efficiency.

Even under the assumption that B&F manpower controls were relinquished completely (that is, in aggregate and in detail), this would not represent "loss" of a significant amount of total *management* control. Many management functions of the county/state system are largely in the hands of forces external to the system. JCAH (through its accreditation process), DOH Hospital and Medical Facilities Branch (through its certification process) and the Social Security Administration (through Medicare facility approval and utilization review requirements) are illustrative of these forces.

State governments in general have not developed rational overall managerial and operational control processes. Hawaii is no exception. Fiscal control through detailed line-item, object-class appropriation and allotment limits, coupled with strict manpower controls on each and every position, still are the rule. As the PPB system begins to take root and develop in the executive branch, and as focus is increasingly turned on objectives and accomplishments, the shortcomings of the existing control process will become increasingly apparent.

At present the job of assuring that resources are used *effectively* is done *nowhere*, neither within the system nor outside the system, nor are measures and standards for performance evaluation being developed for the

County/State Hospital Program. This crucial problem is endemic to the industry. In addition, no resources (manpower, money) in the County/State Hospital Program are presently assigned to the task of developing and/or using such standards and measures.

The Administrator should be responsible for assuring that resources are used effectively and efficiently within the County/State Hospital System. He should develop managerial controls and should assist hospital administrators in developing operational controls. Virtually nothing has been done in these areas because (a) the transition from county to State has been fragmentary and piecemeal and welding the loose federation of autonomous hospitals into a system has therefore been slow to evolve; and (b) there has been no *incentive* for development because the State Legislature has guaranteed financial solvency to each of the individual hospitals and, hence, to the system.

Management controls for the Administrator should deal in summaries, aggregates and totals. Operational control by hospital level administrators and managers deals with specific items, tasks, actions and transactions. For example, the Administrator's management control system should measure performance of the system as a whole, of the counties, and the relative performance of each hospital as a complete unit. Operational control systems, on the other hand, focus on tasks such as the scheduling and providing of specific health care for patients. Management control at the Administrator's level should largely emphasize

effectiveness in meeting system objectives; *efficiency* in meeting objectives is accomplished at operating, or hospital, level. Recommendations for alleviating managerial and operational control deficiencies are included in Part 3, Management Information Systems. Substantial improvement in both managerial and operation control should result from implementation of the reorganization recommendations in Chapter IV.

2. *Operational control.* Assuring that specific tasks are carried out efficiently in hospital units the size of those in the county/state system to a large extent is and must be a function of personal supervision by managers (chief of medical staff, chief nurses, chief pharmacist, housekeeper, engineer, etc.). Operational control in the county/state hospitals is concerned with tasks such as the admission, diagnosis, treatment, feeding, and care of a patient. Operational control tends to be governed by rules and procedures which have been developed. Repetitiveness and uniform, standardized routines characterize this function. The time span is day-to-day and week-to-week.

In small entities the manager's closeness to and, indeed, participation in the performance of tasks make the need for formal reporting and controls for motivational purposes less necessary. Still, the conscientious manager should like to know how his group's performance compares with that of other similar groups or with some established standard.

An analysis of variations from an established standard can provide clues for improvement of performance. At present, managers have no performance measures (e.g., costs, standards, etc.) which indicate how efficiently and effectively their tasks are being accomplished.⁹ The result is that good performance is not rewarded nor is poor performance punished. Improvement of performance therefore is not encouraged as much as it might be.¹⁰

Improvements in the operational control area will result in economies and more efficient use of resources. Within the County/State Hospital Program there appear to be many areas where savings might result from either countywide or statewide consolidation of functions, as opposed to having each hospital operate totally independently. For example, centralized purchasing of certain basic,

⁹Some appropriate concepts and measures for the County/State Hospital Program might include costs related to standards, costs related to volume, analyses of activity unit-cost increases, identification of fixed and variable costs, committed costs and managed costs.

¹⁰It should be recognized that performance measures alone will not produce results—depending on circumstances they may only measure and reveal nonresults. It takes managers to produce results, and better managers make a system provide better results. Management development courses and seminars would be useful and important in sharpening the management perspective, emphasizing the economic goal of efficiency and stimulating managerial personnel in the County/State Hospital Program to use the information and control system. What is needed is training in *management*, not in technical matters such as nursing technique, proper use of technical equipment, etc. To our knowledge training in *management* has been almost totally neglected in the County/State Hospital Program. Details of a recommended training program for management and information systems are included in Part 3, Chapter IX.

high-volume-usage supplies might result in a number of economies. In order to achieve these savings it is not necessary that a new purchasing staff be formed for the system. Some consolidation of the purchasing function promises to be more efficient than the present system in which each hospital unit does all of its own purchasing. Instead, the larger hospitals could perform this service for each county or for the entire system with little or no addition of clerical and administrative staff.

Besides more centralized purchasing of drugs, medicines, supplies, and services, it appears that less than optimum efficiency in the form of cost economy is due to separate functions at each hospital for:

- . Non-standard forms, reports, and records (lack of economy in printing and duplicating costs).
- . Laundry service (Mahelona and Kauai Vets are now initiating a consolidation of this function).
- . Pharmacy function (Hawaii County has accomplished a rational consolidation here).
- . Laboratory, radiology, physical therapy, occupational therapy, and possibly central supply functions.
- . Dietition function, including acquisition of food and infant formulas.

Hawaii's geographic peculiarities need not obstruct *economizing* actions such as those suggested here.¹¹ Where geographic island separation prevents complete systemization, consolidation can still be done on each island. As indicated above, some desirable consolidation has been or is in the process of being done. The audit team suggests, however, that the Administrator's office should provide more policy direction and leadership in this area.

F. County Systems

Chapter II presented the historical development of the County/State Hospital Program and resulting conflict vis-a-vis the matter of centralized control versus local autonomy. Local autonomy can be productive or deleterious depending upon the way in which it manifests itself. On the one hand, local control may evidence nothing more than parochialism of vested interests. On the other hand, local autonomy in which subordinate units function as effective *responsibility centers* for decisionmaking can be quite productive and useful as a management incentive.

¹¹At least one bank in Hawaii provides an example of how a multi-island information system can be rationalized with a little creative ingenuity. This bank does *all* its customer deposit accounting on computers at the largest branch. Information for doing this—all on standard *system* forms—is flown from the other islands daily.

It must be recognized that many of the hospitals in the County/State Hospital Program are too small to attract or support an adequate managerial staff. In fact, even the two largest hospitals have to depend upon a relatively thin layer of management expertise. The result is that some hospitals do not have, and could not be expected to have, a trained hospital administrator. Others have but one or two key people who, if they resign or retire, leave an almost total void in the managerial function. It is possible to overcome many of these shortcomings and provide additional managerial *backup and depth* by welding all the hospitals in a county into a single countywide system. This can be accomplished within the existing structure and without any additional personnel.

County systems also make sense in terms of the relative geographic isolation of the neighbor islands from one another, and the necessity to have day-to-day operational decisions made in an expeditious manner. As suggested in the preceding section, countywide consolidation of many functions can frequently result in more efficient operation. The Hawaii County Hospital System is a good illustration of a managerial unit with sufficiently delegated responsibilities for effective management and more efficient operation.

County systems composed of an integrated network of general acute hospitals plus extended care and outpatient facilities, with one leading medical center for specialization, appear to be most advantageous for small counties with fractured and limited health care resources.

When one hospital is properly delegated responsibility for serving as the administrative and management center for the county system, it shortens the lines of control and properly aligns management responsibilities. The ultimate product is a more effective decisionmaking unit with responsibility (and, hopefully, incentive) for providing better countywide health care delivery in both an effective and efficient manner.

For these reasons, the audit team recommends the *immediate* designation of county hospital systems for each of the neighbor islands. It is further suggested that the lead general acute care hospital be designated the County System Administrative Office and the current hospital administrator be given the dual responsibility of County System Administrator.¹²

G. Management Advisory Councils

The Management Advisory Councils established under Act 265 for each general acute care hospital have a confusing and somewhat vague set of advisory responsibilities. The Director of Health has wisely realized their potential and has tried to keep them broadly informed about and involved in hospital

¹²During the period 1963-1968 the now defunct Hospitals and Health Facilities Planning Council of Hawaii strongly recommended that county systems be established. See Working Paper No. 1 on file in the Office of the Legislative Auditor for more details.

activities. In some instances they have assisted in areas beyond their basic statutory responsibility of advising the Governor on selection of the hospital administrator. Nevertheless, the MACs' *official* responsibilities are peculiarly narrow in the sense of simply passing upon the appointment of one middle-management-grade civil servant.

The audit team recommends that the Director of Health officially request the MACs to assume responsibility for advising him about all Act 97 facilities in their respective counties. This would only condone what is already a *fait accompli* in the County/State Hospital Program. Members of MACs who were interviewed showed a surprising depth of knowledge and verve in pursuing matters relating to the health care needs of their fellow citizens. It would be a disservice to the talents of these public spirited citizens if their expertise were not applied to countywide problems, rather than limited to the scope of one individual hospital.

Second, it is suggested that the MACs be given additional powers to advise on the overall development of countywide policies and management problems. Additionally, the MACs might be asked to assist in holding public hearings and relieve the Director of Health of some of this burden.

H. Concluding Remarks

This chapter has presented several recommendations for immediate

implementation in the areas of policy, planning, management and control. These recommendations can be implemented administratively and relatively quickly. Each recommendation will serve to strengthen and improve the present County/State Hospital Program. In addition, the prompt execution of these recommendations will also lay a firm basis for transition to the proposed form of organization presented in Chapter IV (if that recommendation is adopted).

CHAPTER IV

HAWAII HEALTH FACILITIES AUTHORITY PROPOSAL AND ANALYSIS

A. Summary of Recommendations

The audit team proposes the establishment of a Hawaii Health Facilities Authority (HHFA). This Authority is to have complete responsibility for the present Act 97 Hospital Program. The Authority will be attached to the Department of Health (DOH); however, it will act independently of the DOH. The Director of Health will be an "ex-officio" non-voting member of the Board of Trustees of the HHFA.

The program will be made financially self-sufficient through a combination of changes, the two most important of which are:

- . Substantial increase in fees
- . Extending Medicaid coverage to mental patients in the county/state hospitals.

As each county achieves financial self-sufficiency, it will be free of virtually all encumbering requirements of various State agencies. The Authority will then be self-sustaining and self-managing.

The HHFA will have a nine member Board of Trustees appointed by the Governor with the advice and consent of the Senate. At least one member of the board is to be selected from each of the neighbor islands. The board

- . Will act as the "Governing Authority" for all county/state hospitals.
- . Will hire a full-time general manager who, with a small permanent staff, will be responsible to the Board of Trustees for managing the hospital system.

B. Introduction

1. *The authority concept, generally.*
Although public hospitals in Hawaii have always been line units of county or state government—and thus have been directly subject to the political process—there does exist within the State of Hawaii a number of precedents for

removing activities from the direct political process and placing them under an authority-type arrangement. The Board of Water Supply and the Hawaii Housing Authority are but two ready examples of quasi-independent, government-sponsored authorities supplying services to the public. Within the health field there is also precedent for this proposal. For example, in an attempt to run its hospitals in a more business-like basis, New York City recently turned over the operation of its hospitals to a newly-formed New York City Health and Hospitals Corporation.

The *raison d'être* for authorities is well-known. When they are properly created and charged with the right goals and missions, authorities speed up, simplify and rationalize the decisionmaking process. This, in turn, gives them a capability of supplying those services which they provide more efficiently and more effectively. This is exactly what is desired from the County/State Hospital Program, and this basically is why an authority-type organization is recommended.

Authorities generally possess one very important characteristic which is currently missing from the County/State Hospital Program. Namely, authorities are usually financially self-sufficient by virtue of fees, tolls or some other form of reimbursement for services rendered. It is by virtue of this fact that authorities earn their right to autonomy from the usual governmental controls on expenditures, personnel, etc.

Better understanding of the basic concept underlying this recommendation is achieved by dichotomizing the health care system in the usual economic terms of supply and demand. Or, translating supply-demand into terms specifically related to the hospitals, there are "suppliers of service" and "consumers of service." Broadly speaking, the essence of this proposal is (1) to remove the State-operated suppliers of service (i.e., the hospitals) from the political process and operate them in a businesslike manner in the best interests of the patients and the communities which they serve; and (2) to focus all political interest in health care on the consumers of service (i.e., various target groups, such as Medicaid recipients, the working poor, etc.).

Invariably the purpose of placing any governmental activity under an independent authority is to improve overall efficiency and effectiveness. In general, authorities¹ are appropriate when the mainstream of the political process is detrimental to continuing efficient operation of an activity which could and should be run in a more businesslike manner. An authority is a common governmental device for insulating certain management decisionmaking areas from the political process.

¹Or public benefit corporations or commissions or whatever they may be called.

It would be extremely naive, however, to think that the political process is all bad, or that independent authorities are all good. Authorities can have weaknesses as well as strengths. Typically, an authority is given rate-setting power and monopoly over some important sector of public service. Once the authority becomes firmly established on a self-sufficient basis, it can have substantial economic power. In fact, the more businesslike and efficient it becomes, the greater is its power. Appropriate controls must therefore be built into an authority's initial charter so that the public interest will be the authority's paramount interest and will thus be safeguarded at all times. In creating an authority, one must therefore steer a careful course between the Scylla and Charybdis of too much and too little insulation from the political process. In other words, some insulation from the political process is probably good but too much insulation may in time be just as bad if proper safeguards are not provided. The particular recommendations made here have been designed to steer such a course.

2. *Alternatives considered.* During the course of the audit team's evaluation of the County/State Hospital Program, a number of organizational alternatives were analyzed such as the following:

a. Keep the program within DOH, but expand its area of discretion over resources and services (contingent on greater self-financing).

b. Move the program to another agency of State government (DSS, in particular, offered

itself as the only feasible candidate among existing departments).

c. Make the program a separate department, on a par with DOH or DSS.

d. Repeal Act 265 and revert to Act 203 status, or some modified Act 203 status.

e. Repeal Acts 265, 203 and 97 and give the hospitals back to the counties, along with all managerial and financial responsibility.

Under the last two alternatives, "d" and "e", it would not be possible to achieve the basic recommendations discussed in Chapter III, for there could be no statewide system, no statewide policies or standards, nor any systematic upgrading in areas of greatest need. Moreover, the audit team found no evidence to indicate that the same local political forces which in the past were so effective in preventing adequate rate increases would be any less effective in the future if either of these two alternatives were adopted. Thus, under alternative "d" the State would be faced with an annual subsidy demand, but with even less control than now. It is politically naive to think that any state government will continue to give any activity a continuing substantial subsidy without subjecting that activity to the same control which the state imposes on regular government activities. For these reasons, alternative "d" was not considered feasible. Under alternative "e" the counties would be faced with the same subsidy demand, which they could ill afford; it too was therefore rejected as infeasible.

Alternatives "a", "b" and "c" obviously do not present the problems ascribed to alternatives "d" and "e". It is conceivable that under the former three alternatives the program might achieve most or all of the *basic* management improvements discussed previously; i.e., standardization of policy, upgrading of standards, financial self-sufficiency, etc. However, each of these alternatives has other important drawbacks. Not one of these three alternatives, for example, gives the County/State Hospital Program the kind of decision-making latitude which any large enterprise should have in exercising managerial control.

Alternatives "a" and "b" do nothing to shorten the span of control or the lines of communication. Moreover, as a line division of a line agency of State government, whether it be the DOH or DSS, the County/State Hospital Program would remain subject to the usual budgetary channels and resource allocation constraints as prevail now to restrain managerial authority and confuse program responsibility.

Alternative "c" does shorten the span of control and the lines of communication *to a degree*, but not so much as does the authority concept. As a line agency, it would be subject to detailed central executive control as are other State executive departments. This alternative also has the distinct disadvantage that, under the State Constitution, one more agency of the allotted twenty would be unavailable for any future reorganization elsewhere in State government.

Alternatives "a", "b" and "c" were therefore rejected in favor of the authority concept.

3. *Description of the proposed "Hawaii Health Facilities Authority."* The remaining sections of this chapter discuss the salient features of the authority concept as applied to the proposed reorganization of the State/County Hospital Program:

- . Board of Trustees
- . General Manager
- . Proposed Funding Status
- . Financing of Operations
- . Financing of Capital Improvements.

Appendix A contains the proposed statutory provision to effect the recommended reorganization plan. Explicit details of this proposed reorganization will be found there.

C. Board of Trustees

1. *Terms and conditions of office.* It is recommended that no later than nine months prior to the effective date of the reorganization (July 1, 1972) the Governor appoint, with the advice and consent of the Senate, a nine member Board of Trustees for HHFA. Four of the board members must be selected from each of the neighbor islands. The board elects its own chairman, who serves for a one-year term.

No one is to serve on the board if he has any potential conflict of interest or does business directly or indirectly with the hospitals, except as a patient. The Governor may remove members for either good cause or if they are absent for two consecutive meetings. Trustees shall serve until a successor is appointed; however, trustees may not serve for more than one consecutive five-year term. Terms of the trustees are staggered.

Frequency of meetings, quorum requirements, voting procedures and compensation for trustees are indicated in Appendix A.

2. *Powers of the board.* The Board of Trustees is responsible for and directly accountable to the Governor and the Legislature for *operation* of all hospitals turned over to its jurisdiction and control. The Board's functions pertain chiefly to policy, planning and control. The Board is directly responsible for *initiating* both policies and planning (including *areawide* planning for inpatient and outpatient care).² The Board is of course responsible for establishing or approving all policies governing operation of the hospitals. In addition, the Board of Trustees selects the general manager and it approves the hiring of each individual hospital administrator.

²Institution of this function by DOH now, as recommended in Chapter III, will facilitate implementation of this responsibility.

Basic powers of the board include, but are not limited to, the following:

- . Establishing hospitals and health facilities.
- . Governing, controlling and operating each facility.
- . Determining policies affecting the hospitals and health facilities.
- . Establishing programs for prepaid insurance or prepaid payments for health care services.
- . Establishing short-term financial lines of credit and borrowing working capital.

The Board of Trustees thus bears a heavy and direct responsibility. This role is in sharp and almost complete contrast to the current restricted *advisory* role of the Management Advisory Committees.

The total responsibility of the Board of Trustees for running this entire hospital system demands the appointment of highly qualified persons who are interested in and dedicated to the task. Interviews with a number of people now serving on the various Management Advisory Committees left no doubt that such people exist.

3. *Duties of the board.* The duties of the board in carrying out its responsibilities are

commensurate with its broad-ranging powers. Among its principal duties are:

- . Hiring administrators for all hospitals and health facilities and a general manager for the system.
- . Reviewing and approving all operating and capital improvement budgets.
- . Determining price and fee schedules for all services.

A major limitation on the board is that it shall not have the authority to issue long-term bonds or other forms of indebtedness without the approval of the Director of Budget and Finance (see Financing Capital Improvements, Section G). Probably the most pressing responsibility during the initial phases of its operation will be the necessity of raising fees to a level which will make the authority self-financing and thereby enable it to achieve the benefits of the reorganization outlined previously (see Proposed Funding Status, Section E).

The audit team suggests that the Board establish a small working committee to formulate carefully-studied systemwide policies in all areas where they are needed. As noted previously, this area needs substantial attention because of the current total lack or nonexistence of such policies.³

³Immediate development of appropriate systemwide policies, as suggested in Chapter III, will ease this initial burden on the Board of Trustees.

D. General Manager

The general manager is hired by the Board of Trustees. When a vacancy occurs in the administrator's job in an individual hospital, the general manager screens candidates and recommends one to the Board of Trustees, who must approve the appointments of all hospital administrators.

The general manager is responsible for overseeing the entire operation. At present the individual hospitals pretty much run their day-to-day operations. They most probably should continue doing so except to the extent that efficiency and effectiveness can be enhanced by consolidation and/or centralization.

We suggest that the general manager

- . Work with the Board of Trustees to establish statewide policies and standards where needed
- . Actively participate in all three areas of planning; budgetary, capital improvements, and areawide
- . Develop those central staff functions which the whole system needs but which individual county systems cannot afford
- . Develop overall financial controls (including accounting, reporting and rate-setting) which will insure the

solvency liquidity and sound financial operation of the entire system and

Engage in such other activities as the Board of Trustees may desire.

E. Proposed Funding Status

In addition to the general fund, State law provides for the use of special and revolving funds. At times a certain amount of confusion concerning the distinction between these two has existed.⁴ However, a recent study by B&F has helped to clarify the situation.⁵ It now seems to be generally agreed that (1) a *revolving fund* is appropriate for those activities where reimbursements from users *substantially or totally* pay for the cost of providing the service, and (2) a *special fund* is appropriate for those activities where user fees are an important consideration in making decisions about funding proposals, but when the activity cannot or is not expected to be essentially self-supporting. Therefore the audit team recommends

. That five special funds be established, one for all the hospitals in each county and one for central administration.

⁴ A more extensive discussion of this subject is contained in our Working Paper No. II, on file in the Office of the Legislative Auditor.

⁵ Internal memorandum from Robert Cornett to Nils Ueki, dated February 24, 1970, on the subject "Special Fund Project."

That when and for so long as a county fund is self-sustaining it be designated a "revolving fund" and be free of control by B&F.

In other words, until reimbursements reach a specified level, all hospitals in a county will operate under a *special* fund, with their budgets subject to detailed review and control by B&F, as they are now. However, when reimbursements make the county operation self-sustaining, it is recommended that the status of the special fund be changed and designated a *revolving* fund. At this time B&F control will be relaxed and managerial discretion and responsibility of the authority will correspondingly increase.

From the viewpoint of hospital management, the distinction between special and revolving funds is most important. Special funds are subject to virtually the same detailed review and control process as are general fund requests—because, naturally, of the support received from the general taxpayer. In general, revolving funds are subject to much less stringent reviews and restrictive controls—especially where the fund is in fact self-supporting. Thus, when properly interpreted, the distinction between special and revolving funds is valid, appropriate and useful. We therefore urge that

1. The distinction between the two be retained—and sharpened.
2. The hospital system become self-supporting by:

- a. Establishing a contract or subsidy formula for reimbursing the hospitals for unreimbursed services now paid for from their general fund appropriation.
 - b. Sufficiently raising rates to make all currently reimbursed services self-supporting.
3. Whatever action is necessary be taken to enable (and guarantee) that the status of a fund be changed whenever it becomes (or ceases to be) self-sustaining. (See Financing of Operations, Section F, for discussion of specific recommendations in these areas.)

F. Financing of Operations

To achieve self-sustained financing for HHFA will require a rationalization of the manner in which certain operational expenditures are now financed. The following discussion will display and discuss recommendations for accomplishing this objective. The specific topics include:

- Basic services
 - Patient fees
 - Uncollectible accounts

- Mental patients
- TB patients
- Special services
- Ambulance services
- Emergency rural outpatient services.

1. *Basic services.* The basic services in all county/state hospitals are now operating at a deficit. This part of the overall deficit is occasioned essentially by two factors:

- Patient fees which are inadequate to reimburse the hospitals for the full cost of rendering service; and
- Patients who do not pay (occasionally bad debts, but generally mental or TB patients).

a. *Patient fees.* Patients for which the hospitals are reimbursed fall into two broad categories: those who pay the full cost and those who do not. At the present time hospitals receive (retroactively) full cost reimbursements for all Medicare and Medicaid patients. That is, during the course of the year the Medicare and Medicaid programs reimburse the hospitals for their customary charges and then, after the close of the fiscal year, they make an additional payment based upon the hospitals' full cost actually incurred during the year. No other patients or third-party payers reimburse the

hospitals for anything above their established rates. Therefore this subsidy (which arises from established fees being lower than cost) is received by those patients who pay their own hospital bill or by their insurers (e.g., those plantations who self-insure, HMSA, Aetna Life, etc.). The obvious and recommended way of eliminating this part of the deficit is to raise established fees to a level which will cover their full cost.⁶ Therefore the audit team recommends:

That no later than July 1, 1973, the Board establish fees at a level which will make the authority self-supporting.

While there may be some political resistance to rate increases which will cover full costs (no one ever likes to lose a subsidy), there may soon be strong pressure to do just this for another reason. Under present conditions, the federal government (Medicare) is paying the hospitals at rates as high as or higher than those for all other patients. These are not the customary terms for the federal government's purchases of goods or services. Rather, the federal government usually expects to pay less than or no more than the established fee. Sometime in the not-too-distant future it would

⁶ Ironically, if this practice were instituted it would amount to no more than following the budget instructions issued by B&F, which perennially admonish agencies to set fees at a level which will cover *anticipated* costs. It appears that this admonishment is observed mostly in the breach, not only by DOH but by other agencies as well.

not be surprising to see the Medicare program revise its rules and procedures to eliminate retroactive upward cost adjustments. In fact, effective July 1, 1971, the State Medicaid program will institute such a rule for skilled nursing care. If Medicare and Medicaid programs adopt this policy, the loss of Medicare/Medicaid reimbursement will then add considerable pressure on the county/state hospitals to raise their rates to full cost. Thus a full-cost level of fees may be coming regardless of recommendations contained in this report.

b. *Uncollectible accounts.* Uncollectible accounts from private patients usually arise when substantial bills are owed by "the working poor" who do not qualify for Medicaid and at the same time do not have enough income or assets to make worthwhile any attempt to enforce collection. In some instances the parties are deceased and their estates have no means with which to pay a hospital bill run up during the terminal illness.

A certain percentage of uncollectible accounts can be anticipated by hospitals (just as in all other lines of business) and most hospitals set their fees at a level which allows them to experience some bad debts and remain solvent. In Hawaii a larger percentage of the citizenry have some form of health insurance than in other states. This reduces the number of uncollectible accounts. Overall, it is our judgment that uncollectible accounts present no impediment whatsoever to putting the hospitals on a fully-reimbursable basis. Moreover, given the present trends towards ever-expanding

health insurance, the bad debt problem should gradually but surely diminish in magnitude (see Section H for a discussion of trends in health care financing). Whether this will in fact be the case only experience will tell. It must be recognized, of course, that the county/state hospitals bear a special responsibility not shared by many private hospitals. In the first place, they are public hospitals and, as such, they must accept (up to the limit of their capacity) anyone who needs hospitalization. Secondly, on Hawaii and Maui they have an absolute monopoly. Because of this monopoly position they also have a moral obligation to accept all patients regardless of ability to pay. Consequently it is at least conceivable that the county/state hospitals would have to bear substantially more bad debts than their counterparts in the private sector. If it does come to pass that bad debts exceed two percent of gross billings, the audit team recommends that at that time the State establish a "subsidy scheme" whereby B&F (or some other agency) will be required to "buy" excess unpaid accounts over 120 days old. This will relieve the Authority and the hospitals from carrying an undue burden of public responsibility.

c. *Mental patients.* Under the Medicare law (Title XVIII), mental patients over 65 who are assigned to a state mental institution cannot qualify for federal Medicare reimbursement. In practice this means that mental patients (over 65) assigned to Kaneohe do not qualify for federal reimbursement, but mental patients (over 65) in any of the county/state hospitals do qualify. Up to the limit of eligibility (90 days)

the county/state hospitals are currently billing and receiving Medicare reimbursement for all cases which qualify. At present, however, Medicare is about the only form of major reimbursement which the county/state hospitals receive for mental patients. Private insurance plans and self-insurers have limited provisions for mental illness. Moreover, while mental illness can qualify for federal reimbursement under the federal Medicaid (Title XIX) law, at present State law explicitly denies Medicaid coverage for mental illness. Therefore the audit team recommends:

That the State amend its statutes covering medical assistance to the indigent and categorically needy to provide Medicaid coverage for non-institutionalized mental health care.

It is of course obvious that if mental illness were covered by Medicaid, the hospitals would be somewhat closer to the goal of being self-reimbursing.⁷ Beyond this, however, there are a number of other reasons for this recommendation.

The State is now paying 100 percent of all costs of caring for mental illness in county/state hospitals. Including mental illness under Medicaid would

⁷ DSS would then reimburse the hospitals for eligible mental patients as they do for all other eligible patients.

probably save the State between \$200,000 – \$300,000 annually (the estimated amount of federal reimbursement).

The present Medicaid exclusion discriminates heavily against those with non-mental illness and in favor of mental patients.⁸

Federal law (Title XIX) requires that by 1975 state coverage must be complete, which means that within the next few years the State's Medicaid plan would in any event have to include mental illness.

It would appear that Hawaii's current exclusion of mental illness is in direct conflict with Title XIX,⁹ and may soon result in total loss of all federal reimbursement. For the State to permit this to occur would be like "throwing out the baby with the bath water."

⁸ Mental patients now receive free care from the State, with virtually no attempt to claim any of their income or assets. Non-mental patients, on the other hand, in order to qualify for Medicaid must first "pauperize" themselves.

⁹ Although Title XIX defines a number of optional categories of services which states can elect to exclude from coverage, it explicitly prohibits exclusion by reason of "diagnosis," which is exactly what mental illness is.

d. *TB patients.* At the present time the County/State Hospital Program also receives federal reimbursement for all TB patients over 65 years old (up to the limits of Medicare eligibility). Except for this reimbursement, the State pays the full cost of maintaining and treating all TB patients. Fortunately for all concerned, advances in the treatment of TB now permit most TB victims to be treated on an outpatient basis. Consequently, the TB inpatient population has shown a steady downtrend, until today TB patients account for less than two percent of all patient-days in the county/state hospitals. While it is possible to rejoice in these more pleasant facts of life, this does not solve the (relatively minor) reimbursement problem which the few remaining TB patients do occasion.

In the case of TB, options are more limited than for mental patients. Title XIX permits state Medicaid coverage only for TB patients *over 65 years old*. This exclusion means that *in any event* the state must continue paying 100 percent of the cost of caring for all TB patients under 65 years old.¹⁰ One reimbursement option open to the State is to include TB under Medicaid coverage, with DSS reimbursing the hospitals for all TB and claiming federal reimbursement where it is permitted. A second

¹⁰ Of all TB patients discharged during 1970, those under 65 accounted for about 70 percent of all TB patient days, and those over 65 accounted for the remaining 30 percent. Potential federal reimbursement for this 30 percent was on the order of magnitude of \$50,000.

and simpler option is for the hospitals to maintain an account for each TB patient, and at the end of each month bill some agency in State government for care of TB patients. Therefore the audit team recommends:

- That the Department of Health pay all bills for TB care not reimbursable by Medicare or other third-party payers.

This plan is expeditious because (1) the number of TB patients is so small and declining, (2) the total dollars involved represent a small amount to the State (and in any event the State is now paying full cost for these patients), and (3) DSS eligibility investigation, certification and paperwork (for Medicaid) require too much time and expense for the numbers involved.

2. *Special services.* For the most part the County/State Hospital Program provides what is usually considered as routine or normal hospital inpatient and outpatient services. However, because the program is also a government activity, it has assumed at least two responsibilities not normally performed by private hospitals.

Specifically, in all counties with less than 200,000 population the program is charged with supplying uneconomic ambulance service, and in outlying, difficult-to-reach areas (such as Hana), the program is committed to operating uneconomic outpatient clinics with limited capacity for short-term, non-acute inpatient care, such as maternity care. Neither ambulance service nor rural units such as the Hana

facility can be expected to operate on a self-reimbursing basis.

Activities such as emergency ambulance service and outpatient clinics in low population areas are generally government activities worthy of general taxpayer support, much like lighthouses, rural free delivery, or police protection. It would make no more sense to expect these two activities to be self-supporting than it would to expect a lighthouse to be self-supporting. This is why it is important to distinguish between these two services and other services normally provided by private self-supporting hospitals. In view of this basic distinction, ambulance service and rural emergency facilities should be supported by appropriations from the general fund.

a. *Ambulance service.* The audit team recommends

That responsibility for ambulance services in counties with *less* than 200,000 population be provided by the Department of Health, and that DOH contract with the Authority and other providers for such services.

Precedent for this recommendation now exists. For example, on East Kauai and in Lahaina (Maui), ambulance service is currently provided by a private company; on West Kauai the hospital administrator says he would prefer not to have to provide ambulance service. Thus contracting already exists, and the hospitals are

not the sole direct providers of ambulance service.

Placing overall responsibility with DOH¹¹ will enable the program administrator to survey *impartially* all candidates—the hospitals, fire departments, police departments and others—who might best be able to supply ambulance service, and then contract with the best supplier.

b. *Emergency rural outpatient service.* This presents a somewhat more difficult problem. In general, there should be a subsidy to help reimburse the authority for operating and maintaining outpatient facilities like Hana. As is the case in any subsidy situation, the formula should build in a correct (goal congruent) set of incentives, so that plans and operations will tend to be in conformity with overall program objectives. In general, it would be appropriate for the State to subsidize emergency rural facilities *with less than 10 beds*. Any facility larger than this should be established and operated on a self-reimbursing basis.¹²

¹¹It is suggested that the Injury Control Branch is an appropriate place for assignment of this responsibility.

¹²There is no magic economic relationship which comes into play with a 10, 11 or 12 bed facility. Facilities this size would also be money-losers. The point is—and it is a point which should not be overlooked—facilities in such a small intermediate size range *should not be built*. If the size limit of facilities subject to receive subsidies is to be altered in any way, *it should be lowered*; i.e., only provide subsidies to facilities with not more than 6, 7 or 8 beds.

At present, the only such facility is Hana, which currently operates at an annual deficit of approximately \$55,000. Total operating expenses for the entire County/State Hospital Program are around \$16,000,000. The deficit from the Hana facility therefore represents less than half of one percent of total expenses. At this time it is recommended that the Authority attempt to cover the Hana deficit out of its general operating income. If, in the future, however, the operation of the Hana facility becomes burdensome, or if construction of more such facilities is deemed desirable, then the Legislature should consider an appropriate subsidy formula for Hana and all similar rural emergency facilities.

3. *Summary.* The operating deficit of the County/State Hospital Program, which is covered at present by an appropriation from the general fund, has been attributed to six sources. These are summarized in Table IV-1, along with (a) a recommendation on how to treat each of various sources of the deficit, and (b) a summary of the estimated net cost impact on the State.

As column (3) indicates, the State would still be paying (indirectly) a certain amount of money to the hospitals. The State will realize substantial savings, however, from increased payments by private insurers and, to a somewhat lesser extent, the federal government. These savings could be used for any State purpose, or, should the Legislature desire, such savings may be "earmarked" for health care to finance various desirable changes in either the Medicaid program, the medical school, nursing school, or

whatever else might increase the supply of health care personnel. Discussion of these options and possibilities is beyond the scope of this report, however.

G. Financing Capital Improvements: Creation of Hawaii Health Facilities Building Trust

In general, governmental accounting does not provide for depreciation of fixed assets. However, for determination of appropriate rates, as well as "full cost" for purposes of Medicare/Medicaid claims, it is *not* permissible for hospitals simply to write off capital expenditures against current operating expense. It is therefore necessary that hospitals "expense" their fixed assets. A simple and straightforward way to accomplish this end result is for the hospitals to pay an appropriate monthly or annual "rent" for its facilities; the payment should of course be based on the economic value of the facilities.³ Therefore, the audit team recommends:

Financing Capital Improvements

- That a Hawaii Health Facilities Building Trust be created (to be chaired by the Director of B&F—or his designee—and to be housed within B&F).

³By this means, appropriations for each program would thus reflect a fair rent on space occupied as a portion of total program cost, which is now hidden as an implicit cost.

Table IV-1
Summary of Recommendations to Eliminate the County/State
Hospital Program Operating Deficit

Source of Deficit (1)	Recommendation (2)	Net Annual Cost/Savings to the State (3)
1. Fees for Basic Services	Set rates high enough to cover anticipated costs.	State will save estimated \$4-5 million annually.
2. Uncollectible Accounts	If bad debts exceed two percent of total reimbursements, the State to "buy" the excess.	No change; should not exceed \$300,000 annually (these expenses now implicit in the general appropriation).
3. Mental Patients	Include under Medicaid; shift sufficient funds to DSS budget.	Federal Government will reimburse \$200,000-300,000 now being paid by State.
4. TB Patients	DOH to pay all bills for TB patients not covered under Medicare.	No change.
5. Emergency Ambulance Service	Establish responsibility and funding in DOH; where desirable contract with hospitals on a full-cost basis for such service.	No change.
6. Emergency Rural Outpatient Clinics	Authority to absorb current deficit.	State will save estimated \$55,000 per year.

That on the effective date of transfer—July 1, 1972—all real and fixed property be transferred to and subsequently leased back from a Hawaii Health Facilities Building Trust.

The Building Trust be authorized to issue long-term indebtedness for capital improvements for the hospitals, the principal and interest of which would be financed by hospital reimbursements.

In addition to the foregoing, the creation of a Building Trust to be lodged in the Department of Budget and Finance is recommended for the following reasons.

1. Bond issuing authority should be, where feasible, centralized in one State agency. In this instance, the usual debt issuing authority for the State of Hawaii is the Department of Budget and Finance. This arrangement could result in cheaper borrowing rates, based on the State's credit ratings, than if a newly-organized entity such as the HHFA were to undertake long-term financing on its own.
2. The authority should not become directly indentured to a group of bond holders and thereby avoid the risk of becoming dominated by special financial interest groups.

3. A separation of capital improvement planning from financing capability will provide an independent arm's-length review of the feasibility and desirability of all capital improvement proposals originated by the authority.

4. Reliance on legislative appropriations to finance hospital improvements, as presently is the case, tends to defeat the purpose of creating a fully self-financing authority which would and should be held totally accountable to the public which it serves.

Assuming that this recommendation is accepted, when the authority wants to build new facilities or undertake major capital improvements for existing facilities, the Building Trust would issue bonds and would charge the HHFA an annual lease or rental fee which would fully amortize the initial cost and all carrying charges. Prior to making any such investment, the Building Trust would ascertain to its satisfaction that each new facility or improvement would in fact be self-supporting.¹⁴ It will of course be up to the authority to initiate any "loan applications." The Building Trust is not supposed to have any role in facility planning or sponsorship of projects.

¹⁴All disbursements by the Building Trust on behalf of the Authority should be fully reimbursable. Under no circumstances should the Building Trust become a "pork barrel" dispenser, with its bonds to be redeemed by subsequent appropriations from the general fund.

H. Future Directions in Financing Health Care Costs—Their Impact on the Recommendations

It is estimated that approximately 93 percent of the people in Hawaii now have some form of third-party coverage—the highest in the nation. Equally significant, the State itself, through its Medicaid/Medicare program,¹⁵ is now a substantial third-party payer.

Since 1859, when young King Kamehameha IV first established Queen's Hospital, the State of Hawaii has subsidized health care through its support of hospitals and other related institutions supplying health care services. In contrast, State support of third-party coverage for consumers of health care services is relatively new—except, of course, for State employees, for whom the State (in its role as employer) has provided health insurance for many years.

Medicare and Medicaid, despite their newness, mark the beginning of a major revolution in public concepts related to governmental responsibility for provision of health care. Trends and the amount spent on Medicaid—relative to the hospitals themselves—are almost staggering. Thus, even though Hawaii's Medicaid program only started

in 1966, by 1973 the Governor's budget indicates that State payments on behalf of consumers of service will be about three times the general fund appropriation to the County/State Hospital Program. If present trends were to continue unchanged, it is not unlikely that by 1980 the State will spend 10 times as much for direct support of consumers of service as it does for direct subsidies on the County/State Hospital Program.

Viewed in this context, the recommendation that hospitals become self-financing—and that health insurance or third-party coverage be the principal means by which they achieve a self-financing status—is little more than an extension of existing trends. It simply means that the State would spend 100 percent of its health care appropriation directly on behalf of consumers of service, instead of spending 90 percent on behalf of consumers and appropriating 10 percent directly to the hospitals.

Every extension and spread of third-party coverage increases the hospitals' reimbursement potential and reduces further the traditional role of the public hospitals. Significantly, further increases in third-party coverage seem to be coming for all directions. For example,

The State's Medicaid plan, except for present exclusions on mental illness, is almost totally comprehensive. By 1975 the federal enabling act stipulates that coverage be comprehensive for all who are eligible.

¹⁵For all welfare clients over age 65 the State pays for "Type B" Medicare coverage.

- . The President's most recent state of the union message made expansion of National Health Insurance coverage a top priority goal.
- . Currently proposed legislation makes third-party health insurance virtually mandatory for everyone in Hawaii.
- . Private health insurance plans are slowly but steadily expanding coverage to more people and to more

afflictions. Some private plans, such as the Kaiser Health Plan, now provide comprehensive coverage.

All factors thus appear to point in the direction of increasing third-party reimbursements for hospitals. By 1980 it is not unlikely that, one way or another, comprehensive health insurance will be virtually universal in Hawaii. The hospitals should capitalize on this trend by establishing themselves on a self-financing basis now.

PART 3
INFORMATION SYSTEMS FOR MANAGEMENT PLANNING AND CONTROL

CHAPTER V

SUMMARY OF RECOMMENDATIONS

Total elapsed time of these immediate action steps is 15 months from initiation. Estimated development cost is \$71,000 and annual operating cost is \$73,000.

A. Immediate Action

The audit team recommends that the County/State Hospital Program commence development of an information system to support management planning and control as soon as possible. Top priorities during the first and most crucial period of development are:

1. Upgrade internal capabilities of both administrative and professional personnel to support and utilize information systems
 - . Through training programs
 - . By hiring two staff specialists.
2. Use existing information sources more effectively by exploiting professional and statistical services
3. Establish standard reporting requirements and formats for all county/state hospitals.

B. Deferred Action

Provided the above steps are accomplished as prescribed, we further recommend a three-phase program resulting in explicit, full-blown information systems development:

Phase I

1. Develop an operational control system to enable the Administrator's Office to monitor quality of health care services.
2. Install data collection equipment in the hospitals to reduce nurses' clerical workload.
3. Develop a patient-accounting and accounts receivable system as a pilot project leading to a countywide or systemwide system using computers.

Elapsed time for implementation of Phase I is 15 months; 36 man-months of effort are required. Estimated development cost is \$200,000 and annual operating cost \$100,000.

Phase II

1. Extend pilot project to process patient accounting and accounts receivable of other county/state hospitals.
2. Develop an information system for policy development and strategic and long range planning in the County/State Administration Office.
3. Expand pilot project to include information processing for accounting, operational control, management control, and budgeting.

Total elapsed time for full implementation of Phase II is 12 months; 24 man-months of effort are required. Estimated development costs are \$55,000 and annual operating cost \$50,000.

Phase III

1. Extend expanded pilot project to all other county/state hospitals.
2. Convert selected modules of County/State Hospital Administration Office to computer-based operations.

Elapsed time required for implementation of Phase III is 12 months; 12 man-months of effort are required. Estimated cost is \$35,000 for development, and \$30,000 for annual operating expense.

Table V-1 summarizes estimated development and annual operating costs for each of these recommendations.

Table V-2 displays the time-phased five year program costs (inclusive of *both* one time development costs and *recurring* annual operating costs) for both recommendations. The steps recommended for *immediate action* should be undertaken independent of whether any organizational changes are instituted; they are required to upgrade the current level of management. The *deferred action* steps are closely related to organizational restructuring which will create information demands which cannot be met by present procedures and capabilities.

CHAPTER VI

OVERVIEW OF INFORMATION HANDLING

A. Background

In 1964 the State of Hawaii decided to centralize data processing in a Statewide

Table V-1
Estimated Costs of Information Systems Recommendations

<u>Recommendations</u>	<u>Costs</u> <u>(In thousand \$)</u>	
	<u>Development</u> <u>(Non-recurring)</u>	<u>Operating</u> <u>(Annual)</u>
A. Immediate Action		
1. Upgrade internal personnel capability	\$ 24	\$ 41
2. Use existing information more effectively	4	32
3. Establish uniform reporting standards	<u>43</u>	<u>-0-</u>
Subtotal	71	73
B. Deferred Action – System Development Plan		
Phase I		
1. Develop operational control system administration	15	16
2. Install data collection equipment	145	14
3. Develop pilot project	<u>40</u>	<u>70</u>
Subtotal	200	100
Phase II		
1. Extend pilot project to all C/S hospitals	20	25
2. Develop for the C/S hospital administrator a policy and planning information sub-system	15	15
3. Expand pilot project—include all accounting, operational and management control and budgeting	<u>20</u>	<u>10</u>
Subtotal	55	50
Phase III		
1. Extend expanded pilot project to all C/S hospitals	20	25
2. Develop computerized support for C/S hospital administrator	<u>15</u>	<u>5</u>
Subtotal	35	30
 Total	 <u>\$361</u>	 <u>\$253</u>

Table V-2
Estimated Five Year Time Phased Program Costs
County/State Hospital Program M.I.S. Action Plan

Costs	Year				
	1	2	3	4	5
Development					
Immediate Action ..	\$ 63,000	\$ 8,000	\$ --	\$ --	\$ --
Deferred Action					
Phase I	--	132,000	68,000	--	--
Phase II	--	--	27,000	28,000	--
Phase III	--	--	--	35,000	--
Subtotal	63,000	140,000	95,000	63,000	--
Annual Operating					
Immediate Action ..	60,000	73,000	73,000	73,000	73,000
Deferred Action					
Phase I	--	67,000	100,000	100,000	100,000
Phase II	--	--	25,000	50,000	50,000
Phase III	--	--	--	30,000	30,000
Subtotal	60,000	140,000	198,000	253,000	253,000
Total	<u>\$123,000</u>	<u>\$280,000</u>	<u>\$293,000</u>	<u>\$316,000</u>	<u>\$253,000</u>

Information System (SWIS). Since then, significant funds have been appropriated for SWIS. Meanwhile State agencies with data processing requirements have awaited the time when their needs and demands would be serviced by this system.

In both the Department of Health and County/State Hospital Administration Office, all major equipment and systems decisions have been held in abeyance pending development of SWIS. With the present arrangement, the experience of the county/state hospitals in

particular has been highly negative. No part of the information emanating from, or used by, the hospitals can be said to be on SWIS in any effective way.

In 1969, DOH established its own internal review committee "to assay the Department's requirements for information and the outlook for data processing services from SWIS." This committee produced a report¹ which implied that DOH's information needs would have to be satisfied by a departmental system. The report included a recommendation that high priority be given to converting accounting activities at county/state hospitals to a computer-based, agency-wide information system.

The Administrator sought funds in his 1971 budget request to support development of a management information system (MIS). His request resulted in the Legislature appropriating funds for a broader audit of both the organization and information needs of the County/State Hospital Program for planning, managing and controlling its resources and programs.

Hence, the backdrop for this part of the audit is (1) a Statewide Information System which is not servicing present needs (and which is presently under review); (2) a DOH study which recommends that an internal departmental computerized information

¹*Creating a Data Processing Capability Within the Department of Health*, by Bert Woods, Management Analyst, DOH.

processing capability be established; and (3) the Administrator's efforts to acquire funding to develop a management information system for his division.

B. Purpose and Scope

The fundamental purposes of this part of the audit report are to identify existing deficiencies in information processing and handling, and to recommend a plan of action leading to a clear definition of management and operational control structure and installation of an operating management information system for the County/State Hospital Program.

At present, neither the individual hospitals nor the County/State Hospital Program has a formalized information system. Rather, what exists at present are a number of relatively disjointed data-gathering and information-processing activities which produce a variety of reports for both internal and external consumption. In order to provide more detail for the recommendations summarized in Chapter V, the four remaining chapters of Part 3 cover the following areas:

- *Definition* of existing information and information processing capabilities (Chapter VII)
- Evaluation of existing information processing capabilities (Chapter VIII)

Recommendation of immediate and deferred action plans for development and installation of a management information system (Chapters IX and X).

C. General Discussion of the Recommendations

As indicated in the Summary (Chapter V) the recommendations are divided into two distinct, time-phased plans of action:

First, those steps which should be taken *immediately* to rectify current deficiencies and establish the minimum in-house capability that is necessary for implementing and effectively utilizing a management information system.

Second, those steps which must be *deferred* until an adequate in-house capability is developed. When implemented, these measures will lead to a streamlined, mechanized information system in the individual hospitals and in the Administrator's Office.

Mechanization and automation of the hospital information systems will require *substantial* outlays of money, time and energy. Moreover, mechanization and automation are *not* one-time, non-recurring efforts. Improvements and breakthroughs in equipment

occur regularly, and upgrading of a management information system is thus a *continuing* process.

It is crucial that an adequate in-house capability first be developed, lest the County/Hospital Program waste a great deal of time and money. It is very easy to acquire sophisticated hardware which cannot be made to function effectively and produce results for the organization. In fact, this is a major pitfall in the information system area. Moreover, the hospitals now generate a considerable amount of data and information *which are not being effectively utilized*. The problem is not untimely or costly generation of these data and information, *but the failure of key people to use what they now have* to upgrade their operations. For these reasons, *the initial steps focus primarily on people*: (1) those already in the County/State Hospital Program, and (2) new staff personnel.

Of those now in the program, most important are the Administrator and individual hospital administrators, who must be able to exercise sound judgment and make top management decisions about information systems. Detailed knowledge on their part is not required, but their present level of sophistication must be substantially upgraded. Short, formal training courses *with a distinct top-management orientation* are strongly recommended. In addition to administrators, the business managers, office managers, accounting staff and even head nurses must also develop better understandings about management and systems for processing information. These people must become involved and committed before

substantial changes in the information system can be expected to occur. Short, formal training courses, appropriate for their perspective (which is different from top-management) are required.

Concurrent with establishing a greater in-house recognition of the information problem and needs, the Administrator should also recruit two staff analysts: (1) a person with in-depth skills and training in the broad area of information systems, and (2) someone (probably a physician) with background and skills which all enable him to interpret medical utilization data and work with the Administrator and medical staffs at the hospitals to upgrade their health care delivery. These two staff specialists will be concerned with coordination and detailed execution of specific in-house projects aimed at developing standards and uniform formats for reporting both health care delivery and operational information.

Concurrent with the upgrading of staff capabilities, the Administrator should launch a major effort aimed at more effective utilization of the services of certain professional organizations. Two organizations—notably, the American Hospital Association and the Commission on Professional and Hospital Activities—already have large-scale computers and data banks, to which access can be obtained at a reasonable cost.

The third series of immediate action steps deals with the basics of an information system: *First*, establishment of several in-house working committees to develop standards, uniform

procedures and forms for reporting both health care delivery and financial information; and *second*, contracting with a qualified consulting group for technical assistance in identifying reporting standards and for simplifying the organizational paperflow.

These steps requiring immediate action are entirely feasible. They require only modest outlays, limited additional personnel and no new equipment. Positions already authorized by the Legislature (but not yet released by Budget and Finance) can and should be utilized. When implementation of these necessary prerequisites is assured, execution of the deferred development plan can proceed with a reasonable assurance of success.

D. Recommendation Impact on Current Statewide Information System (SWIS)

The recommendations contained herein relative to the development of an integrated management information system for the County/State Hospital Program are basically geared to facilitate decentralized system development and operations. This approach was taken with cognizance of the existing Statewide Information System (SWIS) which is essentially patterned to provide highly centralized data processing services for State agencies.

Although the audit recommendations appear to diverge from the SWIS concept, they are not necessarily incompatible. Data generated for machine processing, both as to source and

format, are essentially no different if they were for SWIS or for any alternative system. The key difference lies in locating the control functions for operating the management information system. While present controls formally rest with SWIS, the audit team was informed that this concept is under reexamination and that decentralization of such controls is under serious consideration.² Should statewide policy relative to MIS be modified to accommodate decentralized MIS development and operations by the Department of Health, the audit recommendations in their entirety could be implemented as proposed. However, should the extreme degree of centralized control be retained, then the implementation steps proposed herein would need to be modified to conform to such policy.

E. Definition and Terms

Like any other field, that of information handling systems has its own set of terms, or "jargon." Much of the jargon is derived from the language of computers and electronic data processing. It is useful in that it is "shorthand" for communicating ideas within a special field. Jargon can also be ambiguous when used outside its field. To clearly identify the meaning of the terms as used in Part 3 of this audit report, a number of recurring MIS concepts and terms are defined in Appendix C.

²As related to the audit team by the State Director of Finance who now exercises operational supervision over SWIS.

CHAPTER VII

CURRENT INFORMATION PROCESSING IN THE COUNTY/STATE HOSPITAL PROGRAM

A. Summary

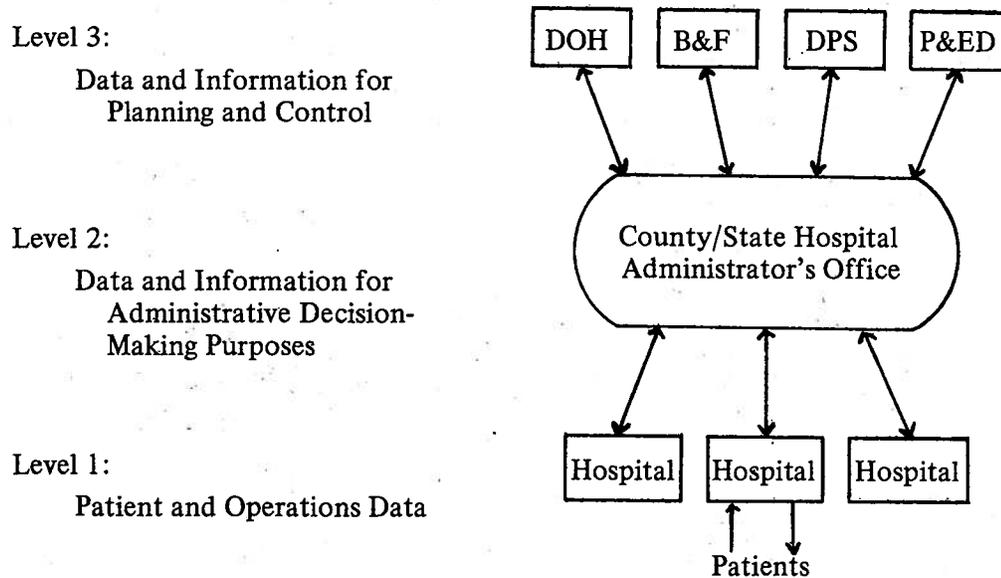
The County/State Hospital Program does not have a formalized information system at present. Rather, in each hospital there exist a number of relatively disjointed data-gathering and information-processing activities which produce a variety of reports for the hospital itself, for other State agencies, the federal government, professional associations, and others. Thus, any attempt to describe an existing management information system would be misleading. This section identifies and describes the related information processing activities that link the hospitals with the County/State Hospital Administrator's Office and with other State agencies. The information extracted from the hospitals is obtained primarily from the patient accounting procedures at each hospital. Much of the basic information for hospital and program management and control ultimately rests upon the maintenance, updating and manipulation of these patient-derived data.

For purposes of discussing management information systems, the County/State Hospital Program contains essentially only two organizational levels: the Administrator's Office and the local hospitals. The individual hospitals have their own data base which they process

according to their needs. The processing which takes place is related to the flow of patients in the hospital. As shown in Figure VII-1, the patient flow generates data (level 1) which are processed and become available as *information* (level 2) to the hospital for use in

decision-making. Some of this information can also be viewed as input to the Administrator's Office. Level 3 indicates information provided to agencies outside the County/State Hospital Program.

Figure VII-1
Information System Overview



B. Information Processing within the Hospitals

Information processing activities are easiest to identify within the individual hospitals. The basic definitional unit for an information processing system is the *module*, and each county/state hospital can be said to have five basic information processing modules:

- . Patient accounting
- . Resource management
- . Statistical reporting
- . Accounting and fiscal management
- . Budgeting (capital and operational).

The driving mechanism in the entire process is the patient. For example, each admission results in a series of patient-related activities, such as a surgical operation, which causes hospital resources to be expended and relevant data subsequently to be recorded.

Patient accounting gathers operating data as well as patient charges. Thus, as a patient charge is posted to the patient's account, it is simultaneously recorded in the accounting, resource management, and statistical reporting modules. In Figure VII-2, these latter three modules are collectively called "operational information processing."

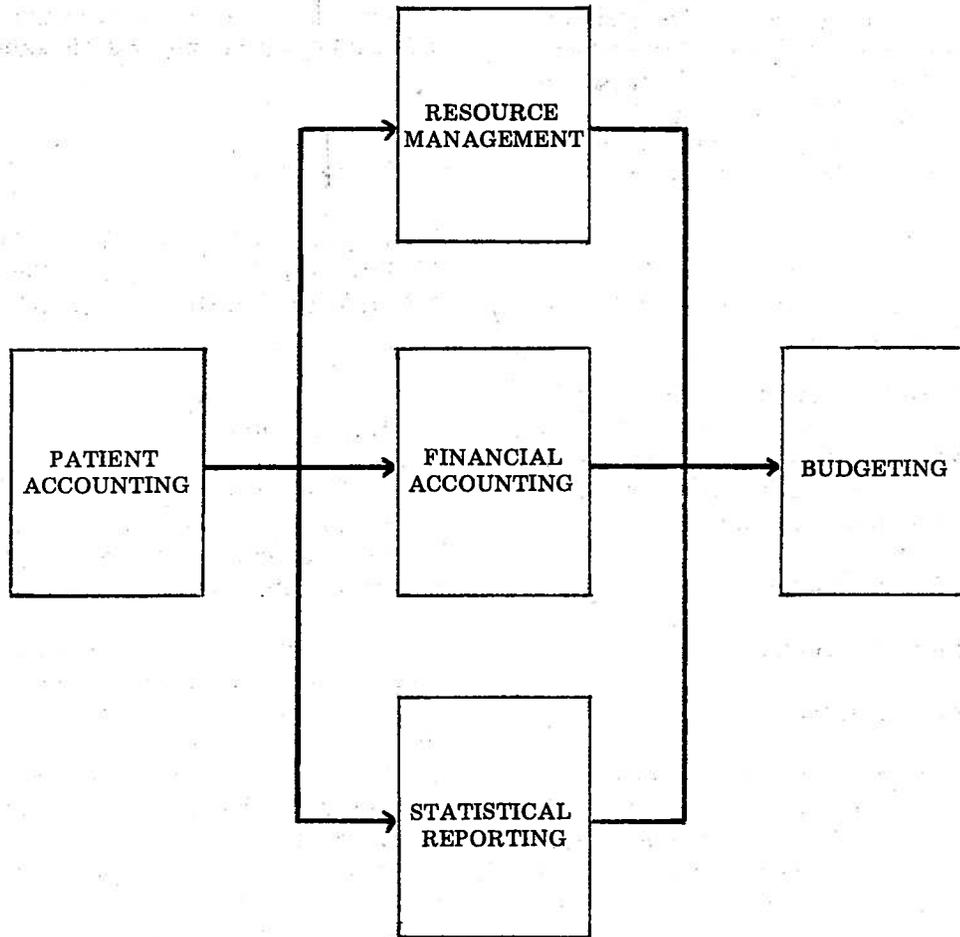
Summary reports in the form of operating statements, balance sheets and utilization reports, for example, are outputs of the processing which occurs. Output also includes routine operating documents such as vouchers. Data accumulated by this processing are the basis for the preparation of budget requests and formulation of capital and operating budgets. Since the hospitals have been government-administered for some time, systems and procedures for preparation of budget requests are well established; similar fiscal budgetary processing tends to exist throughout all hospitals in the system.

The apparent simplicity of Figure VII-2 is both accurate and misleading. It is accurate in that all hospitals have the same general informational processes and data flow, and in general this data flow is not particularly complex. It may be misleading, however, if one thinks that information processing in all hospitals is *identical*. In fact, each hospital has its own set of internal forms and procedures and, while they accomplish essentially the same purpose, no two hospitals are exactly alike. This presents problems for standardization of forms and, ultimately, machine processing.

C. Information Processing in the County/State Hospital Program

As Figure VII-1 illustrates, any information system for the entire program must rely upon the various data bases maintained in the individual hospitals. In effect, the individual

Figure VII-2
Hospital Information Processing



hospital data bases could be tapped by a County/State Hospital Program MIS. At present the County/State Hospital Program does generate certain data and reports for various statewide information systems. Consider the budget, for example. Each hospital first asks its operating units for budget requests; these are then compiled and sent to the Administrator's Office which compiles all of them into a divisional budget for submission to DOH, and so on.

D. Information Processing and the Organization Structure

Figure VII-3 illustrates the specific information processing activities of the Administrator's Office and an individual hospital. The Administrator's Office presently processes information in three areas:

- . Capital budgeting
- . Operating budgeting
- . Personnel management

A significant number of routine activities at the State level also involve agencies other than the Administrator's Office. These include employee payroll, insurance reimbursement, voucher payment, funds allotment, and facilities surveying and licensing.

As shown in Figure VII-3, these routine activities are directly related to hospital

operations and exist as components of the five major hospital information processing modules mentioned previously (enclosed in dotted lines). These are: patient accounting, resource management, statistical reporting, accounting and fiscal management, and budgeting.

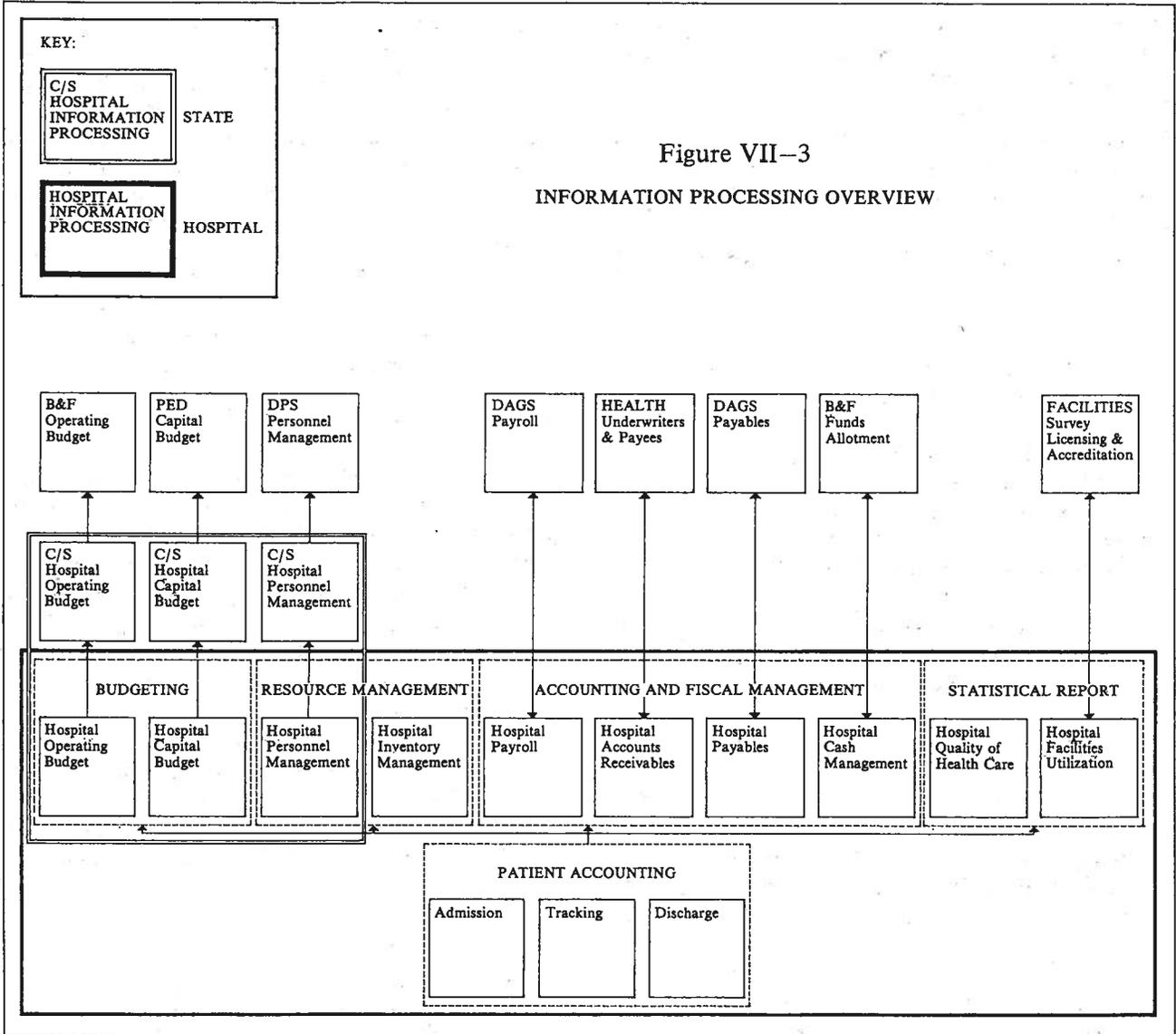
CHAPTER VIII

EVALUATION OF CURRENT INFORMATION PROCESSING IN THE COUNTY/STATE HOSPITAL PROGRAM

A. Introduction

In Chapter VII, application of the concept of information *systems* to the Act '97 Hospital Program was considered inappropriate because no information system exists at present.

The existence of an information system involves at least two organizational prerequisites. *First*, the organization should have explicit objectives with respect to providing information for its managers. *Second*, there should be an organizational plan to achieve those objectives. Where managerial information is created by happenstance and is *responsive* rather than *anticipatory*, only the loosest concept of systems could be applied. The audit team chose not to loosely apply the system concept since a planned approach to creating management information does not currently exist.



In this chapter the information processing activities of both the county/state hospitals and the Administrator's Office will be evaluated in terms of the information systems which should exist under present operating arrangements. This will provide the basis and rationale for the recommendations which were outlined in Chapter V and are discussed in detail in Chapters IX and X.

B. Basic Findings

First, and perhaps most important, the County/State Hospital Program lacks the necessary internal capabilities to utilize effectively existing hospital-based information and develop *or operate* a management information system.

Second, critical operating performance and fiscal information from individual hospitals do not currently feed into the Administrator's Office for timely and responsive review for correction of possible deficiencies.

Third, there is no clear formalized system of management reporting, despite an overwhelming data base to draw upon at the hospital level. This shortcoming has tended to confound essential planning, management and control functions which might otherwise achieve basic inpatient and outpatient objectives.

Fourth, a virtual absence of information on the quality of care delivered in the County/State Hospital Program impedes both the

improvement of basic services and the efficiency of operations.

Fifth, the lack of rigorous controls over health care practitioner inputs in the crucial areas of patient and fiscal accounting has resulted in an unnecessary imputed interest cost to the State of \$200,000¹ annually from delayed and unrecoverable billings to federal, State and private health plan financial intermediaries.

Sixth, almost one-fifth—nearly \$2.5 million annually—of county/state hospitals' operating costs is devoted to information processing activities. Fifty percent of this \$2.5 million is traceable to inefficient utilization of scarce nursing care personnel in essentially clerical functions. This time would be more productively used if it could be devoted to improving the quality of care in the County/State Hospital Program; any improvement in this area would also contribute to alleviating the acute shortage of such skilled personnel.

Seventh, anticipated increases in workload and associated labor costs over the next five years might be profitably offset by planning for the introduction of smaller, less costly systems of data collection and processing. The estimated

¹ Assuming 6% nominal interest on \$3,461,000 invested in accounts receivable. Our Working Paper No. II on file with the Office of the Legislative Auditor contains a detailed analysis.

development and recurring costs for such a program would be more than offset by the resulting *dividends* of increased nursing and clerical productivity and the substantial reduction of existing unnecessary imputed interest costs from delayed patient billings.

C. Discussion of Findings

1. *The pervasiveness of information processing delays.* The timely receipt of information for managing and operating hospitals is a *sine qua non* for effective control. The reliability evaluation of present county/state hospital information processing activities revealed major delays in basic patient accounting and billing procedures. At their source they are directly related to the lack of control over final diagnostic statements required of physicians for release of patients and for subsequent processing of all patient-derived fiscal information.

The compound effects from such initial time delays can be seen in the following example. Posting of daily charges varies from one to ten days after charge slips are submitted to the hospital business office. Hilo, for example, posts charges seven days after services are rendered and is not able to begin to close its books until all charges are posted. Thus, the preparation of basic accounting and statistical information is substantially delayed. (See Table VIII-1.)

A major consequence of this delayed posting is *the virtual impossibility of billing patients upon discharge.* These delays increase the amount of rebillings and the difficulty of collection. The compounding effect of time delays on patient billings accounts for a substantial amount of the inordinate imputed interest costs of outstanding accounts receivables in the entire County/State Hospital Program.

Statistical reporting such as the Hospital Administrative Service (HAS) reports is not done until the books are closed, because considerable data are captured from monthly accounting data. This implies that if the books are not closed during the succeeding month, a HAS report cannot be prepared and returned by the American Hospital Association until three months after the end of a particular month. Similarly, in the case of the Professional Activities Study and Medical Audit Program (PAS-MAP) reports, delay in submittal of reports of final diagnosis forestalls the timely receipt or even the generation of reports on the quality of care. Currently, delays in the submittal of both HAS and PAS-MAP input data range from one to over six months.

2. *The disjointedness of current information processing.* In Chapter VII, the discussion of the current range of information processing activities in the County/State Hospital Program contained a warning that the structure of the present flow of information and processing was not as "smooth" as depicted. Evidence to this effect was developed during the

Table VIII-1
Patient and Fiscal Accounting Procedures and Time Delays
Selected County/State Hospitals

County	Time Required to Post Charges	Final Diagnosis Required to Bill	Average No. of Days from Discharge to Receipt of Final Diagnosis	Number of Bills Prepared Each Month		Closing of Accounts Following Month End
				Initial	Rebillings	
Hawaii						
Hilo	7 Days	Yes	45 Days	600	1,300	2 Weeks
Maui						
Maui Memorial...	1 Day	Yes	60 Days	1,000	2,500	3 Weeks
Kula	1 Day	Yes	1-2 Days	250	350	3 Weeks
Kauai						
Kauai Veterans Memorial	1 Day	Yes	2-3 Days	390	300	2 Weeks
Samuel Mahelona*	1 Day	Yes	1-2 Days	100	10	2 Weeks
Oahu						
Maluhia**	1 Day	Yes	1-2 Days	200	230	1 Month

*As of 3 February, 1971, posting is 60 days behind due to changeover in procedure to segregate clinical from service billings. They anticipate being caught up by 1 March. Accounts for November, 1970, are still not closed.

**As of 3 February, 1971, one month is required before accounts are closed because of General Fund status and necessity to file claims with DAGS.

Note: Only clinical and ancillary services are posted daily; room and board are posted monthly or upon discharge, whichever is first (all hospitals).

course of the audit team's investigations of the current non-system. The evidence points to the lack of clearly defined objectives, and the lack of an overall plan for standardizing and integrating management reporting activities. Nine significant areas of this current disjointedness of information processing are briefly discussed here.

a. *Personnel capabilities.* No administrative or fiscal personnel in the system is familiar with or have been trained in either electronic data-processing, information systems or, more importantly, in the use of information from these systems. This serious shortcoming is unquestionably responsible for many of the remaining eight points discussed here. An important area such as management information systems and management reporting should have a qualified person responsible for directing this important function. The audit team found *no* such qualified person in the system. However, it should be noted that a position for some sort of (undefined) specialist was authorized by the Legislature in 1970. This position has not yet been released by B&F.

b. *Basic patient statistical reporting.* The statistical reporting subsystem, which encompasses the generation of reports on daily census and occupancy, represents the most poorly structured subsystem. Generally, statistical requirements are met on an *ad hoc* basis, and rarely is responsibility centered in one individual or department in each hospital. No objectives, such as creating a health care profile, are associated with statistical processing. Rather,

for each period for which some report must be filed, someone is assigned the task, frequently the hospital administrative secretary.

c. *Financial accounting and fiscal management.* This subsystem is formalized to the extent that financial accounting information conforms to the Hospital Association of Hawaii accounting standards. However, because the accounting systems are largely *manual* operations, and the generation of information is limited to monthly income and expense statements, some weaknesses here are:

- . Cost accounting data are limited or non-existent.
- . Comparative information for the system and analysis of variances among hospitals are lacking.
- . Payrolls do not provide summarized cost and statistical data which the hospital business manager needs.
- . Accounts receivables are not controlled in any uniform way and aging is not done on a recurring or regular basis.

d. *Patient accounting-reporting.* The most important data base for ultimate management of the hospital program is the patient accounting system. As indicated earlier, the initial inputs into this system are the charge slips and admission forms filled out by the nursing services staff. Methods and procedures

for controlling this vital function are not standardized among the hospitals. A Hilo Hospital study indicated that about 25 percent of nursing staff time is devoted to clerical activity.² Studies of similar manual operations elsewhere indicate that this can range as high as 40 percent of total nursing care man-hours.³ The hospital's program has begun to conduct work sampling surveys in an attempt to determine this portion of the nursing care workload.

More basic is the fact that each hospital has non-standardized forms for collecting patient-generated information. The frequency with which data are collected or filed also varies; some hospitals maintain up-to-date records while others lag seriously. (See Table VIII-1.) The net effect of these problems is that the patient accounting subsystem generates more data than are used for reports and a burdensome claim is probably placed on nursing staff time.

e. *Quality of health care reporting.* The Commission on Professional and Hospital Activities (CPHA) conducts a nationwide survey of professional medical practices as an aid in determining the quality of care provided among participating general acute care institutions. The service, known as PAS-MAP, can and should be

²Internal Memorandum from H. Ando, Hilo Hospital, February 1, 1971.

³Budd, *Hospital Topics*, "ADP as an Aid in Personnel Shortage," April 1969.

a valuable tool in both measuring and improving the quality of care provided. At present, only two county/state hospitals subscribe. Hilo Hospital currently receives monthly PAS reports and Kauai Veterans Memorial Hospital receives both PAS and MAP. In the instance of Kauai Veterans Memorial, even though it has only had the PAS-MAP service for about six months, it has already uncovered some limited evidence indicating possible areas of improvement in care. At present, none of this hospital-based information reaches the Administrator. The lack of a coordinated PAS-MAP program in the entire system prevents the use of such data in guiding and improving professional staff activities. Furthermore, this void virtually keeps the program and the public in the dark on how good care actually is in the system.

f. *Operational and performance reporting.* The American Hospital Association conducts a nationwide survey of member institutions and generates a Hospital Administrative Services (HAS) report encompassing a variety of operational and performance indicators. This information is displayed on both an internal and comparative basis and also indicates trends in each reported category. All hospitals in the program, with the exception of Samuel Mahelona and the smaller hospitals on the island of Hawaii, currently subscribe. The opportunities afforded both hospital and system management by this statistical service are vitiated by the following:

Hospitals make only limited use of HAS-derived information because of a

lack of training and experience in using the service as a basic management tool (e.g., emergency room man-hours per visit, X-ray diagnostic direct cost per procedure).

- . Data inputs for the HAS reports are frequently incorrect and delayed for several months or more.
- . HAS performance information is not currently used on a consistent basis for internal hospital reviews.
- . The Administrator does not receive copies of monthly HAS reports which now constitute the only periodic operational report by which to discern administrative performance of units under his supervision.

g. *Feedback in the program.* Feedback is the flow of useful or corrective information back from a recipient of information to the sender. Feedback is both desirable and important as a mechanism for creating effective management and operational control. By any definition, hospitals in the program receive little or no feedback from either the Administrator's Office, the Department of Health or other state agencies.

Examples of the lack of feedback are:

- . Monthly statistical reports on census and occupancy sent through the Administrator's Office to the Medical and Health Facilities Branch in DOH

are never reviewed. Obvious factual errors in data are not brought to sending hospitals' attention, nor is comment offered on present operating conditions.

- . Monthly income and expense statements are sent both to the Administrator's Office and, ultimately, to B&F. However, no comment is offered on the level of financial conditions.
- . Payables are executed by DAGS on a voucher reimbursement basis. However, when feedback is given in the form of a payables statement, there is no voucher identification for verification of payment.
- . Hospitals file an annual statistical report with the Medical Services and Health Facilities Branch of DOH as part of what they *believe* is the annual statement requirement for institutional licensing. Neither the hospitals nor the Branch have queried one another to (1) identify the purpose and scope of the statistical form or (2) determine the appropriateness of much of the information collected.

The limited feedback which hospitals do receive is from the DOH after its annual licensing inspection (and biennially from the Joint Commission on Accreditation of Hospitals

(JCAH)—a professional standards group). The Division of Medical Services and Health Facilities (and the JCAH) prepare detailed statements that are used by hospitals to correct deficient conditions or initiate further actions; i.e., renovating a building or adding a new wing, etc.

h. *Interfaces.* An interface is a data/information flow between modules such as between patient accounting and operational performance reporting, for example. These flows represent opportunities to capture data which may be vital for purposes of planning, management and control. However, if interfaces do not exist between modules residing in different organizations, data which might be otherwise available are lost. Figure VIII-1 indicates that a sizable number of potentially important interfaces do not exist currently between the hospitals and the Administrator's Office. In fact, at present, only three principal reporting activities actually do interface; they are (1) the operating budget, (2) capital improvement budget and (3) the personnel management.

Even where interfaces exist they may not provide the right kind of information. A good illustration is the personnel reporting area. The hospitals are required by the Department of Personnel Services to file a basic form (SF-5) for each personnel transaction which occurs; e.g., hiring, promotion, transfer or salary increases. Each such individual form is processed via the Administrator's Office. There are hundreds, if not thousands of these forms

processed each year. However, the Administrator does not receive periodic or monthly summary statements of personnel status. The lack of such reports contributes to a significant void within the system on what current manpower needs and problems are. Thus, manpower planning cannot even begin.

i. *Documentation.* Hospitals are provided voluminous manuals for operations of the personnel management activities associated with DPS and the voucher payables system of DAGS. B&F also provides detailed instructions relating to budget requests and budget execution. However, in none of its investigations did the audit team find any documentation of reporting procedures or standing procedures manuals relating to information systems, developed either by the hospitals themselves or by the Administrator's Office. With the exception of the Hospital Association of Hawaii uniform accounting structure, no standards for financial information reporting have been established.

3. *Information processing costs.* The specific resources devoted to information processing activities are not easily obtained from normal hospital financial data. Therefore, as part of the evaluation, estimates of information processing costs were derived from studies of time devoted to information processing activities by nurses, system medical librarians, administrative and fiscal staff personnel. These data, in conjunction with operating cost information extracted from monthly HAS reports, were the basis for deriving estimates of

Figure VIII-1
Hospital-County/State Hospital Administration System Interfaces

Outputs Inputs by Hospitals:	County/State Administrator			Other Interfaces*			
	Operating Budget	Capital Budget	Personnel Mgmt.	DAGS	Ins. Cos.	B&F	H&MF/DOH
Operating Budget	X						
Capital Budget		X					
Personnel Management			X				
Inventory Management				Y			
Payroll				Y			
Accounts Receivable					Y		
Cash Management						Y	
Facilities Utilization							Y
General Ledger Accounting							
Quality of Health Care							
Accounts Payable				Y			

Key:

X = Interface exists between hospitals and County/State Administrator's Office.

Y = Other interface exists, as indicated.

Blank = No interface exists.

*DAGS - Department of Accounting and General Services.

Ins. Cos. - Insurance Companies.

B&F - Department of Budget and Finance

H&MF/DOH - Hospital and Medical Facilities Branch, Department of Health.

the relative impact of information processing costs on total operational expenditures for the County/State Hospital Program. The estimates, shown in Tables VIII-2 and VIII-3, are displayed under two alternative assumptions: (a) thirty percent of nursing time spent in information processing and (b) a ten percent reduction in this figure to twenty percent.

In general, it is estimated that information processing costs constitute slightly under one-fifth of the annual operating expenses of general acute care hospitals and almost one-fifth for the two reporting extended care facilities. Thus, in the aggregate, information processing

costs constitute a significant component of the costs of health care delivery in the County/State Hospital Program. In part, this can be attributed to the large share of total cost represented by nursing services—almost fifty percent for general acute care units. Much of the combined cost is a product of the current labor-intensive mode of processing information in the system.

Substantial benefits will be realized if this pattern can be revised. For example, if the amount of time which nurses spend on information processing could be reduced from, say, thirty to twenty percent, then out of a \$13.5 million budget (FY 1970)

Table VIII-2
Estimated Proportion of Operating Expenditures
Represented by Information Processing Costs

	Alternative Nursing Care Assumptions			
	20 Per Cent		30 Per Cent	
	<u>Per Cent of Total Operating Costs</u>	<u>Per Cent Nursing Services of Information Costs</u>	<u>Per Cent of Total Operating Costs</u>	<u>Per Cent Nursing Services of Information Costs</u>
Selected General Acute Care Hospitals	15.6	43.4	18.6	49.6
Extended Care Facilities . . .	17.5	41.7	21.6	48.1

Source: County/State hospitals monthly HAS reports, various, June 1970–October 1970.

Note: For methodology consult text and Working Paper No. 5 on file in the Office of the Legislative Auditor.

Table VIII-3

Estimated Nursing Care "Productivity Dividend"
from Reduced Information Processing Activities

County/State Hospital Program

Nursing Care Information Proces- sing Assumptions	Per Cent Informa- tion Processing Costs of Total Operating Costs		Fiscal Year 1969-70 Operating Expenses	=	Estimated Cost of Information Processing
30 Per Cent	18.6	x	\$13,500,000	=	\$2,511,000
20 Per Cent	15.6	x	\$13,500,000	=	\$2,106,000

Estimated Productivity Dividend \$405,000

Source: Table VIII-2.

there would be a potential "productivity dividend" of \$405,000. This represents the amount of nursing resources that could potentially be released to other critical functions such as patient care. It may be possible to achieve some of these operating efficiencies through either the use of supplemental clerical personnel or the acquisition of nursing station data collection equipment.

4. *Future workload requirements.* The current disarray of management information processing and reporting functions for the County/State Hospital Program will not improve in the near future unless specific action is taken. Indeed, the present deficiencies seem almost certain to become more pronounced if a formalized plan of system development is not implemented in the next two years.

Worsening of operating conditions is likely to be evidenced in three areas. First, workloads will almost certainly increase more rapidly than population growth in the two major County/State Hospital Program counties of Hawaii and Maui. Second, wage increases for public service employment are likely to continue growing at a rate of approximately ten percent per year.⁴ Third, the number of beds in the system is likely to expand over the next ten years from the following sources:⁵

- . Construction of new facilities at Kamuela and Kona on Hawaii.
- . Possible absorption of Lanai and Molokai Community Hospitals into the program.
- . Renovation and expansion of Kauai Veterans Memorial Hospital and, possibly, entry of G. N. Wilcox Memorial Hospital into the program.

Expanding workloads *alone* underscore the necessity for developing a functioning MIS. Tables VIII-4 and VIII-5 display information

⁴Over the first decade of Hawaii's existence as a state, public service wage rates grew at a rate of over ten percent compounded annually.

⁵*Project Development Report—Kona Hospital*, DAGS Job No. 01-20-0526.2 by Ralph H. Conway, 1967, and *Areawide Health Facilities Plan for the State of Hawaii—Revised 1967 County of Hawaii Plan*, Health Facilities Planning Council of Hawaii, 1967, and *Areawide Health Facilities Plan for the State of Hawaii—Revised 1967 County of Maui Plan*, Health Facilities Planning Council of Hawaii, 1965.

on present and future population changes and bed requirements for the neighbor islands over the period from 1970 to 1980. Forecasted percentage changes are summarized below.

	Percent Increase in Population 1970 to 1980	Percent Increase in Estimated Bed Requirements 1970 to 1980
Hawaii	9.5	32.2
Kauai	14.2	17.2
Maui	13.0	12.6
Total	11.7	23.3

Overall, the estimated bed requirements for the two counties serviced entirely by the County/State Hospital Program will increase by almost one-quarter during this decade, while population in the neighbor islands will increase by *half* that rate, or about twelve percent.

This growth pattern in *basic* workload requirements for the County/State Hospital Program will necessitate planning for additional personnel. Some portion of that personnel increase (and resulting increase in the wage bill for the overall system) might be *avoided* through the acquisition of mechanized forms of data collection and data processing equipment. These equipment capabilities, when matched with properly trained operating personnel, could achieve substantial operating efficiencies.⁶

⁶For example, the estimated \$405,000 currently devoted to the inefficient utilization of nursing staff in essentially clerical functions.

Table VIII-4
Current and Future Populations—
Selected County/State Hospital Program by Counties

County	1970 ¹ Census	1980 PED Estimate	Per Cent Change 1970-80
Hawaii ²	63,468	69,500	+9.5
Kauai ³	29,761	34,000	+14.2
Maui ³	<u>46,156</u>	<u>52,200</u>	+13.0
Total	<u>139,385</u>	<u>155,700</u>	+11.7

Sources:

1. State of Hawaii, Department of Planning and Economic Development, *Population of Hawaii, 1970*, Statistical Report 77, November 19, 1970.
2. State of Hawaii, Department of Planning and Economic Development, *Population Projections, 1967*.
3. State of Hawaii, Department of Planning and Economic Development, *Population Projections, 1964 and 1966*.

In general, where efficiencies can be introduced through more equipment rather than through more personnel, a necessary precondition is that the unit costs of such tradeoffs are more than offset by reductions in unit labor costs. This condition will continue to evolve in the next two to three years as new, more compact and less expensive families of data processing equipment penetrate the market.

However, before those opportunities for efficient operations can be achieved, the County/State Hospital Program must implement a plan to correct present deficiencies, integrate reporting systems and train personnel in the use of uniform standards and procedures for processing and interpreting management information.

Table VIII-5
Current and Future Bed Requirements
Selected County/State Hospital Program by Counties

County	1970	Per Cent ECF	1980	Per Cent ECF	Per Cent Change 1970-80
Hawaii ¹	514	64.0	680	61.8	+32.2
Kauai ²	227	57.3	266	57.9	+17.2
Maui ³	<u>294</u>	57.1	<u>331</u>	55.2	+12.6
Total	<u>1,035</u>	59.5	<u>1,277</u>	58.3	+23.3

Sources:

1. Health Facilities Planning Council of Hawaii, *Areawide Health Facilities Plan for County of Hawaii*, 1964-1985 (Revised 1967), p. 51, September 21, 1967.
2. Health Facilities Planning Council of Hawaii, *Areawide Health Facilities Plan for County of Kauai*, 1966-1985, pp. 50 and 51, July 19, 1966.
3. Health Facilities Planning Council of Hawaii, *Areawide Health Facilities Plan for County of Maui*, 1965-1985, pp. 61 and 62, April 20, 1965.

CHAPTER IX

PROPOSED IMMEDIATE ACTION PLAN

A. Overview

The audit team recommends full implementation of three "immediate action" tasks *no later than* 15 months following formal acceptance of the report. Successful completion will place the County/State Hospital Program in a position to implement the "deferred action" recommendations, which involve actual systems development. The three major tasks, involving seven sub-tasks, which should be completed first are:

1. Upgrade Internal Personnel Capability
 - a. MIS and Management Training
 - b. Recruit Two Staff Specialists
2. Exploit Use of Existing Information
 - a. PAS-MAP
 - b. HAS
3. Establish Standard Reporting Requirements and Formats
 - a. Reporting Standards
 - b. Work Measurement Survey

c. New Reporting Standards and Forms

Each of these will be discussed in order. The discussion of each task will indicate its purpose and scope as well as estimated costs for completion. Figure IX-1 shows estimated initiation and completion dates for these tasks.

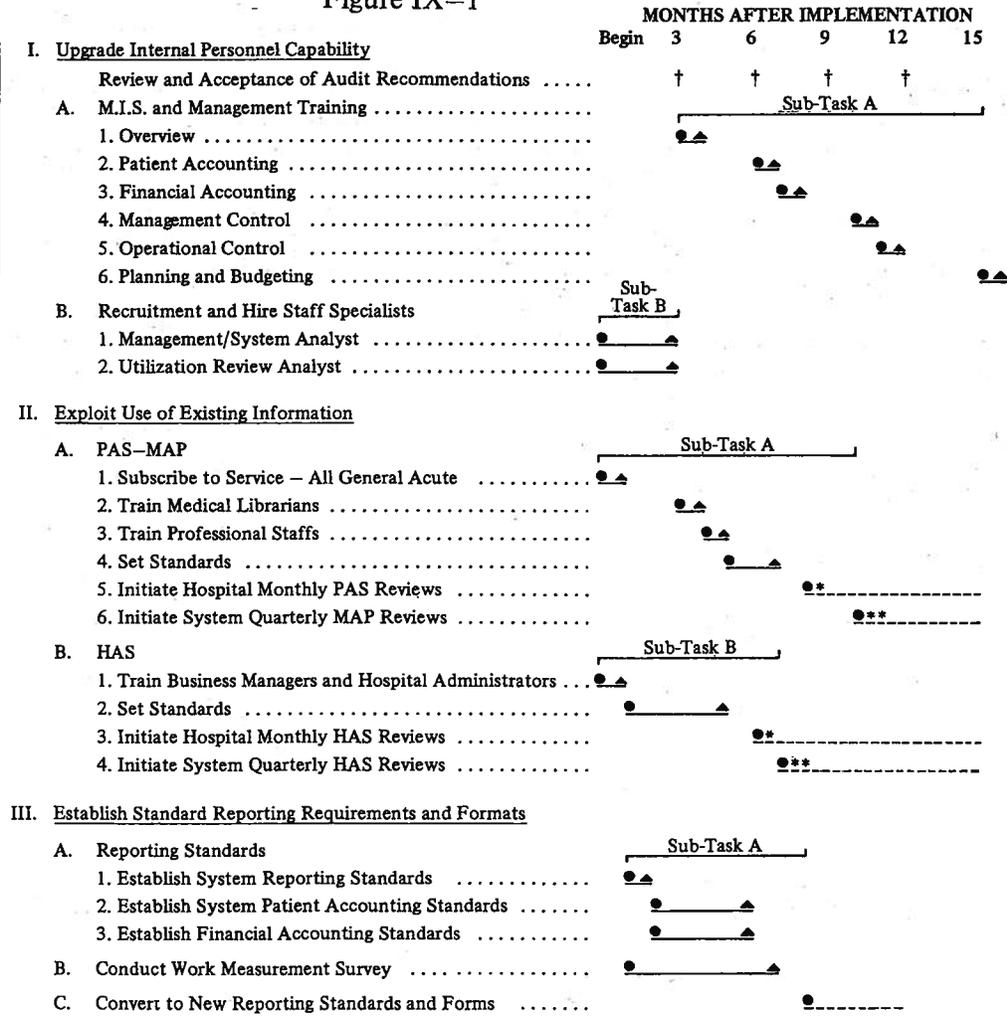
Major milestones in the immediate action phase include the following:

- . Establishment of an MIS Review Committee
- . Quarterly status reports
- . System HAS reporting standard (sixth month)
- . System PAS-MAP analysis standards (seventh month)
- . System Patient and Financial Accounting standards (eighth month)
- . Time standards for nursing services and administrative and fiscal activities (ninth month)
- . New reporting standards and forms (tenth month)
- . Completion of MIS basic training (15th month).

**SCHEDULE OF TASKS AND MAJOR MILESTONES
M.I.S. ACTION PLAN – IMMEDIATE ACTION PHASE**

Figure IX-1

LEGEND	
●	Beginning of Task
▲	End of Task
--	Continuation
†	Status Report
*	Monthly Hospital Review
**	Quarterly System Review



B. Upgrade Internal Personnel Capability

This first task involves completion of two pivotal sub-tasks requiring development cost of \$24,000 and operating cost of \$41,000 over a period of 15 months.

1. *MIS and management training.* The audit team considers this sub-task as necessary so that program management personnel develop an awareness of what a management information system is and how it functions. The training program should include a general introductory review as well as specialized subject treatments. The basic concept is to conduct a series of one to three day seminar workshops in the following subject areas:

- . MIS and Management Overview
- . Patient Accounting
- . Financial Accounting
- . Management Control
- . Operational Control
- . Planning and Budgeting.

The courses should be put on by contract organizations and qualified experts in each area. This program of training should take about two months to plan and thirteen months to complete. Upon conclusion of the training program, the Administrator should establish an

MIS Review Committee and appoint members to it from among the professional and administrative personnel in the system. A brief rundown of these six training courses follows.¹

a. *MIS and management overview.* This course is directed at both the Administrator and the hospital administrators. It should last two to three days, using chiefly the didactic devices of seminars and case workshops. In Figure IX-1 this course has been tentatively scheduled for delivery about the second week of the third month following implementation. In general, the course content should include the following subjects:

- . Managerial overview
- . Basic system concepts
- . Managerial responsibility
- . Hospital system structure.

b. *Patient accounting.* The second MIS course is designed for an audience comprised of the internal hospital administrative and professional staff. It should include hospital administrators, business managers, and the Director of Nursing. The course should last from one to two days and should basically be a

¹A summary of the suggested courses can be found in Table IX-1.

Table IX-1
Summary of Recommended M.I.S. and Management Training Courses

Course	Target Group	Type of Course	Contents
Overview	Program Administrator and Hospital Administrators	Seminars and Case Workshops	Systems Concepts, Management Responsibilities, Hospital Systems
Patient Accounting	Hospital Administrators, Business Managers and Directors of Nursing	Seminars and Workshops	Patient Accounting Systems and Applications
Financial Accounting	Business Managers and Accountants	Seminars and Workshops	Financial Accounting Subsystems, Reporting Requirements
Management Control	Administrator and Hospital Administrators	Case Study Workshops	Budget Processes, Responsibility Cost Centers, Program Costing
Operational Control	Hospital Administrators and Business Managers	Case Study Workshops	Managerial Accounting, Cost Centers Performance Standards
Planning and Budgeting	Program Administrator, Hospital Administrators and Business Manager	Lectures and Workshops	Planning, Budgeting, Cost Estimating, Forecasting

seminar workshop involving problem discussion. In Figure IX-1 this course has been tentatively scheduled for the second week of the sixth month following implementation. Content for the course should include the following topics:

- . Patient accounting concepts and systems
- . Purpose and structure of the patient accounting subsystem
- . Analysis and discussion of working problems.

c. *Financial accounting.* The third course is directed at business managers and accountants. It should last from two to three days and basically consist of a series of seminars and workshops on hospital-based financial accounting systems and problems. In Figure IX-1 this course is tentatively scheduled for the second week of the seventh month. Course content should include:

- . Structure of the financial accounting subsystems
- . Purpose and structure of the subsystem
- . System financial accounting requirements
- . Financial accounting requirements of federal, State and private reimbursement plans

- . Analysis and discussion of working problems.

d. *Management control.* As noted previously, management control is "the process by which managers assure that resources are obtained and used effectively and efficiently in the accomplishment of an organization's objectives." Thus this fourth course is designed for both the Administrator and the individual hospital administrators. It should last from two to three days and consist of a series of case study workshops. In Figure IX-1 this course is tentatively scheduled during the second week of the tenth month following implementation. Content should emphasize:

- . The budget process
- . Exercising budgetary control
- . Variable expense budgeting
- . Development of costs by responsibility centers
- . Development of full program costs
- . Identification of key program control variables.

e. *Operational control.* Operational control is defined as "the process of assuring that specific tasks are carried out effectively and efficiently." Thus this fifth course is designed for hospital administrators and business managers and should last from two to three

days. As in the instance of the preceding course on managerial control, the course vehicle should be the use of case workshops. Principal subjects should include:

- . Identification of managerial accounting concepts
- . Development and application of performance standards and reporting
- . Analysis of performance data from responsibility centers.

In Figure IX-1 this course has been tentatively scheduled for the second week of the twelfth month following implementation.

f. *Planning and budgeting.* The sixth and last course is directed at an audience comprised of the Administrator, the hospital administrators and business managers. The course should last from two to three days and consist of lectures and workshops. In Figure IX-1 this course is tentatively scheduled for the second week of the 15th month following implementation. Content should include:

- . The planning and budgeting subsystem
- . Purpose and structure of planning
- . Contemporary health care delivery planning concepts
- . Forecasting concepts and techniques

- . Annual budget cycle
- . Cost estimating for budget formulation
- . Case workshops in planning and budgeting.

2. *Recruit and hire two staff specialists.* Two staff specialists should be recruited and hired: a management/systems analyst and a utilization review specialist. Screening should begin *immediately* upon acceptance of the audit team's recommendations and conclude on or before the end of the third month following implementation.

The management/systems analyst should serve as the project manager for design and development of all Management Information Systems. His experience should include previous responsibility for MIS implementation in small to medium-sized organizations, preferably health-care based. The suggested salary range for this position is \$13,000 - \$15,000.

The medical utilization review analyst will serve as a part-time consultant for analysis and interpretation of PAS-MAP and federal Medicare quality of health care utilization data. His experience should include previous responsibility for utilization review and analysis for medium to large hospitals and/or medical groups. The salary range, which should be commensurate with the individual's professional qualifications and background, will probably be in the range of \$17,000 - \$20,000.

C. Exploit Existing Information

The second major task involves having all hospitals subscribe to and use two hospital-based statistical reporting services:

- . The Professional Activities Study—Medical Audit Program (PAS—MAP) service of the Commission on Professional and Hospital Activities (CPHA); and
- . The Hospital Administrative Services (HAS) survey of the American Hospital Association.

The PAS—MAP service generates monthly and quarterly information on the level of medical care for each hospital. The HAS survey develops monthly, quarterly, semi-annual and annual data on hospital operations and performance.

Working Paper No. VI² describes in detail how each of these services operates and its potential uses and benefits along with estimated costs of exploiting its potentials for the County/State Hospital Program. In brief, this task entails the expenditure of an estimated \$4,000 in development costs and \$32,000 in annual operating costs thereafter. The non-recurring developmental portion of this task should be completed in a total elapsed period of nine months after initiation.

²On file with the Office of the Legislative Auditor.

1. *PAS—MAP*. The audit team considers it essential to fill the county/state hospitals' present vacuum on information concerning the quality of health care by undertaking several basic steps regarding the PAS—MAP service.

- . Broaden subscription to the service
- . Training medical librarians in the acquisition and processing of basic PAS—MAP inputs
- . Training professional staffs in the development, interpretation and uses of PAS—MAP information for improving quality of health care
- . Set uniform standards for measuring quality of health care in the county/state hospitals
- . Initiate monthly staff reviews of PAS—MAP data
- . Initiate quarterly system reviews of PAS—MAP data.

a. *Subscribe to PAS—MAP*. Only two county/state hospitals currently subscribe to PAS and only one of these currently receives quarterly MAP reports. The County/State Hospital Administration Office should require all general acute care hospitals in the system to subscribe to PAS—MAP *no later than* one month following implementation of this plan. It should further require that attending physicians and surgeons file final discharge notices *no later than*

seven days following a patient's release from a county/state hospital. The estimated annual operating cost for the systemwide subscription to PAS-MAP is \$18,000 (based upon fiscal year 1970 patient discharges).

b. *Train medical librarians.* Hospital medical librarians acquire basic PAS-MAP input data from final diagnosis reports filed by attending physicians and surgeons. They are an important link in ensuring both accurate and responsive transmittal of this information to the CPHA processing center (at Ann Arbor, Michigan). To assure uniform treatment of these input data, medical librarians should receive a minimal amount of formal training. The audit team, therefore, recommends that the Administrator contract with either the CPHA center in Ann Arbor or the Hawaii Kaiser Health Plan for a one-day workshop on the PAS-MAP service. In Figure IX-1 this is programmed for delivery in the second week of the third month following implementation.

c. *Train professional staffs.* Since PAS-MAP information stems from final diagnosis reports prepared by attending physicians and surgeons, all county/state hospitals' chiefs of staff and medical superintendents should be given a one-week seminar workshop in the subject. The seminar workshops are already developed by the PAS-MAP center and are provided by the service gratis. In Figure IX-1 this one-week seminar workshop is tentatively scheduled for delivery during the fourth week of the third month following implementation. The seminar

workshops generally include the following subject matter:

- . Introduction to the purpose and scope of PAS-MAP
- . Basic information sources for PAS-MAP service inputs
- . Standards of care and their use in interpreting PAS-MAP data
- . Use of PAS-MAP analyses in improving the quality of inpatient health care delivery and the utilization of personnel and ancillary services.

d. *Set standards.* A basic and desirable feature of the PAS-MAP quality of care service is the development of standards by local professional staffs. The audit team recommends establishment of a PAS-MAP Standards Committee by the Administrator to set these standards. The objective is to develop a basic set of care standards to facilitate systemwide comparisons of the level of health care. The existing set of criteria developed by the Hawaii Medical Association and the Hawaii Kaiser Health Plan may serve as a useful guide for this initial effort; however, the final selection should be left up to the committee. Committee members should include chiefs of staffs, medical superintendents and medical and clinical department heads, as the Administrator deems appropriate. The committee should begin its deliberations on or before the fourth week in the fourth month following implementation and

should deliver its final recommendations *no later than* the first week in the seventh month following implementation.

e. *Initiate monthly hospital PAS reviews.* Following the completion of system subscription, training and standard setting activities, monthly PAS reviews in each acute care hospital should be initiated by *no later than* the end of the seventh month following implementation. The audit team further recommends establishment at each general acute care hospital of a Standing PAS Review Committee. The PAS Review Committee should consist of the chief of staff and the heads of each medical and clinical services department, where appropriate, as well as the hospital's medical librarian. The purpose of the Hospital PAS Review Committee is to analyze monthly PAS reports and make internal recommendations regarding improvement in basic health care delivery services as deficiencies are noted.

f. *Initiate quarterly system PAS-MAP reviews.* Quarterly PAS-MAP reviews for the entire county/hospital system should be started *no later than* nine months following implementation. These reviews should be integrated into the existing quarterly joint staff meetings. The overall analysis and consultation of the reports should be directed by the county/state staff specialist in utilization review. The purpose of these PAS-MAP quarterly reviews is to review performance during the past quarter, note deficiencies (if any) and prescribe remedial actions. The final

quarterly review for the fiscal year should present an annual report and review of the quality of inpatient care and the comparative areas of improvement.

2. *HAS.* Current usage of the HAS survey reports by those county/state hospitals that now subscribe is low or virtually nonexistent; further, little or no information from these reports reaches the Administrator. To correct these deficiencies and thereby increase both the productivity and visibility of HAS survey information, the audit team recommends a series of four essential tasks:

- . Train hospital administrators and business managers in development and analysis of HAS-derived information
- . Set uniform standards and formats for reporting HAS-derived information
- . Initiate monthly hospital HAS report reviews
- . Initiate quarterly system HAS report reviews.

a. *Train hospital administrators and business managers.* The American Hospital Association provides a series of seminar workshops and training materials for development and analysis of HAS survey reports. The audit team, therefore, recommends the delivery of a two-day seminar workshop under HAS auspices for all hospital administrators and business managers *no later*

than the second week in the second month following implementation. The course should include information on the following subjects:

- . The HAS survey: purposes and scope of services
- . Developing hospital data bases for input to HAS
- . Methods of analysis for measuring hospital operating performance using HAS information
- . Case study workshops on selected HAS problems.

b. *Set standards.* The HAS survey provides participating hospitals with an array of standards for each operating and performance indicator. These vary by size of hospital and location. Intelligent use of HAS requires development of a basic set of performance indicators in graphic and tabular form for efficient comparison of operations, both internally and systemwide. The audit team recommends that the Administrator establish an ad hoc HAS Standards Committee to develop such criteria and means of analysis. Committee members should be composed of hospital administrators in the program, with the Administrator as chairman. This committee should begin its activities *no later than* the fourth week of the second month following implementation. This committee should present its final recommendations *no later than* the

fourth week in the fifth month following implementation.

c. *Initiate monthly hospital HAS reviews.* Monthly HAS reviews should be initiated by each hospital *no later than* the sixth month following implementation. The HAS reviews should be conducted formally through the device of a monthly operations review meeting chaired by the hospital administrator, and involve the business manager and selected department heads (where appropriate).

d. *Initiate quarterly systems HAS reviews.* Quarterly HAS reviews should be initiated by the administration *no later than* the beginning of the seventh month following implementation. A standing System Operations Review Committee should be established with the Administrator as its chairman and hospital administrators as members. The management/systems analyst should be an ex-officio member of the committee. Reviews should include consolidated county and systemwide comparisons. At the mid-year and year-end reviews comparisons should also be made on a state and national basis, in addition to reporting on annual operating performance results.

D. Establish Standard Reporting Requirements and Formats

The third and final major immediate action task entails development of standards for

- . Systemwide operational reporting
- . Patient accounting
- . Financial accounting.

This task culminates in the conversion of all hospitals in the County/State Hospital Program to new and more simplified reporting systems and formats. The estimated development cost for Task III is \$43,000; of this amount \$35,000 is allotted to the Work Measurement Survey (see paragraph D-2). The cost of printing and distributing new reporting forms and instructions is not included in this estimate.

1. *Reporting standards.* The County/State Hospital Program has a proliferating array of forms and procedures for reporting operational, patient and financial accounting information. Each hospital has its own set of reporting formats, which helps confound management interpretation of operating information. To correct this deficiency, the audit team recommends the establishment of standards for reporting this vital information. To accomplish this requires that the Administrator

- . Establish system reporting standards
- . Establish patient accounting standards
- . Establish financial accounting standards.

a. *Establish system reporting standards.* On or before the fourth month following implementation of these recommendations, the Administrator should establish an ad hoc Reporting Standards Committee, chaired by the Administrator and composed of selected hospital business managers, chief accountants and chief nurses. The executive secretary for this committee should be the management/systems analyst. The primary purpose of this committee is to prepare a set of recommendations in the areas of patient and financial accounting reporting. Preliminary final recommendations regarding reporting standards should be ready *no later than* the beginning of the ninth month following implementation. These recommendations may subsequently be modified in the light of findings from the consulting engineering group's Work Measurement Survey.

b. *Establish patient accounting standards.* *No later than* the end of the second week in the fourth month following implementation, the Reporting Standards Committee should have made assignments to a Patient Accounting Standards Subcommittee (membership of the subcommittee should be comprised of business managers and chief or head nurses). The major activity of the subcommittee is to develop standard forms and procedures for in-hospital patient accounting functions. The principal concern of the subcommittee should be to establish a uniform series of forms for posting admissions and for processing daily charges. This subcommittee should file its preliminary final

recommendations *no later than* the end of the eighth month following implementation.

c. *Establish financial accounting standards.* In parallel to the Patient Accounting Standards Subcommittee, a companion subcommittee concerned with Financial Accounting Standards should also be established (members of this subcommittee should be composed of chief accountants). This subcommittee's basic objectives will be to establish uniform accounting standards and reporting forms based on accounting requirements laid down by the Hospital Association of Hawaii, the federal Medicare program and the Administrator's Office. Charts of accounts should be drawn up, in addition to suggested monthly, quarterly and annual financial statements which will facilitate the accumulation of basic hospital financial information for subsequent cost and program analysis.

2. *Work measurement survey.* As an aid in developing uniform standards for reporting basic patient and financial accounting information, the Administrator should contract with a qualified consulting industrial engineering group for a work measurement survey. This survey should be designed to obtain information leading to the establishment of more efficient utilization patterns for nursing, administrative and fiscal personnel. A further by-product of this effort should be generation of time standards for personnel in these categories and

simplified paperflows supporting their reporting activities.³ The work measurement survey is a necessary precondition for implementation of system development tasks suggested in the deferred action phase. The survey should begin no later than the beginning of the fourth month, with a final report to be delivered on or before the tenth month following implementation.

3. *Convert to new reporting standards and forms.* By the eleventh month following implementation, the County/State Hospital Program should be in position to convert to new reporting standards and formats. During the eleventh month, forms and instructions should be distributed and briefings held with the staffs of each hospital to explain the new procedures and forms. The briefings should be coordinated by the management/systems analyst. The entire fourth quarter following implementation should be devoted to a shakedown of the new reporting procedures and formats, and any necessary corrective action taken.

³*A note of caution:* the proposed study is not intended to result in the reduction of classified positions in these two manpower categories, but rather in increasing the productivity of existing personnel.

CHAPTER X

SUGGESTED DEFERRED ACTION PLAN

It is essential that the County/State Hospital Program first implement the immediate action plan and meet the preconditions which are necessary for full development of an MIS. Once this has been accomplished, the program will be in a position to embark on major changes leading to (1) mechanization and automation of the information system, and (2) increased productivity at several points in the system.

There is more than one possible way to approach development of an information system. Several factors which have been instrumental in the plan presented here are:

1. All subsystems are heavily dependent upon the patient and financial accounting information subsystems (the latter is heavily dependent on the former).

2. The size of the hospitals is a major determining factor in the acquisition of resources, such as personnel, required to support MIS efforts.¹

¹Specifically, Hilo could support a management systems analyst who would have overall responsibility for the development of a system for Hilo and subsequently be shared by the other hospitals on the Island of Hawaii. On the other hand, several hospitals such as Kauai Veterans or Maluhia are small, without central processing capabilities, and will doubtless have to depend upon some other point in the hospital system for any significant data processing capability.

3. Of the approximately \$2.5 million spent annually on information processing, the largest component (approximately 50% or \$1.3 million) is related to nursing services.

4. In order to have an effective information system in the Administrator's Office, a majority of the individual hospital information systems must first be operating effectively.

5. Resources available for initial development of an information system will be strictly limited—on the order of a few additional personnel and very little equipment.

6. In the event the County/State Hospital Program becomes self-sustaining (as recommended in the organization part of this audit report), a most important initial aspect will be development of a more reliable financial information system.

Based on these factors, it is suggested that development of an information system for the hospital program be executed in three phases extending over a period of approximately three years. This is a sequential plan; *the completion of each phase represents a major decision point at which further development can be modified, postponed, or discontinued.*

Unlike the instant total systems approach, this plan builds gradually toward integration of computer assisted capabilities. The three phases, involving eight major tasks, are:

Phase I – Basic System Development

- Develop a basic operational control system to enable the Administrator to monitor quality of health care services.
- Install data collection equipment to reduce nurses' clerical workload.
- Undertake a pilot project to develop a patient-accounting and accounts receivable system.

Phase II – Expanded System Development

- Extend pilot project to other county/state hospitals.
- Develop management planning and control information system for Administrator's Office.
- Expand pilot project to include operational and management control, and budgeting and all accounting.

Phase III – System Centralization

- Extend expanded pilot project to all other hospitals.
- Computerize selected modules in Administrator's Office.

Each of these three phases will be discussed in order. The discussion of each phase will

indicate its purpose and scope, as well as estimated costs for completion.² Figure X-1 shows suggested initiation and completion dates for each phase and the major tasks within each phase.³

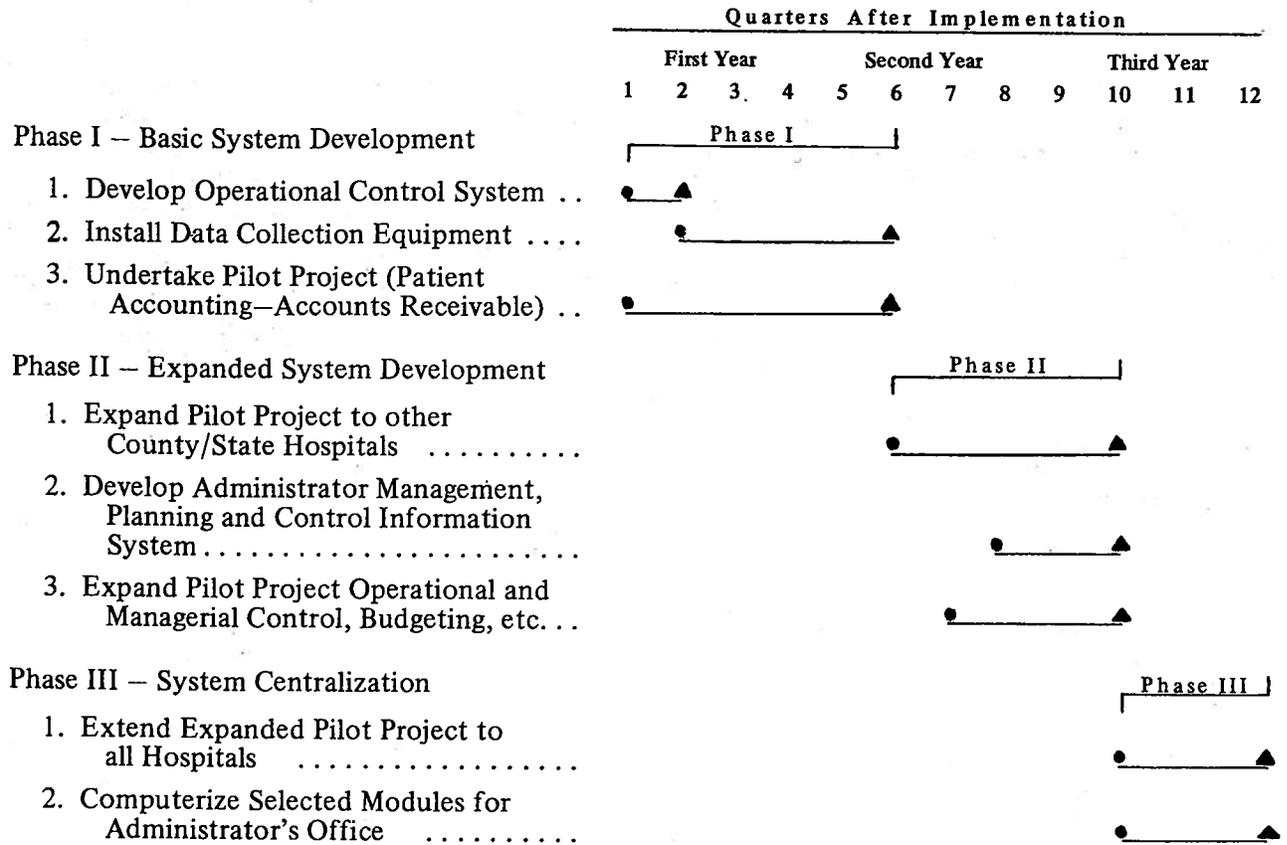
As noted above, commencement of the deferred action plan suggested here is contingent upon prior completion of the immediate action plan. If the immediate action plan requires longer to complete than the time scheduled, initial action on the deferred plan should almost certainly be further postponed. Because of this time lag, and because significant changes can possibly occur in some of the above factors which were instrumental in shaping the plan, it is recommended that the plan be carefully restudied before implementation commences.

Another important reason for revalidating this plan is the continued progress in data-processing equipment, especially in areas of mini-computers and even smaller EDP equipment, such as electronic accounting machines. Significant changes seem to be occurring every 12-24 months in terms of cost, productivity and simplicity. Because these

²Because of the time lag involved, these costs are tentative and subject to revision. Inflation aside, there is a strong underlying trend in this area towards higher (real) labor cost and lower cost per unit of equipment—or, as so often happens, more productive equipment for a given amount of money.

³Appendix D depicts and discusses the suggested system operation concept and flow charts.

Figure X-1
Tasks and Major Milestones M.I.S. Action Plan--Deferred Action Phases



LEGEND:
 ● – Beginning of Task
 ▲ – Completion of Task
 ┌───┐ – Duration of Phase

various unpredictable factors make this plan somewhat tentative, it falls in the category of a *suggested* plan of action, not a recommended plan.

A. Phase I: Basic System Development

This first phase contains three major tasks which should be executed. Estimated time for achievement of these tasks is approximately eighteen months. Estimated investment costs are \$200,000, and annual incremental operating costs are approximately \$100,000. Costs for the individual tasks are given in Table V-1.

1. *Develop basic operational control.* A basic operational control subsystem should be developed for the Administrator. The aim should be to develop a "management by exception" system, whereby significant aberrations or abnormalities are automatically flagged and brought to the Administrator's attention for further investigation and whatever corrective action may be necessary. Development should initially center on the facilities utilization and quality of health care modules. The basic information which should initially be used are the HAS and PAS-MAP reports. Effective control information can be derived from the individual reports as well as system reports grouped according to type of facilities (extended care and general acute) and by size. The task should also include development of non-computerized feedback procedures between the hospitals and the County/State Hospital Administration Office.

Assuming that the immediate action plan has been fully implemented, the in-house staff will be capable of carrying out this task. Moreover, it represents a logical follow-through step from the immediate action plan.

2. *Pilot project.* All modules of the Patient Accounting Information Subsystem and the Accounts Receivable Module of the Financial Accounting Information Subsystem should be formalized. In view of the geographical dispersion of the hospitals, the most advantageous approach appears to be a pilot project in one major acute-care facility which has sufficient staff to support such an effort and which could ultimately become the processing center for all other hospitals in either the county or the entire program. At present the two major candidates for such a program are Hilo or Maui Memorial.

The first step in this task is for the Administrator to designate a site for the pilot project. Then the Patient Accounting Information Subsystem and Accounts Receivable Module which will serve as the model for the other hospitals must be developed. Before beginning implementation of this task, additional analytic personnel may have to be hired.

Specific consideration should be given to incorporating some data processing equipment into the processing model. Two basic equipment options ought to be considered for this pilot project. First, if processing is prospectively going to be restricted to each county hospital system,

a small-scale computer probably offers sufficient processing capability. On the other hand, if there is prospect for eventually operating a central processing capability for all hospitals, then consideration should be directed to a shared computer system whose processing capability is expandable in terms of both data storage and data throughput.

3. *Data collection equipment.* The management analyst should evaluate the nursing clerical workload and introduce appropriate data collection equipment into the hospitals as an alternative to present manual processing. The introduction of data collection units is the most likely place where the hospital can achieve some cost savings over the present mode of operations.

In Chapter VIII, it was estimated that an annual productivity dividend of over \$400,000 could be achieved in the form of reduced nursing care time devoted to information processing activities. This "dividend" would be achieved by not hiring additional costly personnel and by installing nursing station data collection units instead. If an estimated forty devices at a unit cost of \$3,000 were purchased for a total investment of \$120,000, a net savings of \$280,000 would remain in the form of available nursing time for application to basic patient care functions.

B. Phase II: Expanded System Development

In the second phase a number of hard decisions about whether to have a central

processing facility, the type of equipment and operating strategy will all have to be made. Phase II involves three major tasks. Estimated elapsed time for the second phase is approximately 12 months, involving 30 man-months of effort. Estimated investment costs are \$55,000 and the incremental annual operating costs are approximately \$50,000.

1. *Extend pilot project.* The patient accounting and accounts receivable system developed in Phase I should be extended to service the needs of each hospital in the program. The system programs which must be developed are exactly the same as those required for all other hospitals in the system. There is no reason, therefore, to duplicate the effort expended. Certainly no more than one facility in each county should have its own processing unit and perhaps there should be only one processing unit for the entire system. Similar mini-computers can be installed on different islands or, alternatively, data can be transmitted through communication lines using terminals at both ends as transmitting devices, along with a line printer at the remote facility in order to receive reports back. This is not an on-line configuration requiring a high degree of technical expertise, but rather a data transmission setup operated in conjunction with one computer installation. To expand the capacity of the system and bootstrap the extra processing, even with the long distance transmission lines, would at this time appear to be a more feasible alternative than creating a requirement for systems staffs at various facilities.

One possible interesting compromise in this scheme might be to allow some hospitals with enough volume to support an electronic accounting machine to continue handling their own patient accounting and provide standard outputs (in the form of punched cards) which can be used as inputs to a central processing system for purposes of the operational and management control information subsystems. Regardless of the specific alternative selected at this time, the Administrator's staff should work with the hospitals in redesigning forms and facilitating the transition into the new processing system.

2. *Planning subsystem.* The second task is development of the planning subsystem for the Administrator's Office. By the time all preceding work which has been laid out has been accomplished and the hospital personnel have acquired expertise in using information, the planning models which are an integral part of such systems will be within the level of competence to be developed and used. In addition, by this time a sufficient data base will exist for such a system to be feasible.

3. *Expand pilot project.* The pilot project should next be expanded to handle, for one hospital only, the operational and management control information subsystems. At this time, specific consideration should also be given to whether operating and performance data (such as will have been provided by HAS

and PAS-MAP during the previous two years of systems development) might not be more effective if developed internally,--particularly in view of the time delay which is built into HAS and PAS-MAP. At that time, when consideration can be given to the data which are actually being used, the development of internal reporting systems may be feasible.

C. PHASE III: System Centralization

There are two tasks to this final phase. Investment cost will be approximately \$35,000 and incremental operating cost will be approximately \$30,000.

1. *Extend expanded pilot project.* The remaining hospital information subsystems will have to be added to the existing system(s); this will necessitate the expansion of the hardware capacity.

2. *Computerized support for the Administrator.* Modules of the Administrator's Information System which could benefit from automation should be programmed so that they can be operated as part of the new existing computerized information system. Particular attention should be paid to the needs of analytical models which support forecasting, planning and decision-making at the Administrator's level.

APPENDICES

- Appendix A. Proposed Legislation for Establishment of Hawaii Health Facilities Authority and Hawaii Health Facilities Building Trust**
- Appendix B. Proposed Organization Charts**
- Appendix C. Definition of Selected Management Information System (M.I.S.) Terms**
- Appendix D. Suggested Systems Operations Concept for the County/State Hospital Program**

APPENDIX A

A BILL FOR AN ACT

RELATING TO HAWAII PUBLIC HOSPITALS, HEALTH AND MEDICAL FACILITIES AND MAKING APPROPRIATIONS THEREFOR

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

Section —1. Definitions. As used herein:

- (a) “Authority” means the Hawaii Health Facilities Authority described in Section 2.
- (b) “Board” means the Hawaii Health Facilities Board of Trustees described in Section 3.
- (c) “Trustee” means the members of the board appointed under Section 3.
- (d) “Building trust” means the Hawaii Health Facilities Building Trust described in Section 20.
- (e) “Building trustee” means a trustee of the building trust appointed under Section 20.
- (f) “Hospital” means any of the following hospitals and others which may be added to this list by the board:
 - (1) Maluhia Hospital, Honolulu, Oahu;
 - (2) Hilo Hospital, Hilo, Hawaii;
 - (3) Honokaa Hospital, Honokaa, Hawaii;
 - (4) Kohala Hospital, Kapaau, Hawaii;
 - (5) Kona Hospital, Kealahou, Hawaii;

- (6) Kau Hospital, Pahala, Hawaii;
- (7) Maui Memorial Hospital, Wailuku, Maui;
- (8) Kula Sanatorium and General Hospital, Keokea, Maui;
- (9) Hana Medical Center, Hana, Maui;
- (10) Kauai Veterans Memorial Hospital, Waimea, Kauai;
- (11) Samuel Mahelona Memorial Hospital, Kapaa, Kauai.

(e) "Administrative employee" means the general manager of all hospitals and the manager of each hospital.

(f) "Professional employee" means doctors, registered nurses and laboratory technicians.

Section -2. Authority Established; Purpose. There is hereby established the "Hawaii Health Facilities Authority." The authority shall be under the control of the board described in Section 3 and be placed within the Department of Health for administrative purposes.

The purpose of the authority is to establish, manage, control and operate public hospitals and health facilities.

BOARD

Section -3. Composition; Appointment; Removal. There is hereby established the Hawaii Health Facilities Board of Trustees of nine members. Of the nine members at least one shall be from each county. The director of health shall be an ex-officio member of the board without vote.

All members shall be appointed by the Governor with the advice and consent of the Senate.

No one may serve on the board if he has any potential conflict of interest or does business directly or indirectly with the hospitals or health facilities except as a patient.

A trustee may be removed by the Governor for good cause.

Any trustee who is absent for two consecutive meetings shall be removed by the Governor.

Section -4. Term; Vacancy. The normal term of each trustee is five years. Of the first 9 trustees appointed, three shall be appointed for a term of three years, three for four years, and three for five years.

A vacancy on the board shall be filled by appointment of the Governor with the advice and consent of the Senate. The person appointed to fill a vacancy shall serve for the remainder of the term of his predecessor.

If by the end of his term, his successor is not appointed, the trustee shall serve until his successor is appointed.

A trustee shall not serve for more than one consecutive term.

Section -5. Compensation; Expenses. Each trustee shall receive \$150 per official meeting attended but the total amount received per year shall not exceed \$3,000.

Travel and other out-of-pocket disbursements necessary to the business of the authority shall be paid by the board.

A trustee may be reimbursed by the board for any necessary expenses made by the trustee in behalf of the authority and approved by the board.

Section -6. Chairman. The trustees shall select one of their members to serve as chairman, who shall serve no more than one consecutive term of one year.

Section -7. Meetings; Notice; Records and Minutes. There shall be at least one meeting of the board every three months. The chairman may call a meeting of the board at any time by giving at least seven days' written notice of the time and place of the meeting to all other trustees.

Any five trustees may call a meeting of the board by giving at least ten days' written notice of the time and place of the meeting to all other trustees.

A meeting of the board may be called at any time without notice if all trustees agree.

The board shall keep records and minutes of all meetings of the board.

Section —8. Quorum; Voting Power; Majority; Deadlock. Five trustees shall constitute a quorum to transact business.

Each trustee present at a meeting shall have one vote.

Any action taken shall be by a simple majority of the trustees present at a meeting. If the vote on any matter is deadlocked, every trustee present shall cast a vote.

Section —9. Powers. Except as otherwise provided in this chapter, the board may do all acts necessary to carry out the purposes of the authority, including but not limited to:

(a) Establishing hospitals and health facilities and governing, controlling and operating each facility.

(b) Determining policies affecting the hospitals and health facilities.

(c) Establishing short-term lines of credit not exceeding twelve months, and borrowing short-term money, not exceeding twelve months, or selling accounts receivables for working capital needs.

(d) Entering into contracts for the guaranty of services or for a program of services and facilities management.

(e) Determining all personnel policies, including but not limited to the establishment or negotiation of wages, salaries, hours and other conditions of employment for all personnel of the authority.

(f) Establishing programs providing for prepaid insurance or prepaid payments for hospital, medical and surgical services.

(g) Contracting for legal services and hospital and health consulting services.

Section —10. Duties. The board shall do all acts necessary to achieve the purpose of this act, including but not limited to:

(a) Hiring an administrator to function as general manager of all hospitals and health facilities.

(b) Reviewing and approving all budgets, including operating and capital improvement programs.

(c) Contracting for and receiving an annual audit by a CPA firm covering all financial operations of all hospitals and the authority.

(d) Determining price or fee schedules for all services so that by July 1, 1973, the price or fee schedules shall be at a level which will make the operations and programs of the hospitals and health facilities self-supporting.

Section -11. Limitation. The board may not issue long-term bonds or other indentured indebtedness or otherwise enter into long-term debt arrangements without the approval of the Director of Finance.

Section -12. Administrative and Professional Salary; Nonrestriction. The board may determine the salary of administrative and professional employees of the authority. The board may waive the requirements of Section 78-1, Hawaii Revised Statutes, as amended, in hiring administrative and professional employees of the authority.

Section -13. Effective Date; Transfer of Function. Any other law to the contrary notwithstanding, effective July 1, 1972, all functions pertaining to the operation and maintenance of hospitals and other public health and medical facilities heretofore performed by the state under Act 265, Session Laws of Hawaii 1969, shall be administered and performed by the authority.

Section -14. Effective Date; Transfer of Personnel. Any other law to the contrary notwithstanding, effective July 1, 1972, except for administrative employees, all employees of all hospitals, a major portion of whose duties is in a functional area covered by Section 13 herein, shall be transferred to the authority.

Except for administrative employees, no employee transferred by this act shall suffer any loss of salary, seniority, prior service credits, vacation, sick leave, retirement disability, or other employee benefits or privileges as a result of this act. The Department of Health shall not be required to transfer funds to cover the vacation credit earned or accumulated by employees transferred under this act.

Section -15. Effective Date; Transfer of Personal Property. Any other law to the contrary notwithstanding, effective July 1, 1972, all personal property, including but not limited to records, equipment, machinery, motor vehicles, files, supplies, contracts, books, papers, documents and maps of the several hospitals used in the functional areas covered by Section 13 of this act, shall be transferred to the authority without cost to the authority or reimbursement to the Department of Health and without compliance with disposal procedure or requirements. The Department of Health shall prepare inventory

lists to account properly for such transfer.

Any dispute as to whether any particular personal property should be transferred to the authority under this act shall be determined by the administrator.

If the administrator determines that any of the personal property so transferred or to be transferred is not needed by the authority, the property shall be returned to or retained by the Department of Health.

Section -16. Temporary Use of Facilities. If any room, building, structure or other place owned or under the control of the Department of Health was temporarily occupied or used by personnel or property which is related to the performance of duties in any of the functional areas covered by Section 13 of this act, and it is impractical or disruptive to the efficient and orderly transition under this act to relocate or move such personnel or property, then such room, building, structure or other place shall continue to be so occupied and used without payment of any rental or other charges to the Department of Health, provided that such occupancy shall not continue beyond one year after the effective date of this act. The state department to which the function has been transferred shall effect the physical transfer and relocation of all personnel and property at the earliest possible date.

Section -17. Ambulance Services and Tuberculosis Patients. Effective July 1, 1972, in each county of less than 200,000 population, the Department of Health shall provide emergency ambulance service. Funds for this service shall be provided for in the regular budget submission of the Department of Health. The Department of Health may enter into contracts with the authority to provide such services.

Effective July 1, 1972, the Department of Health shall reimburse the authority for inpatient and outpatient care rendered to all tuberculosis patients.

Section -18. Effective Date; County Fund and Fund Status. Any other law to the contrary notwithstanding, effective July 1, 1972, the board shall establish five funds, one central fund for the authority and one for each county, respectively, covering all hospitals and health facilities within each respective county.

Whenever the annual budget for a respective county fund calls for appropriations from the general fund, that fund shall be classified as a special fund and shall be subject to all other review and controls which the Department of Budget and Finance imposes on all other special funds.

Whenever the annual budget for a respective county fund calls for no appropriation from the general fund, that fund shall be classified as a revolving fund. The central fund is a revolving fund. The Department of Budget and Finance shall review, but not exercise any controls over revolving funds.

Section -19. Audit and Reporting Requirements. The board and all operations run by the board shall be audited by the Office of the Legislative Auditor at least once every two years.

BUILDING TRUST

Section -20. Building Trust. There is hereby established a Hawaii Health Facilities Building Trust (hereinafter "building trust"). The building trust shall be under the control of three building trustees, of whom one shall be the Director of Finance or his designee, who shall be the chairman. The other two building trustees shall be appointed by the Governor with the advice and consent of the Senate.

No one may serve as a building trustee if he has any potential conflict of interest or does business directly or indirectly with the hospitals or health facilities, except as a patient.

A building trustee may be removed by the Governor for good cause.

Any building trustee who is absent from two consecutive meetings shall be removed by the Governor.

Section -21. Term; Vacancy. The normal term of each building trustee is five years. Of the first two building trustees appointed, one shall be appointed for a term of four years, and the other for a term of five years.

A vacancy on the building trust board shall be filled by appointment by the Governor with the advice and consent of the Senate. The person appointed to fill a vacancy shall serve for the remainder of the term of his predecessor.

If by the end of his term his successor is not appointed, the building trustee shall serve until his successor is appointed.

A building trustee shall not serve for more than one consecutive term provided that a building trustee appointed initially for less than a full term may be appointed for another consecutive term.

Section –22. Compensation; Expenses. Each building trustee shall receive \$150 per official meeting attended, but the total amount received per year shall not exceed \$3,000.00.

Travel and other out-of-pocket disbursements necessary to the business of the building trust shall be paid by the building trust.

A building trustee may be reimbursed by the building trust for any necessary expenses made by the building trustee in behalf of the building trust.

Section –23. Meetings; Quorum; Voting Power; Majority. The chairman shall call at least one meeting of the building trustees every three months. Three building trustees shall constitute a quorum to transact business.

Each building trustee present at a meeting shall have one vote.

Any action taken shall be by a simple majority of the building trustees present at a meeting.

Section –24. Location; Purpose; Powers; Duties. The building trust shall be placed within the Department of Budget and Finance for administrative purposes.

The purpose of the building trust is to arrange for the designing, development, financing, construction and leasing of hospitals and health facilities of the authority.

Except as otherwise provided by law, the building trust may do all acts necessary to carry out the purposes of the building trust, including but not limited to:

(a) Contracting for the designing, development, financing, construction and leasing of public hospitals and health facilities.

(b) Issuing general revenue bonds or reimbursable general obligation bonds to underwrite the cost of development of said facilities.

(c) Determining fair monthly or annual rent for said facilities to be charged to the authority.

The building trustees shall do all acts necessary to achieve the purposes of the building trust, including but not limited to:

(a) Determining the fair monthly or annual rent for its facilities on the basis of the economic value of the facilities and the amortization of the debt for the construction, including administrative and finance charges, of said facilities within 30 years.

(b) Contracting for and receiving an annual audit by a CPA firm covering all financial operations of the building trust.

Section -25. Effective Date; Transfer of Real Property. Any other law to the contrary notwithstanding, effective July 1, 1972, the Department of Health shall convey to the building trust all of its respective interest in and to any real property and the improvements used in the functional areas covered by Section 13 of this act, and which are directly related to or necessary in the operation and maintenance thereof. The conveyance shall be without cost to the building trust or reimbursement to the Department of Health and without compliance with disposal procedure or requirements.

If within a period of ten years after the effective date of this act, any of the real property so transferred is abandoned or ceases to be used for purposes stated in the preceding paragraph, the Board of Land and Natural Resources shall by resolution declare such abandonment or cessation as to any of the real property conveyed hereunder or any portion thereof and reconvey such realty or portion thereof to the county from which it had originally been transferred. The provisions of this paragraph shall not apply to state lands that had been set aside for use by the county or to real property where the major portion of the cost of the land or improvements was advanced by state funds.

Section -26. Appropriation. There is hereby appropriated out of the general funds of the state the sum of \$ _____ or so much thereof as may be necessary to the authority to carry out the purposes and functions required under this act.

Section -27. Amendment and Repeal of Conflicting Laws. All laws and parts of laws heretofore enacted which are in conflict with the provisions of this act are hereby amended to conform herewith. All acts passed during the general session of 1971, whether enacted before or after the passage of this act, shall be amended to conform to this act unless such act specifically provides that this act is amended.

Section -28. Construction; Severability. If any provision of this act or the application thereof to any person or circumstance is held invalid, the invalidity does not affect other provisions or application of the act which can be given effect without the invalid provision or application, and to this end the provisions of this act are severable.

Section -29. Effective Date. This act shall take effect on July 1, 1971.

INTRODUCED BY

APPENDIX B

PROPOSED ORGANIZATION CHARTS

- Figure B-1** **Proposed Organization of Hawaii Health Facilities Authority (HHFA)**
- Figure B-2** **Proposed Organization of General Manager Office, Hawaii Health Facilities Authority (HHFA)**
- Figure B-3** **Proposed Organization of Hawaii Health Facilities Building Trust (HHFBT)**

Figure B-1
PROPOSED ORGANIZATION OF
HAWAII HEALTH FACILITIES AUTHORITY (HHFA)
Effective Date: 1 July 1972

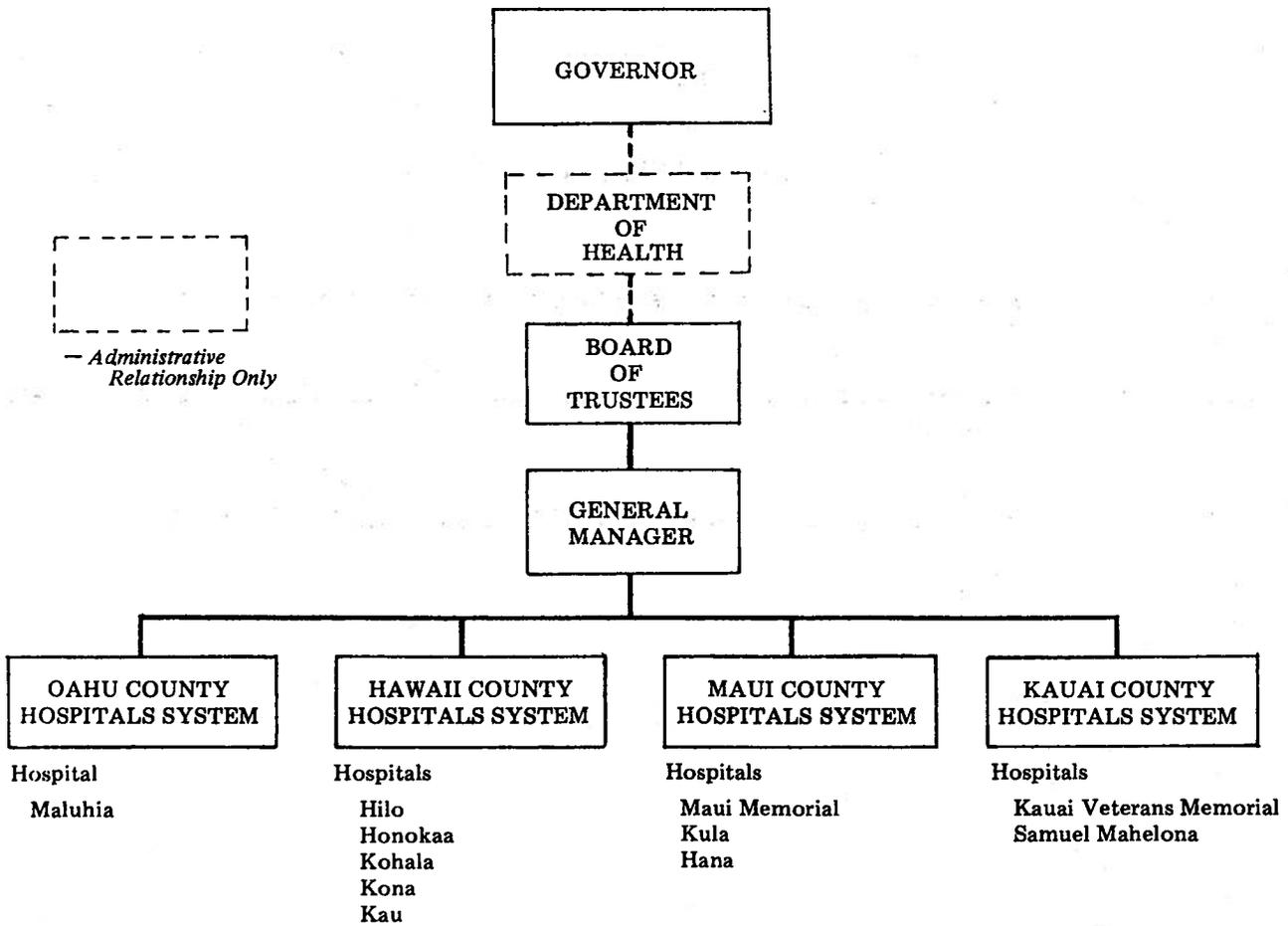


Figure B-2

PROPOSED ORGANIZATION OF GENERAL MANAGER OFFICE--
HAWAII HEALTH FACILITIES AUTHORITY (HHFA)

Effective Date: 1 July 1972

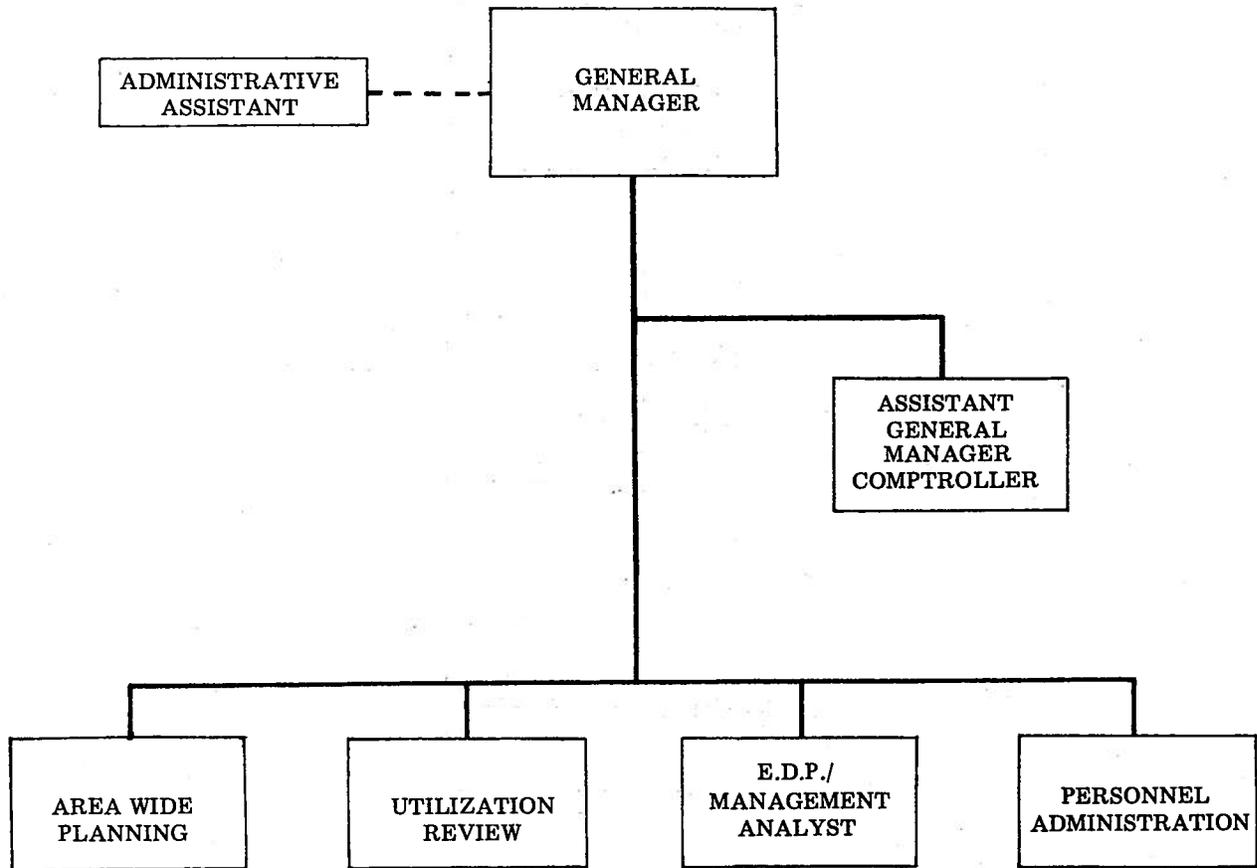
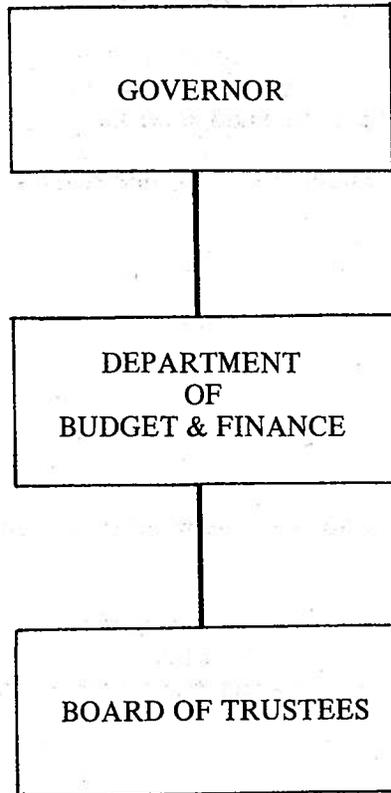


Figure B-3

**PROPOSED ORGANIZATION OF
HAWAII HEALTH FACILITIES BUILDING TRUST (HHFBT)**

Effective Date: 1 July 1972



APPENDIX C

DEFINITION OF SELECTED M.I.S. TERMS

Information System – An information system is a set of procedures for handling, storing and manipulating information. The system may be either machine assisted or it may be entirely manual in terms of the basic functions of processing and manipulating data.

Management Information System – A management information system (M.I.S.) is an information system designed specifically to produce information in a form which can support and aid managerial decisionmaking for the basic purposes of planning and control.

Input – Input to an information system can be numbers, facts, or descriptive materials, generally called *data*.

Output – Output is the product of processing, manipulating, summarizing and compiling data.

Data Base – A data base is simply a standard collection of facts, numbers and descriptive materials that can be maintained, updated and used for historical reference.

Subsystems – A subsystem is a grouping or clustering of closely related procedures for performing specific tasks.

Interface – The linkage or interrelationships between subsystems is called the interface: literally, the “fitting together” of subsystems.

Module – A set of information processing activities satisfying an information subsystem function; the principal component and building block of an information subsystem. When a subsystem is general enough to be used in several different ways or in more than one location in an information system, it is called a module.

Systems Development – Systems development is the process of determining the needs an information system must meet and designing the most effective and efficient procedures for gathering the data and processing it to meet those needs.

APPENDIX D

SUGGESTED SYSTEMS OPERATIONS CONCEPT FOR THE COUNTY/STATE HOSPITAL PROGRAM

A prerequisite for developing the information systems of the County/State Hospital Program is a systems operations concept encompassing the hospitals, the County/State Hospital Administration Office and the relationship between the two. Such a concept, coupled with an action plan will

- . Provide a formal basis for establishing priorities for upgrading existing information processing activities
- . Create a basis for future control and maintenance of systems
- . Provide an explicit focus of attention around which in-house system thinking can be developed and subsequent capability developed.

An action plan includes four basic elements:

1. Responsibility Centers
2. Statement of System Objectives
3. Information System Framework
4. Operations Centers.

A. Responsibility Centers

At both the State and hospital level responsibility for monitoring, developing, and operating information systems should be established in the C/S Administration Office and the hospitals' administration and business offices. The responsibility for information systems should be established so as to transcend subsystem elements such as patient and financial accounting.

At the hospital level, the primary responsible positions for Management Information Systems reporting will be the individual hospital administrator and the business manager for each facility.

B. Statement of System Objectives

Table D-1 displays the system objectives appropriate for the County/State Hospital Program. There are two sets: one from the vantage point of the State in terms of its own requirements and interface with the hospital systems, and the second from the vantage point of the hospitals and the interface of their subsystems with the hospital system.

C. Information System Framework

A framework of management information systems identifies the modular structure of the major functional subsystems. Each subsystem has a specific purpose related to achieving the system objectives. The purpose of the framework is to provide a basis for the development and operation of an information system. As such it is an *integral component* of the action plan.

1. *The Administrator's Office.* Figures D-1(a) and D-1(b) illustrate the recommended framework of the information systems for the County/State Hospital Administration Office. Figure D-1(a) shows only the subsystem structure and interrelationships. The diagram includes the purposes of the subsystems, typical reporting cycles, and the reports generated by the subsystems. Figure D-1(b) illustrates the modules composing each subsystem. This figure indicates which modules of the functional subsystems require further development and which do not currently exist.

Figure D-1(a) includes four important system design considerations. *First*, there are four major subsystems included in the information system of the County/State Hospital Administration Office:

- . Management control
- . Operational control
- . Planning and policy development
- . Budgeting.

Second, the Management Control and Operational Control Information Subsystems directly interface with the hospital systems in terms of receiving data and providing some type of feedback information which can be used in controlling their operations. This feedback is in two forms: one is information specifying control levels or policies as a basis for discretionary control by the hospitals; the other is flagging information sent by the County/State Hospital Administration Office to indicate that certain hospital activities are not being conducted within satisfactory levels for the system.

Third, the Planning and Policy Development Subsystem depends entirely upon the other subsystems.

Table D-1

INFORMATION SYSTEMS ACTIVITIES

Statement of Objectives

County/State Hospital Administration Office

General

Develop and maintain an information system to support the information requirements of County/State Hospital Administration Office.

Specific

Provide information support for policy setting, planning, management, and control of the Act 97 Hospital Program by County/State Hospital Administration Office.

Provide a consistent framework in which each hospital can develop its own information system which will also serve as part of the data base for the state-level system.

Individual Hospital

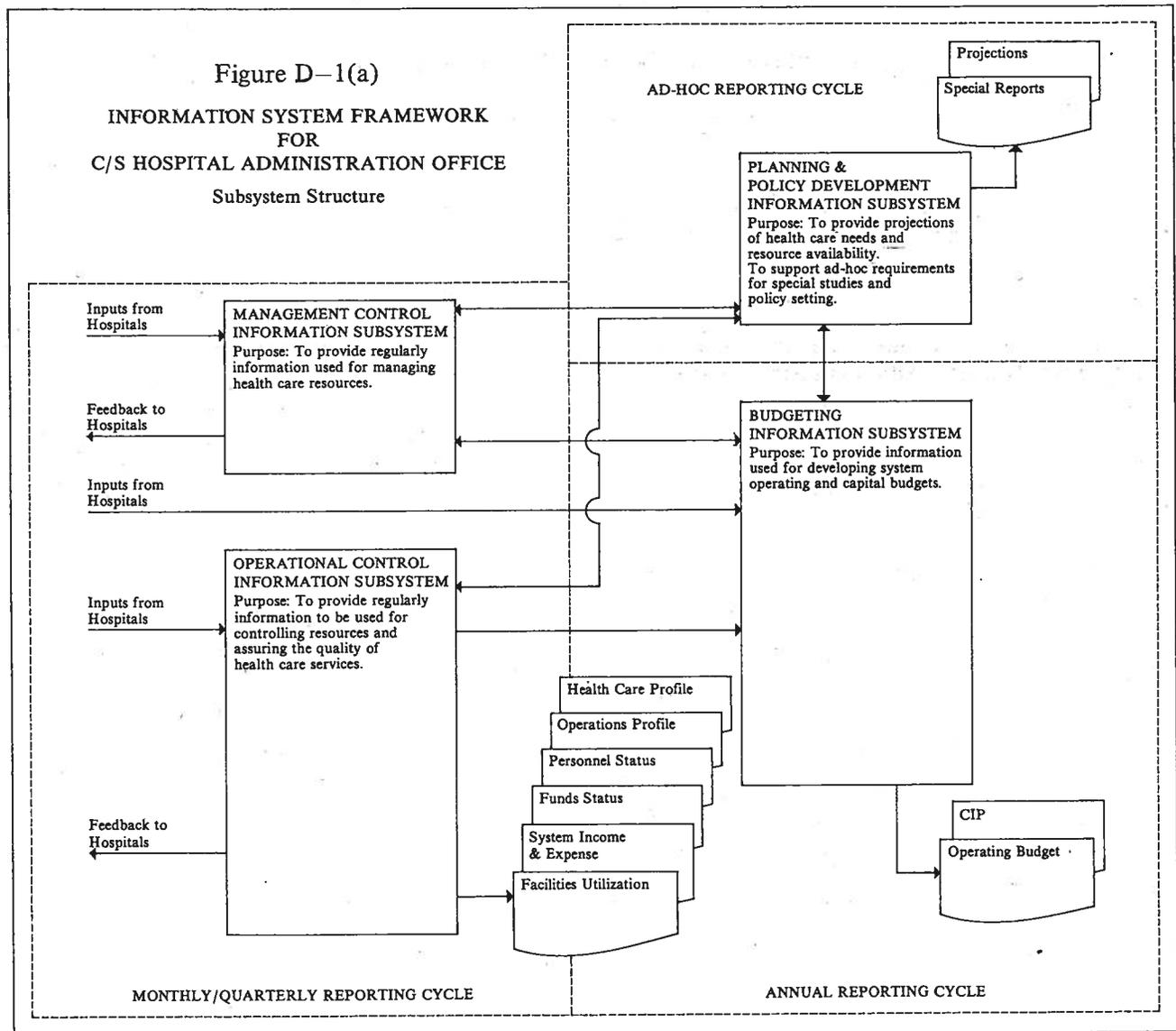
General

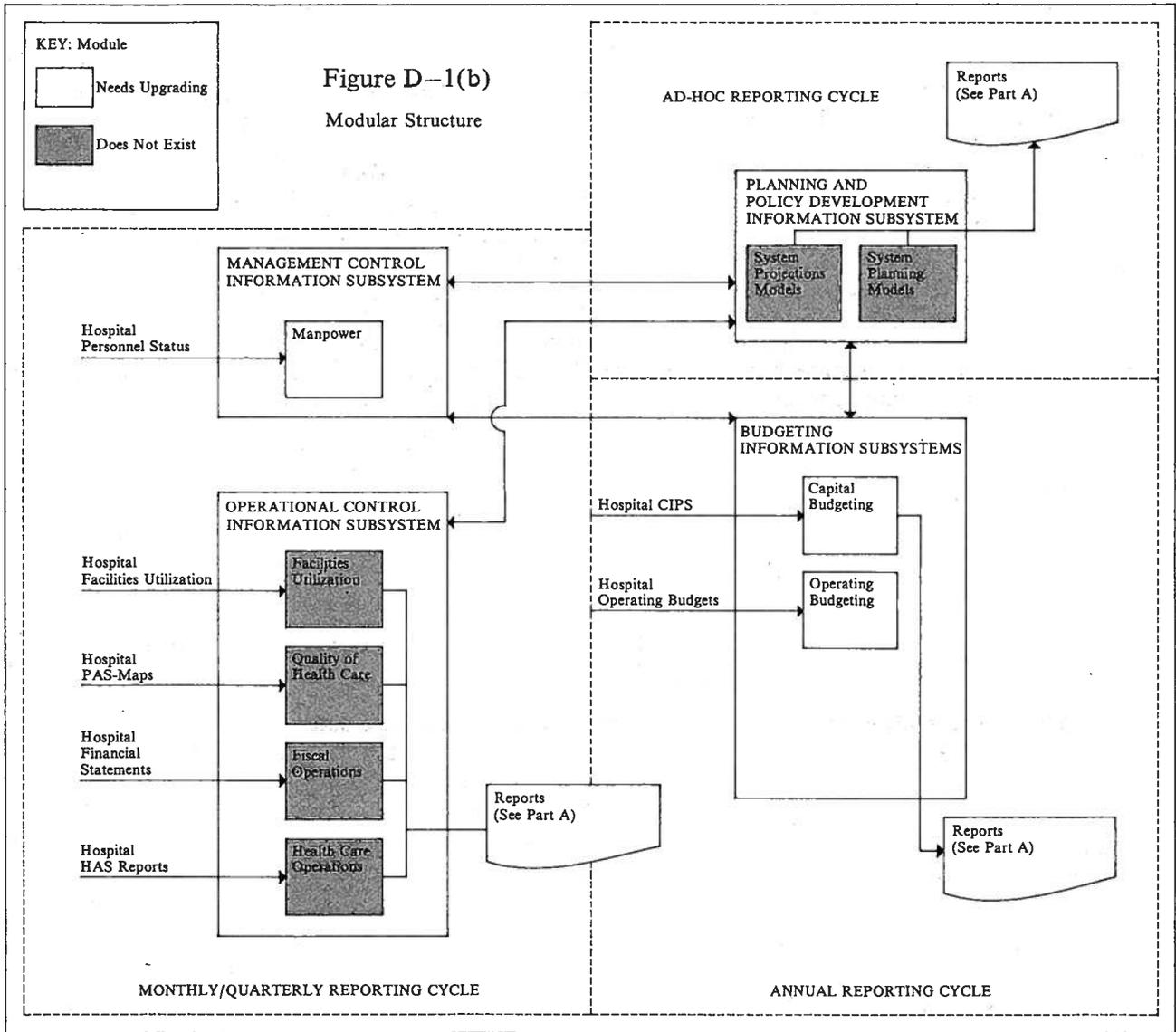
Develop and maintain an information system to support the information requirements of the hospital.

Specific

Provide information support for policy setting, planning, management, and control of the hospital.

To assure that all requirements for hospital data by the County/State Hospital Administration Office can be satisfied and are consistent with State office needs.





to provide the data which it requires in its models and analysis. There is an implied requirement that its data needs influence the structure of the other subsystems.

Fourth, and last, the Management Control Information Subsystem is designed to manage the utilization of health care resources by the County/State Hospital Administration Office.

Figure D-1(b) shows the subsystem structure is based on nine modules. These are also shown in Table D-2. The modules of the Planning and Policy Development Information Subsystem develop projections of the health care demands over time and the facilities capabilities to meet those demands. The outputs of these models should be used to support policy studies, as inputs into the Budgeting or Control Subsystems, or as information back to the hospitals for use in their own planning.

2. *The individual hospital.* Figures D-2(a) and D-2(b) portray the framework of the information system for a typical county/state hospital. Figure D-2(a) illustrates the subsystem structure showing that the typical county/state hospital information system is composed of five subsystems:

- . Patient
- . Accounting
- . Management Control
- . Operational Control
- . Budgeting.

The last three are similar in purpose to the subsystems of the same name existing in the County/State Hospital Information System.

The Patient Information Subsystem is the basis for generating all the data used in the systems of the hospitals and County/State Hospital Administration Office. Satisfactory operation of this subsystem is therefore very critical. To the extent that data are poorly or incompletely collected at this stage in the process, the information generated through the rest of the system will be affected unfavorably. With the exception of the Patient Information Subsystem, the other subsystems interface directly with the State information system.

Figure D-2(b) illustrates the modular structure of each of the subsystems. There are fifteen modules identified in this figure. Table D-3 lists these. At the present time within most county/state hospitals all modules exist in some form; however, they require upgrading and definition structuring.

The actual structure of the modules will vary from hospital to hospital in order to be consistent

Table D-2

**MODULES OF COUNTY/STATE HOSPITAL
ADMINISTRATION OFFICE INFORMATION SYSTEM**

<i>Subsystem</i>	<i>Modules</i>
Management Control	Manpower
Operational Control	Facilities Utilization Quality of Health Care Fiscal Operations Health Care Operations
Planning and Policy Development	System Projection Models System Planning Models
Budgeting	Capital Budgeting Operating Budgeting

Figure D-2(a)

INFORMATION SYSTEM FRAMEWORK FOR A C/S HOSPITAL

Subsystem Structure

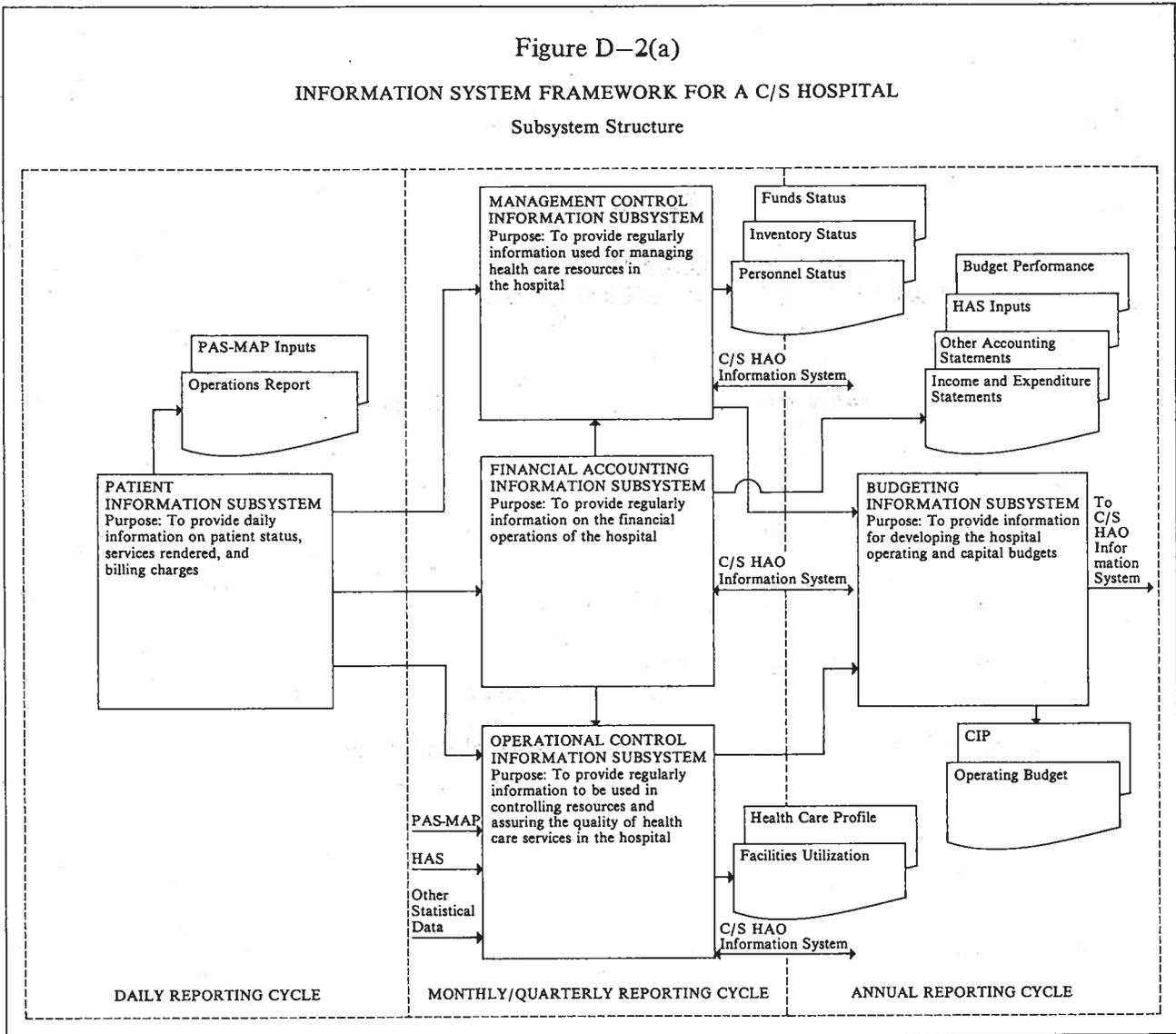


Figure D-2(b)
Modular Structure

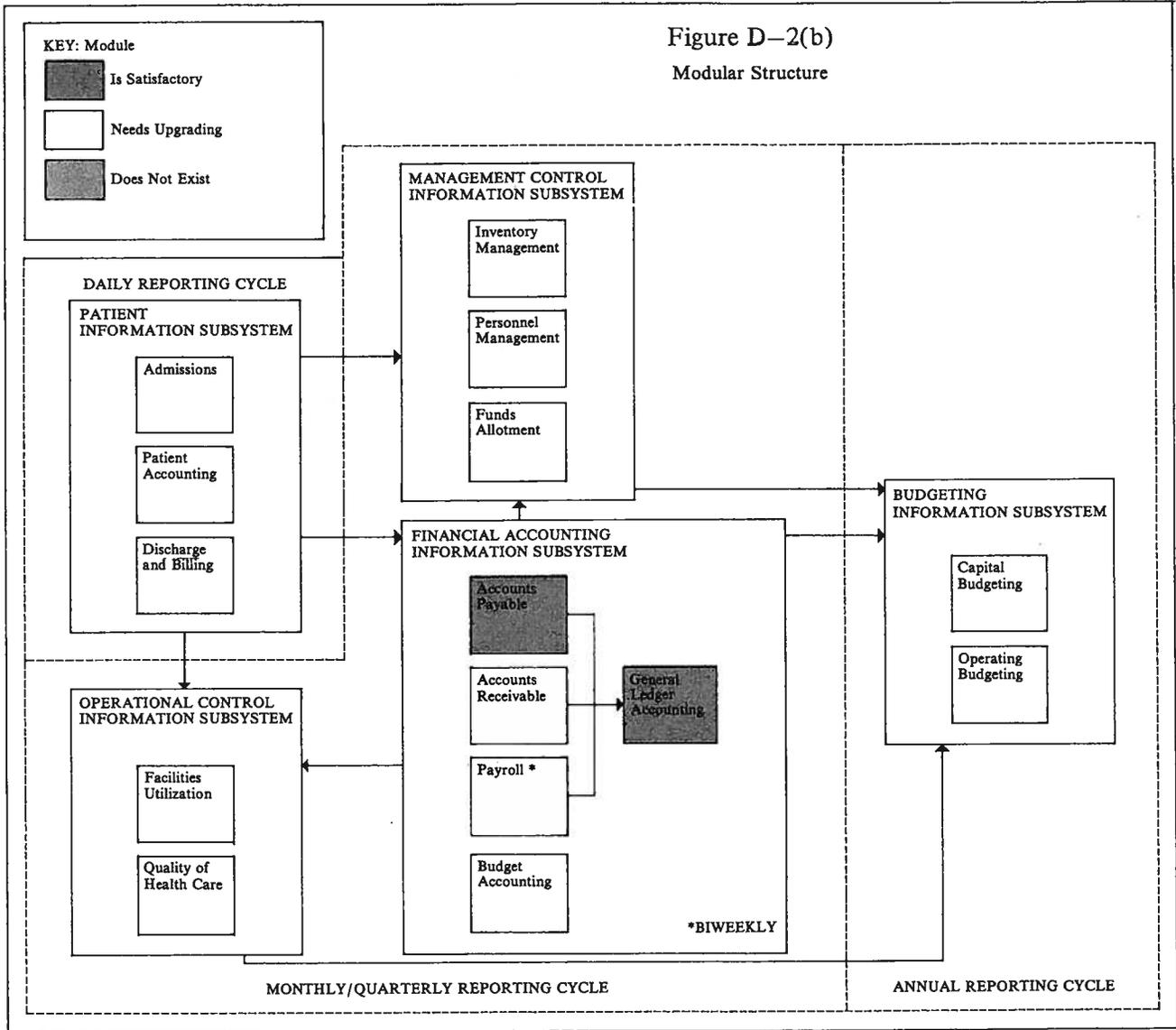


Table D-3

**MODULES OF COUNTY/STATE HOSPITAL
INFORMATION SYSTEM**

<i>Subsystem</i>	<i>Module</i>
Patient	Admissions Patient Accounting Discharge and Billing
Management Control	Inventory Management Personnel Management Funds Allotment
Operational Control	Facilities Utilization Quality of Health Care
Financial Accounting	Accounts Payable Accounts Receivable Payroll General Ledger Accounting Budget Accounting
Budgeting	Capital Budgeting Operating Budgeting

with the needs of the particular hospital. Influencing factors include type of facility, ECF or general acute, and volume of patients. These factors which tend to individualize the hospitals' systems must be balanced against the need for the information to interface with the County/State Hospital Administration Information System.

D. Operations Centers

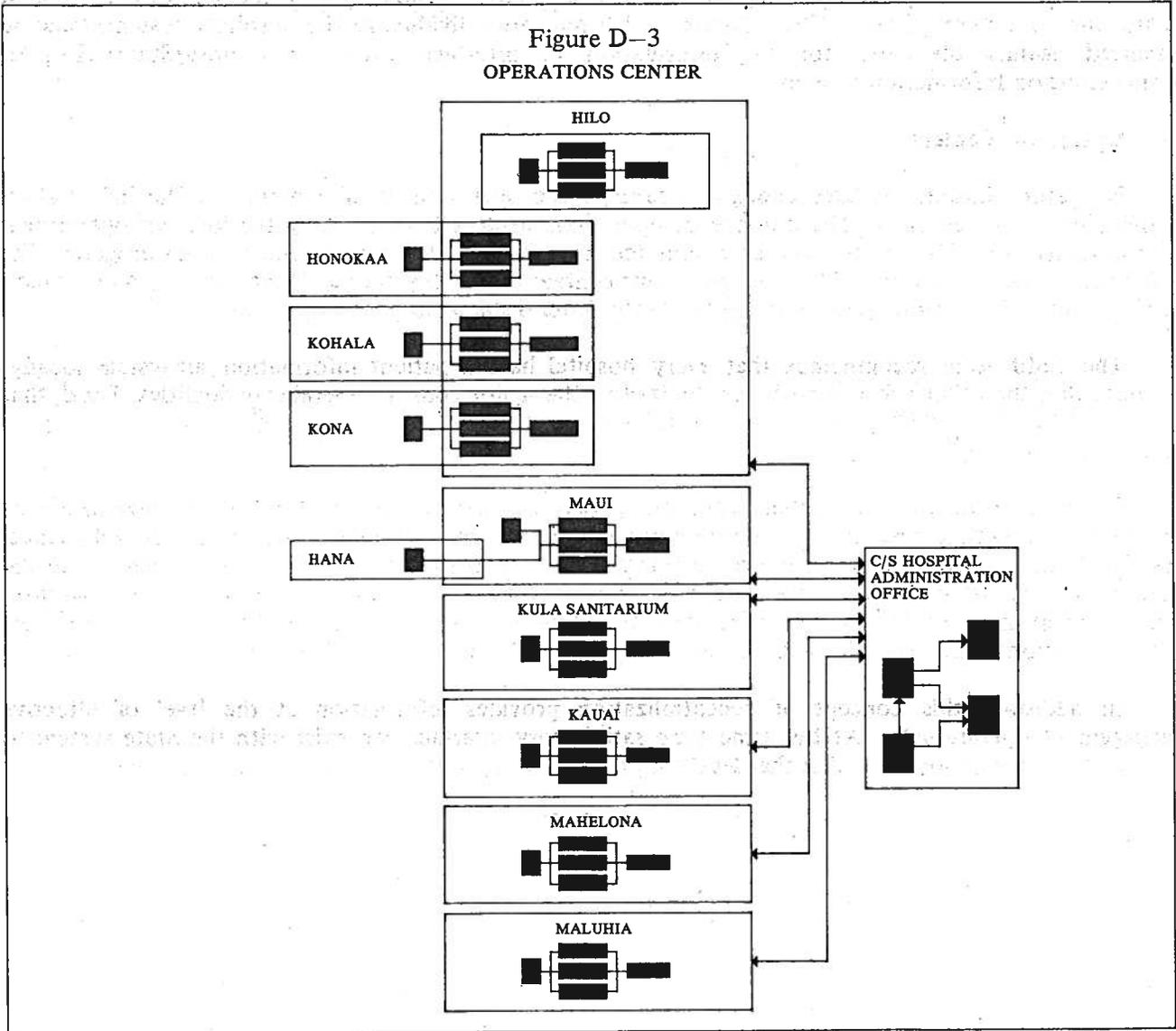
Not every hospital is large enough to support the operation of all modules of the information system, nor is it necessary. The purpose of operations centers is to identify the locus of operational responsibility for information systems within the organization structure of the hospital program. The difference between responsibility and operations centers is that the former identifies who will develop and maintain information system strategy while the latter deals with system operations.

The audit team recommends that every hospital have a patient information subsystem locally. Second, that the other subsystems be centralized in the major county general care facilities. Third, that there be an interface between the major processing centers and the County/State Hospital Administration Information System.

Figure D-3 illustrates an initial operation concept based on existing capabilities and organizational arrangements. As time passes and the hospital program is restructured, the operations centers will change. As noted, the trend should probably be towards central processing facilities at those places where the data processing is done. Over the long run, there will be insufficient volume to justify computer equipment at many of the individual facilities; therefore, the processing should be grouped so that the larger operations centers will have sufficient volume to justify the use of such equipment.

In addition, this concept of decentralization provides information at the level of effective management operationally. At the same time satisfactory interface can exist with the State system to provide the information needed at that level for policy setting, control, planning, and budgeting.

Figure D-3
OPERATIONS CENTER



COMMENTS OF AGENCIES AND OF HALDI ASSOCIATES

On February 13, 1971, copies of the preliminary report on the *Audit of the County/State Hospital Program* were distributed to the Department of Health and the Department of Budget and Finance. The covering letters from the Legislative Auditor to the agency directors asked that written comments be submitted by March 1, 1971 (Attachments 1 and 2 below). Subsequently, upon the request of the Department of Health and the Department of Budget and Finance, respectively, meetings were arranged and held with representatives of the Office of the Legislative Auditor and the Haldi Associates audit team to clarify for the agencies concerned the content of the audit report. Written comments were received from the Department of Health (Attachment 3), but none was received from the Department of Budget and Finance. The following response by Haldi Associates, therefore, addresses itself to the written comments of the Department of Health (DOH).

Response to DOH Comments by Haldi Associates

At the outset, may we say that we are pleased that the DOH has not contested the facts nor questioned the conclusions regarding the management structure and information system of the County/State Hospital Program, as contained in our audit report. It seems reasonable to assume then that the department is in accord with many, if not most, of the management deficiencies observed in our audit.

The queries raised in the DOH comments focus mainly on the proposal to create a Hawaii Health Facilities Authority (HHFA) and how it should operate if created. In fact, all but one of the questions posed relate to the proposed "authority." It should be emphasized that, at this stage, the proposal is still a conceptual one to be mulled, digested and reworked. Thus, there is room for improving the authority concept as it might be applied best to the Hawaii State government and, specifically, to its public hospitals. With this in mind, we will respond to the specific inquiries contained in the DOH comments as to how we visualize the HHFA and its operations.

1. Board of Trustees

a. Does the reorganization plan effectively abolish Act 265/69? If the draft bill (Appendix A of the audit report) is enacted in substantially the same form it would supersede Act 265. Note

particularly that Section 27 of the draft bill would amend and repeal laws not conforming with the bill.

b. Doesn't the denial of persons with "potential conflict of interest" from being appointed to the Board of Trustees rule out some members of present Management Advisory Committee? Would not the governor's removal power afford adequate safeguard?

We believe it is better medicine to avoid potential conflicts of interest before they arise than to prevail upon the governor to rectify conflicting interests after the fact. We believe further that there are people now serving on MACs and in the community at large who could serve as trustees without jeopardizing the credibility and integrity of the board because of potential conflicts of interest.

c. What would be the relationship between the Board of Trustees and the Hospital System Policy Committee? Would their functions overlap? Could persons be appointed to serve on both the board and committee?

The Hospital System Policy Committee is envisaged as a body to assist in developing systemwide hospital care policies on behalf of the "governing authority" whether it be the Director of Health as now or the Board of Trustees as proposed. Should the board when created desire, it may either retain the committee or create some other method by which it may receive assistance in discharging its policymaking responsibilities. There is no compelling reason to bar a trustee from being appointed to serve on working committees.

2. General Manager

Should this position be exempt from civil service?

To allow the fullest possible consideration of applicants with professional managerial talent we believe that the position should be of appointive status and not be subject to civil service constraints.

3. Financing Operations and Capital Improvements

a. Would the authority be exempt from requirements of the Administrative Procedures Act (APA) in establishing fees?

It should not be exempt. The APA provides safeguards against discriminatory administration acts or omissions which should be preserved to the public, with or without the "authority."

b. Would bonds issued by the proposed building trust affect the State's bonded indebtedness limit?

It all depends on whether the hospital system under the "authority" will be a continuing self-sustaining enterprise. The Hawaii State Constitution provides for these exclusions from the debt to be counted against the debt limit:

(1) Revenue bonds, authorized or issued, qualify for exclusion provided that such bonds are issued for an enterprise for which the charges made for services are sufficient to pay the cost of operation, maintenance and repair of the enterprise as well as the required payments of the principal and interest on all revenue bonds.

(2) General obligation bonds which are issued qualify for exclusion to the extent that the charges made for services reimburse the general fund for the payment of principal and interest of the bonds which are issued.

(3) General obligation bonds which are authorized and unissued qualify for exclusion only if in the fiscal year immediately preceding the authorization, the existing enterprise will have produced a net revenue sufficient to pay for the full amount of the principal and interest due for all general obligation bonds then outstanding for the enterprise.

c. With respect to uncollectible accounts, the proposed subsidy scheme whereby unpaid accounts over 120 days would be "bought" by some agency of the State appears unnecessary because hospitals are able to contract private collection agencies to handle such delinquent accounts.

Public hospitals generally are not authorized to hire private collection agencies unless specifically permitted by law. Ordinarily, delinquent accounts should be turned over to the attorney general's office for further collection efforts. Such being the case, public hospitals, if they were to go the "authority" route, would need to recoup these unpaid obligations by some other means. In any case, no amount of contracting would result in collections of delinquent accounts if these accounts were accrued by, say, the working poor who have neither cash reserves nor medicaid coverage.

In addition to the foregoing queries regarding the "authority" concept, the DOH has raised several other points relating to in-house administrative problems in implementing audit recommendations; e.g., compensating non-public medical professionals to serve on the proposed policy development committee, and the anticipated difficulty in effecting position transfers (areawide planning) within time limits

prescribed in the audit report. Our response to the above is that where “insurmountable” obstacles lie in efforts to judiciously follow our recommendations, the best recourse may be to modify implementation schedules and plans but retain the basic intent and objectives as stated for the recommendations.

Attachment No. 1

COPY

**THE OFFICE OF THE AUDITOR
State of Hawaii
State Capitol
Honolulu, Hawaii 96813**

**Clinton T. Tanimura
Auditor
Yukio Naito
Deputy Auditor**

February 13, 1971

Dr. Walter B. Quisenberry
Director, Department of Health
State of Hawaii
Honolulu, Hawaii

Dear Dr. Quisenberry:

Under a contract with this office, Haldi Associates, Inc., made an audit of the organization and management information system of the County/State Hospital Program (Act 97 Hospitals) of the State of Hawaii. The audit was conducted pursuant to Act 3, Session Laws of Hawaii 1970.

We transmit herewith five copies of the preliminary report of the *Audit of the County/State (Act 97) Hospital Program of the State of Hawaii*. The term "preliminary" means that this report has not been released for general distribution. However, we have issued copies of this report to the Governor, the presiding officers of both houses of the Legislature, and the Director of Finance.

The report contains several recommendations. We would appreciate receiving your written comments on them, including information as to the specific actions you intend to take with respect to each of the recommendations. Your comments must be in our hands by March 1, 1971. The report will be finalized and released shortly thereafter.

If you wish to discuss the report with us, we will be pleased to meet with you on or before February 24, 1971. Please call our office to fix an appointment. A "no call" will be assumed to mean that a meeting is not required.

May I emphasize that this preliminary report is not intended for public view, and thus its contents should be kept in strictest confidence until our final report is released.

Sincerely,
/s/ Clinton T. Tanimura
Clinton T. Tanimura
Legislative Auditor

Encl.

Attachment No. 2

**THE OFFICE OF THE AUDITOR
State of Hawaii
State Capitol
Honolulu, Hawaii 96813**

**Clinton T. Tanimura
Auditor
Yukio Naito
Deputy Auditor**

COPY

February 13, 1971

Honorable Hiram K. Kamaka
Director of Finance
State of Hawaii
Honolulu, Hawaii

Dear Mr. Kamaka:

Under a contract with this office, Haldi Associates, Inc., made an audit of the organization and management information system of the County/State Hospital Program (Act 97 Hospitals) of the State of Hawaii. The audit was conducted pursuant to Act 3, Session Laws of Hawaii 1970.

We transmit herewith a copy of the preliminary report of the *Audit of the County/State (Act 97) Hospital Program of the State of Hawaii*. The term "preliminary" means that this report has not been released for general distribution. However, we have issued copies of this report to the Governor, the presiding officers of both houses of the Legislature, and the Director of the Department of Health.

The report contains several recommendations that affect your department. We would appreciate receiving your written comments on them. Your reply must be in our hands by March 1, 1971. The report will be finalized and released shortly thereafter.

If you wish to discuss the report with us, we will be pleased to meet with you on or before February 24, 1971. Please call our office to fix an appointment. A "no call" will be assumed to mean that a meeting is not required.

May I emphasize that this preliminary report is not intended for public view, and thus its contents should be kept in strictest confidence until our final report is released.

Sincerely,
/s/ Clinton T. Tanimura
Clinton T. Tanimura
Legislative Auditor

Encl.

Attachment No. 3

COPY

JOHN A. BURNS
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HAWAII 96801

WALTER B. QUISENBERRY, M.P.H., M.D.
DIRECTOR OF HEALTH

WILBUR S. LUMMIS, JR., M.S., M.D.
DEPUTY DIRECTOR OF HEALTH

RALPH B. BERRY, M.P.H., M.D.
DEPUTY DIRECTOR OF HEALTH

IN REPLY, PLEASE REFER TO:
FILE: C/S Hosp.

March 1, 1971

Mr. Clinton T. Tanimura
Auditor
Office of the Legislative Auditor
State of Hawaii
Honolulu, Hawaii

RECEIVED

MAR 2 1971

OFFICE OF THE AUDITOR
TIME _____

Dear Mr. Tanimura:

Thank you for the opportunity to review the preliminary report of the Audit of the County/State Hospital Program.

We are transmitting our preliminary comments with this letter, and please be assured that the final report will be studied in detail and the recommendations will be given careful consideration.

Very sincerely,

/s/ Walter B. Quisenberry, M.D.
WALTER B. QUISENBERRY, M.D.
Director of Health

Enc.

**Comments on the Preliminary Report of the
Audit of the County/State Hospital Program
by Haldi Associates, Inc.**

Semantics

References to "Administrator" are confusing; a clearer identity is needed between the hospital administrators and the system administrator.

County/State Hospital System Policy Committee (p [19]) *

We are in agreement with the standing committee on policy, but wish to raise one minor legal problem of appointing "medical staff members"—how do we pay for the expenses for any staff member who is not an employee or officer of the State? This question is being addressed because of the need to have greater involvement of private practitioners with medical staff privileges in the hospitals, rather than limiting to only employed physicians. DAGS Circular 204 dated 5/28/70 may not adequately cover this need.

Planning (p [20])

Staffing requirements for the area-wide planning activity by the assignment of one or two existing positions in the Department of Health to the County/State Hospital Program is suggested to be done within sixty days after acceptance of report. Budgetary constraints will not permit this type of assignment freely. It may also involve federal funding.

Board of Trustees (p [33])

The appointment status or civil service status of the general manager and the hospital administrators requires clarification.

Financing of Operations (p [35])

In establishing fees at a level of full cost recovery, is the authority exempt from the requirements of Administrative Procedures Act?

On uncollectible accounts (p [36]), the report suggests that the State establish a subsidy scheme where Budget and Finance (or some other agency) be required to “buy” excess unpaid accounts over 120 days old. It is not clear why this is necessary, as long as the hospitals are able to contract private collection agency to handle all delinquent accounts 120 days old and over.

Financing Capital Improvements (pp [40, 42])

Assuming that the HHFA is created, the building trust will have two alternatives to obtain money for improvements: (1) legislative appropriation, or (2) borrowing. If general obligation bonds are issued (or revenue bonds for that matter), will this have any effect upon the state’s bonded indebtedness limit?

Board of Trustees [pp [31–32])

Does the proposal for the Board of Trustees in the reorganizational plan effectively abolish Act 265/69?

“Potential conflict of interest” will essentially rule out some of the members of the present Management Advisory Committees from serving on the HHFA Board of Trustees. Is representation of special interest groups all negative to warrant this comment? It is sufficient that the removal authority for good cause rests with the Governor.

What is the relationship between the Board of Trustees and the Hospital System Policy Committee mentioned on page [19]?

Even though the Policy Committee would be advisory, would there be any overlapping of functions?

Could individuals serve on the Board of Trustees as well as the Policy Committee?

*Page references in the original of these comments related to the pagination contained in the preliminary report. However, the page numbering in the final report differs from that of the preliminary report. Thus, for the convenience of the reader, in this copy of the comments, all page references contained in the original have been altered to conform to the numbering in the final report and are enclosed in brackets.

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