A RESEARCH PROPOSAL FOR DIAGNOSING ORGANIZATIONAL LEARNING AS A MEANS OF COPING WITH UNCERTAINTY

by

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ABSTRACT

This proposal presents research issues to examine the manner in which the Boston City Hospital has changed its operations to adapt to the impacts of the new cost containment legislation, Chapter 372, that exacerbates factors leading to deficits and uncertainty. The uncertainty concerns the level of health care and supporting personnel that can be sustained in light of increasing deficits. This proposal states that uncertainty is a problem because it prompts severe program and personnel cuts that would otherwise not be made.

The Fiscal, Planning, and Addiction Services departments were selected for this research because of their different tasks and range of responses in adapting to uncertainty. Questions are asked about changes in adaptation through formal and informal structures, decision-making, and organizational behavior during the interim before Chapter 372 was passed and the time it was implemented in 1982. The methodology advocates the consultant as a facilitator during the process in which the departments diagnose their processes of responding to uncertainty.

Although the research has not been conducted, it is proposed that engaging in the self-diagnosis will improve the hospital's ability to adapt to future problems.

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Purpose

This proposal has two purposes. First, to examine how the Boston City Hospital has modified the way it anticipates deficits and responds to the uncertainties it causes around the actual level of health services that can be delivered, the personnel that provide and sustain such services and the future planning and priorities of the hospital.

A second and equally important purpose is to initiate a process of self-examination to aid BCH in adapting to future problems.

INTRODUCTION

Many public hospitals today are confronted with fiscal shortages, increased demand for services from indigent patients and threats to their existence. The Boston City Hospital ("BCH") is no exception. The goal of the original enabling legislation in Section One of the Acts of 1858, Chapter 113 was for the City of Boston to authorize and establish a hospital to receive poor and unfortunate persons in need of care. Adherence to that general goal has usurped the hospital's control over the kinds of patients admitted for medical treatment. An "open door" admissions policy and community declaration as the hospital of "last resort" has translated into the receipt of poor persons with severe medical needs.[1] These factors place inordinate burdens on BCH's clinical, administrative and human resources. Symptoms of these burdens are the large amount of free health care delivered and the bad debt expenses incurred by BCH. A recent shift

in federal policies reducing entitlements and thereby increasing the social service needs of more people and the transfer of poor patients from private hospitals are other causes of growing deficits. Arising from these deficits is uncertainty as to whether service delivery and personnel can be maintained at acceptable levels.

This research proposal presents questions to examine how BCH responds to the uncertainty emanating from deficits. Specifically, this proposal structures its inquiry to see how BCH adapted to uncertainty in the time period before the new cost containment legislation, Chapter 372, was passed in 1982 and the time after Chapter 372 was implemented. The reason for this is that between the first and second time periods, BCH may have changed its operations to adapt to the impact of the new reimbursement law.

The contingencies prompted by Chapter 372 may have forced BCH to evaluate its practices to see if they could withstand new pressures. I propose that BCH's evaluation would consist of: 1) examining a wide range of options in service and personnel reductions; 2) in-depth consideration of ways to avoid such cuts; 3) attempting to control segments of the environment on which BCH depends (coping) and; 4) attempting to change its own mode of operations to better prepare for the impacts of Chapter 372 (adapting). In other words, through a process of reviewing practices, creating new operations and testing them in new situations BCH may have realigned itself to the demands of a changing environment. The process of reviewing, creating and testing operations to achieve a new alignment of operations with changing environments is organizational learning. The criteria to

evidence this learning process are mentioned in one through four above.

Thus this proposal offers research issues and the methodology for BCH to examine its practices, relationships and processes of decision-making that account for changes in coping with and adapting to deficit-induced uncertainty since Chapter 372. It aims to help BCH learn about itself by structuring a methodology for self-diagnosis. As forecast years ago, BCH's "arrangements, extent and details must necessarily be modified according to circumstances".[2] This proposal will help BCH conclude if it has altered the way it responds to uncertainty. An organizational self-diagnosis of this type may pinpoint operational difficulties and improve the thoughtful transfer of this research to other exigencies.

Chapter One discusses the main causes of BCH's deficits. The causes of deficits, such as the transfer of the medically indigent from private hospitals to BCH, the rate of reimbursement for services, etc. have always existed. However, Chapter 372 exacerbates the imapct of these contingencies. A discussion of this law, then, is necessary to show how it accentuates uncertainty. Not only are deficits a problem for BCH but so is the uncertainty that comes from them. This chapter discusses how uncertainty is more than an innate trait of the hospital, but forces BCH to take a conservative stance by making severe cuts in program levels in anticipating very high annual deficits. Chapter Two presents the issues to research the change, if any, in BCH's operations to cope with and adapt to deficit-caused uncertainty since Chapter 372. The issues explore the description of the inputs of uncertainty to the structure, decison-making patterns

and environments bearing on BCH. The Fiscal, Planning and Addiction Services departments are used in this research. Chapter Three is the methodology for conducting this study.

The conclusion explores the benefits of knowing how BCH has changed the way it copes with and adapts to uncertainty. Implications for collecting data on information, shifting of BCH's goals and changes in the structures of BCH are presented.

The appendix synthesizes significant theories of organizational learning. It is included to share the conceptual bases on which I constructed a definition of organizational learning suitable for studying the change in BCH's response to uncertainty.

The method of responding to uncertainty has implications for the potential survival of BCH. One may assume that the continued existence of BCH results, in part, from successfully adaptating to growing deficits and the uncertainty it triggers. However, the hospital's survival is increasingly threatened as the external environment on which it depends becomes more turbulent. This potential threat to survival causes a greater need to cope with uncertainty. The research outlined in this proposal will facilitate BCH's self-examination of its process of change and improve such practices for continued survival.

FOOTNOTES: INTRODUCTION

1. The character of BCH today is a reversal of the character intended by the first Board of Trustees in 1865. At that time, the "open door" was closed to persons who were not thought to be honest workers temporarily beset by sickness. Compensation was expected. Moreover, BCH was first designed to do the greatest good to the greatest possible number. For that reason chronic and incurable cases were not received into the wards. Proceedings at the Dedication of the City Hospital, 1865, p. 7.

2. Proceedings at the Dedication of the City Hospital, 1965, p. 7.

CHAPTER ONE

Sources of Deficits and the Problem of Uncertainty

Introduction

BCH has experienced growing deficits in the past few years. The obligation of the hospital to accept indigent patients for care subjects it to three major factors producing the deficits. These factors are: 1) providing free care for unsponsored, indigent patients; 2) rates of reimbursement not fully covering hospital expenses, and; 3) the receipt of transferred patients who are not able to pay for health care in private hospitals. These causes of BCH's deficits will be discussed in more detail later. The amount of free care demanded each fiscal year by patient populations can at best be approximated. Given the enduring consequences of recent economic troubles, it is reasonable to assume a steady demand for free care.

The new Massachusetts reimbursement law, changes in federal policies impacting state resources and lessening the ability of Boston to assist BCH exacerbate the uncertainties of service levels and personnel. The degree of disequilibrium is greater now than before. Thus the makeup of BCH's payor mix leading to massive free care, patient transfers, and deficits are placed in a new and even more important light by new cost containment legislation.

There are many inputs which cause deficits. I will examine the trend of BCH's deficits since 1981 and its causes in Part A. In Part B I discuss the problem of uncertainty.

A. DEFICITS

The balance sheet for the Department of Health and Hospitals ("DHH") for the year ending June 30, 1981 shows that BCH had total assets of $120,362,464 (Attachment 1). Gross revenue from services to patients totalled $92,752,334. After total deductions of $9,511,585, which included write down of free care to cost basis ($4,173,226) and contractual allowance for free care net patient revenue was $83,240,749. The accumulated defict for that year was $46,225,587 (Attachment 2).

By 1983, BCH's assets totalled $107,396,996, a 12% decrease from the 1981 level (Attachment 3). Gross revenues from patient services totalled $358,363,683 and after deductions net revenue was $80,236,864. When compared with 1981, the gross revenues in 1983 increased by 74%. Even though gross patient revenues increased substantially during the period, deductions were such that they caused net patient revenue to fall by 3.7%. Furthermore, the ending deficit for 1983 was $91,981,304, an increase of 49.7% over 1981. Given lower assets, higher deficits and financial contingencies[1] BCH's financial position appears unstable. These deficits are produced, in part, by BCH's payor mix, receipt of transferred patients and the general consequences of Chapter 372. These major causes of deficits are more fully discussed below.

1. The Payor Mix in BCH

Table One compares the sponsorship of patients in BCH with the Massachusetts average.

Table One

Sponsorship	BCH	State Average
Medicaid	25%	15%
Medicare	20%	35%
Bad debt/free care[2]	45%	5%
Blue Cross	7%	25%
Commercial Insurance	3%	20%

Source: "Understanding Massachusetts' New Hospital Law,"Staying Alive!, February, 1983, p.6.

It is obvious that BCH sustains a disportionate percentage of bad debt and free care. When compared other with other Boston hospitals, BCH incurred $148 million in bad debt and free care in the 1983 fiscal year. Other major Boston hospitals incurred only $67 million in bad debt and free care--45% of BCH's total.[3]

The history of this distorted distribution of free care and bad debt is well documented. The aggregate free care and bad debt of major Boston hospitals in 1981 was $53 million, compared to BCH's $32.2 million. In 1982 the total dollar amount of free care and bad debt incurred by other hospitals was $68.9 million while BCH incurred $66.6 million.[4] The populations receiving free health services, e.g. the homeless or unsponsored, etc., are likely to increase. With the tightening of eligibility levels and benefits package in Massachusetts' Medicaid programs[5] and reductions in federal contributions to public financing, more of Boston's citizens are uninsured.

The homeless comprise many of the uninsured in Boston. This

population has grown as has the number of referrals from homeless shelters to BCH. For example, the Pine Street Inn referred 453 people from its Men's and Women's Clinics in the 1982 calendar year. But in 1983, 585 people were referred to the BCH emergency room and outpatient clinic for health care. The rate of referrals to BCH from Pine Street in 1983 rose 29% over the level in 1982.[6] The need for more shelters for the homeless and state-wide allocations of resources to mitigate this problem further evidence the probability that referrals from all shelters using BCH will increase.[7] The homeless are but one population deemed "socially unacceptable" by the admitting offices of private hospitals. And while BCH offers an alternative to voluntary hospitals for treating drug addicts, alcoholics, and the homeless, the restraints of Proposition 2 1/2 to raise taxes and demands on local services further limits the resources the city of Boston can offer BCH.[8]

Most Boston hospitals serve patients with the ability to pay for health care. These hospitals enjoy a somewhat wealthier clientele. In light of this, new cost containment laws, namely Chapter 372, creates financial incentive to transfer patients in order to avoid unfavorable reimbursement.

Chapter 372 initiated a new era in Boston's health care system. This legislation has unforeseen consequences and changes the behavior of other Boston hospitals in a way that further burdens BCH. Chapter 372 is a landmark change in the hospital financing system that inadvertently contributes to BCH's deficits. This law is discussed below.

2. Efforts to Contain Hospital Costs: The Creation of Chapter 372

Before Chapter 372 was created, Massachusetts' hospital costs were about 30% above the national average. The increased costs were passed to health consumers in the form of escalating insurance premiums. Both Blue Cross and private insurance carriers raised their rates 18-20% in 1982 to cover the increased charges made to them by the hospitals.[9] The insurance industry felt it was fast approaching the limit on how much it could continue to raise premiums without pricing itself beyond the reach of many consumers. Chapter 372 established a new reimbursement system to "stabilize the financial position of the insurance industry by limiting the amount hospitals could increase their charges."[10]

The costs to Massachusetts for rising Medicaid payments prompted state officials to support Chapter 372 because it slows the rise in Medicaid payments. This cost containment law can best be thought of as a political compromise between various groups. However, advocates for poor patients were excluded from this process.

Before Chapter 372, hospitals were paid for every service provided. An increase in the volume of services increased a hospital's revenue for that fiscal year. As hospital costs increased, it could raise the amount it charged. Thus salary increases, new equipment, and construction costs were passed onto its new rate. Under Chapter 372 hospital budgets are fixed at pre-set levels. Hospitals are free to spend the money allocated to them under this system in any way they decide. The use of Maximum Allowable Cost (MAC) in this system creates "financial incentives for discharging patients earlier and keeping patients out of the hospital

altogether..."[11]

Unlike the reimbursement system that preceeded Chapter 372, Medicare and Medicaid will share the financial responsibility of uninsured and underinsured patients. For BCH, if the number of Medicaid, Medicare, and uninsured patients account for 68% or more of its patient population, then Medicaid will pay a portion of its free care. In BCH, where 45% of its patients have no insurance and where 10% are covered by insurance plans, the 68% provision should be helpful. BCH administrators estimate that $15-$20 million in guaranteed income will be generated by this law. But the realization of this money is subject to uncertainty and further exacerbates the fiscally-triggered contingencies BCH copes with. Since the law took effect on October 1, 1982, reimbursement formula for free care and the time such money can be received are vague. BCH is the only public, acute care hospital in the Commonwealth to receive Medicaid money for free care. But free care costs incurred in one year may not be reimbursed until one or two fiscal yaers later. Thus matching the level of services with fiscal resources is made more difficult.

Moreover, Chapter 372 has negative side effects which tamper with BCH's deficits and increase uncertainty. The major side effect is the referral of poor and Medicaid-funded patients from private hospitals to BCH. Thus another cause of deficits is the "economic transfer"[12] of patients attempting to secure services in a private hospital but referred to BCH because of their financial/insured status.

3. Economic Transfer

It was not until Chapter 372 went into effect that reports of economic transfers became common. This law encourages hospitals to adjust their "payor mix" by reducing the care provided to unsponsored patients. Cutbacks in Medicaid and Medicare have increased the number of Massachusetts residents who carry no health insurance. Blue Cross/Blue Shield estimates that 530,000 people in the Commonwealth have not been insured since late 1982.[13] Boston hospitals have tightened their criteria for non-emergency care given to the uninsured.[14] Until the financial incentives for transferring hospitals to "dump" on BCH are corrected, patients requiring very expensive treatment will be cared for at BCH. Direct refusal of care and inappropriate referrals will undoubtedly continue.

However, deficits themselves are inputs to uncertainty. While BCH has always faced uncertainty from some source, the current uncertainty is capable of producing stress which could overwhelm BCH. It is the formulation of uncertainty as a problem to which I now turn.

B. THE PROBLEM OF UNCERTAINTY

Sources of financial drain have always existed for BCH. With the passage of Proposition 2 1/2, changes in federal policies regarding social programs and the implementation of Chapter 372 more indigent patients are seeking care from BCH whose resources are decreasing. This excess of demand over the supply of resources has lead to fiscal shortages. These deficits have been a part of BCH's financial history and they are part of its present. These deficits cause uncertainty as to the level of health care and personnel that can be maintained. On

one hand, projected deficits for a fiscal year may prompt a service department, such as Addicition Services, to reduce services and personnel only slightly with additional cuts as needed. Reductions are more gradual, occur in increments and are therefore less drastic. On the other hand, the uncertainty caused by the impact of shifts in reimbursement structures, behavior of other hospitals and decrease in the economic strength of its catchment population may cause a drastic reduction in services and personnel. Thus the difference between deficits and uncertainty, lies in the severity of response in adapting to perceived demand in light of decreasing and unsure sources of money. Uncertainty forces BCH to assume as little risk as possible in delivering care funded by doubtful money.

Thus a major ramification of uncertainty is that it causes responses that are antithetical to providing care to persons in great need. For example, from this author's interview with Deputy Commissioner Robinson I learned that the uncertainty of the magnitude of projected deficits resulted in reducing the six-month alcohol rehabilitation program to twenty-eight days. Hiring of new personnel for that program was stopped. The number of clients seen by the remaining personnel, i.e., therapists, was increased. Addiction Services reduced the training pre-requisites for some of its medical personnel. Thus Licensed Practical Nurses ("LPNs") were substituted in some instances for the higher trained Registered Nurses ("RNs").

The deficit-driven uncertainties of maintaining health care levels and its providers translate at some point in how the needs of the community are met and sustained. This translation is illustrated

by the fact that this department was forced into considering cuts in programs successful in rehabilitating high-risk clients.

Deficit-produced uncertainty has two main implications. First, it causes BCH to be reactive and not proactive. Unlike other Boston hospitals, which can exercise more control over the environment because of less uncertainty, BCH is vulnerable to the environment. The environment crippled the implementation of a strategy for BCH to improve its payor mix. A few years ago, deficit-induced uncertainty prompted BCH to market itself in a way to attract more insured patients. The marketing strategy included the construction of a $24 million facility. However, the impact of Proposition 2 1/2 on Boston's resources destroyed this strategy. Second, the effectiveness of long-term contingency planning is lessened.

Conclusion

This chapter has looked at the main causes of BCH's deficits. It discussed how uncertainty is a problem and provided examples of the problem at the operational levels of one service department. In the next chapter I pose questions as to how BCH can diagnose the change in its coping with uncertainty.

FOOTNOTES: CHAPTER ONE

1. Notes to the combined statements for 1983 discuss two contingencies which illustrate the uncertainty endemic to monetary inputs to BCH. First, in 1982 and 1983 BCH received overpayments from Medicaid outpatients in the amount of $15,532,000. It is possible that the Department of Public Welfare will seek recoupment of amounts in excess of the limitations. If this occurs, the liability for BCH could be very large.

   Second, the reimbursement by Medicare and Medicaid for portions of free care provided by BCH are not easily estimated. Under Chapter 372, "[t]he determination of free care reimbursement amounts is subject to uncertainties including the levels of free care provided by other Massachusetts hospitals and the specifics of formula application to Boston City Hospital." Notes to Combined Financial Statements, Coopers and Lybrand, 1983, footnote 20.

2. The distinction between bad debt and free care is often confused. State income guides hold that if a person has the economic resources to pay for health services, but refuses to do so, BCH has incurred a bad debt expense. If the person receiving care lacks such resources under the guidelines and could not pay, then BCH has provided free care.

3. The other hospitals were: Beth Israel, Brigham and Women's, Carney, Children's Medical Center, Faulkner, Massachusetts General, New England Baptist, New England Deaconess, New England Medical, St. Elizabeth's and University Hospitals.

4. Figures obtained from the tables of "Free Care and Bad Debt among Major Boston Hospitals," The Boston Globe, February 6, 1984, p. 33; The Massachusetts Rate Setting Commission and the individual hospitals.

5. Since 1980, between 18,000 and 20,000 Medicaid recipients in Boston lost their eligibility. Interview with Barbara Gold, Assistant to the Director of Community Health, BCH.

6. These statistics were provided by Ms. Barbara McInnes, the Public Health Nurse at the Pine Street Inn.

7. See generally; McGerigle, Paul, More Than Shelter, United Community Planning Corporation, 1983. This publication examines the demand for more shelters and offers strategies for community and governmental action in assisting the homeless.

8. Davis, Edith M. and Millman, Michael, L., Health Care for the Urban Poor, (Rowman and Allanheld, New Jersey, 1983), pp. 148-191.

9. CommonHealth, "Understanding Massachusetts' New Hospital Law", Staying Alive, February, 1983, p. 2.

10. Ibid .

11. Ibid, p. 3.

12. The referral of a patient to BCH deemed unable to pay for services in a private hospital is currently termed an "economic transfer". Such a referral is in the best economic interest of the private institution. This situation is not new. As early as 1860, the Massachusetts General Hospital and other hospitals denied admission to poor persons with incurable diseases. Gregg, W.P., Document--No. 34, City of Boston Report of the Committee on a Free City Hospital, 1861, p. 4. These reasons prompted the opening of BCH.

13. Who Cares for Those Who Cannot Pay? Greater Boston Hospitals and the Issue of Economic Transfers, (Boston City Hospital Economic Transfer Task Force, 1984), p. 1.

14. Both Tufts--New England Medical Center and Beth Israel have a vague review process where non-emergency inpatient admission will be provided to persons who evidence third-party coverage or who make cash payment for the estimated bill. Ibid, at page 1.

CHAPTER TWO

The Research Issues

Introduction

This chapter is concerned with the issue of how BCH detects deficits, perceives the uncertainty arising from the deficits and responds to the uncertainty. Moreover, this chapter focuses on the process of detecting and responding to uncertainty and whether the process has changed in relation to Chapter 372. To observe any change in this process, two time periods will be reviewed and analyzed. The time periods are pre Chapter 372 and post Chapter 372. The span of time is roughly two years. It is necessary to structure the research in this fashion to note any modification in the process and how and why they came about. The detection of and response to uncertainty prompts me to formulate the following issues of how BCH copes with uncertainty.

1. The manner in which uncertainty is presented to BCH.
2. How the impact of uncertainty on BCH's operations is perceived.
3. How BCH formally and informally detects uncertainty and responds to it.
4. The process by which BCH evaluates and adapts its operations to cope with uncertainty.

I. INPUTS TO EXAMINING UNCERTAINTY

I propose to look at these issues by examining data which are inputs to BCH's process of adaptation. First, as I have suggested that uncertainty emanates from deficits, it is necessary to know how

the deficits are produced. Thus the indigent patients served, rates and methods of reimbursement and their contingencies should be known for the two time periods I stated earlier. The causes of BCH's deficits and any change in their composition lead me to formulate the following inquiry.

Types of Patients Served by BCH

--How many patients were sponsored by third-party payors (i.e., Medicaid, Medicare, Blue Cross, commercial) immediately before Chapter 372 went into effect? How has this sponsorship changed since then?

--What percentage of BCH's patients received free care before Chapter 372? After 372?

A second cause of deficits is the size of reimbursements for patient care and the time lag when such payments can be realized as revenue by BCH. There is often a discrepancy between the actual costs BCH incurs to provide patient care and the allowable cost reimbursed by third-party payors. The lag factor and the scale of reimbursements prompt the following questions.

Reimbursement

--What was the method and rate of reimbursement before Chapter 372? After Chapter 372?

--How have the costs of providing services changed for BCH since Chapter 372?

The research into the above questions may reveal that the size of the potential deficit is a function of the interaction between the number of patients, amount of reimbursements and the time reimbursements are received.

II. HOW INPUTS ON UNCERTAINTY ARE USED

Having examined the inputs BCH uses to examine deficits, I then propose to analyze how the hospital handles these inputs. The inputs relevant to deficits and its associated uncertainty are first presented to BCH in the form of information. This information has a number of different sources, such as the Mayor's Office, the Department of Health and Hospitals, other hospitals, the community, etc. Thus information on uncertainty must be filtered by BCH, transformed into usable data, distributed to the departments and interpreted by the persons in those departments. This process of bringing data into BCH and transforming it as a prelude to detecting and responding to uncertainty has three components. These components are: 1) the information on deficits and uncertainty; 2) BCH's perception of that information, and; 3) the structure in which data gathering and perceptions are couched. These three elements are crucial to understanding how the use of inputs in examining deficits and reacting to uncertainty has changed since Chapter 372 was implemented. However, before presenting the research questions on those three components I will offer the rationale for selecting the three units mentioned in the introduction. I have chosen three out of eight departments in BCH which I feel fairly represent a wide range of tasks and sensitivity to deficit-induced uncertainty. A description of these three departments is contained in Attachment #4.[1-3]

I selected the Planning Office because it is a major point of contact for BCH with community health centers, citizen groups, task forces and the legislature. The Planning Office is, then, a crucial

point of receiving information from the world outside BCH. Aside from its role as an information recipient, this office facilitates inter-departmental efforts to improve the sharing of data.

Because the Planning Office was organized after Chapter 372, it is possible that its mission was to reduce uncertainty. Lowering deficit-induced uncertainty may result from anticipating the impact of deficits on BCH's level of health care and its personnel. This may be achieved by contingency planning. While this assertion is speculative, it may be confirmed as the research is conducted.

The Fiscal Services department is the leading unit that detects deficits and attempts to control the impact of deficits by reviewing submissions of departmental budget requests, monitoring spending patterns and requesting supplemental monies from Boston. Thus my rationale for selecting Fiscal Services lies in its position on the boundary between BCH and the parts of the Boston bureaucracy that financially support the hospital.

I selected the Addiction Services department because it delivers direct health care to the high-risk populations of the chemically-dependent, the alcoholics and the homeless. These populations are causes of past and present deficits. It is this department where the relationship between the indigent patients cared for and deficits is very evident. My rationale for selecting Addiction Services is due to its direct, continuous association with free care patients whose medical needs demand substantial commitment of resources.

Of the eight responsibility centers in BCH, the Administrative and Service units selected are a reasonable sample for researching the change in coping with deficit-triggered uncertainty.

BCH's perceptions of information are influenced by the environment. Before I present the next set of questions in this proposal, I will very briefly describe the external environment in which BCH functions.

BCH is a small part of the Boston health care system where 15% of the city's residents seek services.[4] The hospital is one of three medical institutions in the Department of Health and Hospitals ("DHH"). However, 70% of the DHH budget is allocated to BCH each fiscal year.[5] As an acute care municipal hospital, BCH depends on the City of Boston and DHH. It must be cognizant of the demands from the Federal government, the local community and accreditation agencies. The external environment is dynamic and mandates careful attention from BCH.

Draped over the intracacies of the world outside BCH is the internal world of BCH. Eight units strive to perform professionally specific tasks. The conflicting goals and polarized perceptions held by some physicians and administrators in providing health care frustrates delivery of services. At times this absence of organizational cohesion causes BCH to function like a collection of "little kingdoms". Given the expectations of the internal and external environments, it is easy to see the complex interactions in which BCH decisionmakers participate. This interaction leads me to ask how information on deficits and uncertainty is gathered and viewed by BCH.

Information

--How were data on deficits and the uncertainty it caused collected from inside and outside BCH before Chapter 372? After 372?

--How are the data on uncertainty aggregated and then used in policies? Has this changed since Chapter 372?

The Manner in which Uncertainty is Perceived

--How does BCH define deficit-induced uncertainty? Has this definition changed because of Chapter 372?

--Does BCH perceive only potential deficits and not the uncertainty that may arise from it? Did Chapter 372 alter this perception?

--If BCH perceived deficit-induced uncertainty, was it seen as a problem before Chapter 372? After 372?

--At any time before or after Chapter 372 went into effect, did BCH see deficit-induced uncertainty as a threat to its operations? If so, how?

--How has the uncertainty impacted BCH's perception of its goals since Chapter 372?

THE STRUCTURES OF BCH USED TO DETECT DEFICITS AND RESPOND TO UNCERTAINTY

Information is received into, filtered and disseminated by the structures BCH has in place. Perceptions of deficits and the contingencies linked with it are affected by these hierarchial arrangments. The hospital's ability to adapt its coping mechanisms to uncertainty is similarly impacted by these structures. The evolution of these systems may partially explain the change in BCH's coping with the doubt arising from deficits.

I have noted two types of structural arrangements in BCH. The first one is formal. A formal structure results from required

coordination of activities and interactions deemed necessary by BCH for persons to perform. The second arrangment is informal. This structure emerges from the activities and interactions among employees to complete their jobs. These actions are neither required nor prohibited by BCH, but simply evolve over time.[6] The major difference between the formal and informal structures is that the former is an attempt by BCH to control part of the work process. Deviating from this could cause friction between the individual or department involved and BCH. Informal structures are attempts by employees to control work. Disrupting the process of these informal arrangements may result in peer condemnation.

The interaction among formal and informal structures is rich. Conflict between them may arise and solutions may be negotiated. I hold that the structures are basic elements in detecting and responding to deficit--triggered uncertainty. Table One presents the types of structures and time periods which the pursuing group of questions is concerned.

TABLE ONE: STRUCTURAL FACTORS

	Pre Chapter 372	Post Chapter 372
Formal Structures		
Informal Structures		

--What were the formal activities of the Addiction Services and Fiscal departments before Chapter 372? After Chapter 372?

--Did Chapter 372 change the formal activities of these departments?

--How do the Fiscal, Planning and Addiction Service departments formally coordinate their inquiry of deficits and its potential consequences? Has this process changed because of Chapter 372?

--Was there a required function in each department to analyze deficits and the contingencies they posed before Chapter 372? After Chapter 372?

--What informal arrangements existed within and across departments to cope with deficit-triggered uncertainty before Chapter 372? After Chapter 372?

--Were informal arrangements centered around temporary problems or were they more institutionalized before Chapter 372? After Chapter 372?

III. THE ROLE OF DECISION-MAKING IN RESPONDING TO FISCALLY-INDUCED UNCERTAINTY

In Part II I discussed formal and informal structures and presented questions which would reveal their impact on the evolution of BCH's adapting to uncertainty. Those structures provide the background for decision-making. With the receipt, filtering and transmission of information by these systems, options for responding to uncertainty can be reviewed and consequences of each option analyzed.

I am concerned with two forms of decisions. The research may show how the scope of analysis and consideration of options under each form may impact the quality of BCH's coping and adaptation abilities. The first type of decision is comprehensive in the sense that multiple

sources of data are synthesized, basic assumptions of operations questioned and each consequence of responding to uncertainty is carefully calculated. This mode of decision-making is demanding of both intellectual and organization reserves.[7]

A simplified mode of decision-making could be used by BCH in responding to uncertainty. This type of process uses fewer data inputs. Basic assumptions of operations are not questioned. The consequences of each action in responding to uncertainty are not considered in-depth. Gaps in the knowledge of deficits and their impact are filled in by personal values, and beliefs. Thus a factual premise is never divorced from the belief structures of the decision makers.[8]

Decision-making in detecting deficits and responding to uncertainty can only have an impact if communicated. Decisions may be concealed or distributed as a source of information. Thus I have further divided decisions into those that are either private or public. A public decision is one that is communicated among the departments. A private decision is one which is not shared with other departments. Table Two presents the matrix of these types of decison-making.

TABLE TWO: MATRIX OF DECISION-MAKING

	Comprehensive	Simplified
Private		
Public		

The following questions are designed to obtain information on the role of decisions in coping with deficit-prompted uncertainty.

--Were all sources of information known to BCH on deficits and the uncertainty they provoked examined before Chapter 372? After 372?

--How are the consequences of responding to uncertainty in different ways calculated and evaluated? Did Chapter 372 alter this?

--Are decisions concerning how the Fiscal, Planning, and Addiction Service departments will respond to deficits and uncertainty concealed within each unit? How has Chapter 372 affected the rate and quality of sharing decisions?

Earlier I mentioned the impact external and internal environments have on the data used to detect fiscal shortages and react to contingencies. The internal environment of BCH greatly affects the frequency and quality of decisions. The freedom to make operational changes and the socialization of new persons to the decision-making process may be restricted. Thus the manner in which BCH feels it should react to uncertainty may be quite different from what actually happens.

Decisions are the building blocks in BCH's coping and adaptation system. It is important for the three departments to understand how traits endogenous to BCH may lessen the potency of decisions. Researching the following questions will provide insight into the quality of the hospital's inquiry of its response to deficits and uncertainty before and after Chapter 372.

--To what extent do the departments exercise discretion in deciding how to cope with uncertainty? What impact did Chapter 372 have on this?

--What is the turnover of departmental personnel since Chapter 372 was implemented?

--Are new persons encouraged to participate in the decisions on how to detect deficits and cope with uncertainty? Did Chapter 372 affect this?

--Do different perceptions on uncertainty prevent full disclosure of decisions among departments?

--Did Chapter 372 prompt BCH to establish precedent on how to cope with uncertainty?

--What was the role of the executive staff in detecting deficits and responding to uncertainty before Chapter 372? Has their role in this process changed because of Chapter 372?

After researching these questions sufficient data should exist to conclude if:

a) the operations in the Fiscal, Planning and Addiction Services departments are different now than before Chapter 372;

b) if any change in operations is a direct result of BHC's adapting to and coping with deficit-provoked uncertainty.

This research will also indicate whether learnig on the part of BCH has increased through BCH's changing the manner in which it copes with deficit-driven uncertainty.[9]

FOOTNOTES: CHAPTER TWO

1. Interview with Mr. Bruce Rosen, Assistant to the Vice President of Planning, BCH.

2. Interview with Mr. Harry Powers, Accountant, BCH.

3. Interview with Mr. Paul Robinson, Deputy Commissioner of Addiction Services, BCH.

4. Interview with Mr. Richard Segan, Director of Community Health at BCH.

5. Ibid.

6. For a more detailed discusision on formal and informal work groups, See: Athos, Anthony and Barrett, Diana, Note on Stable Work Groups, Harvard Business School, 1974, pp. 1-35.

7. Theorists have referred to this comprehensive form of decision-making as analytic. The analytic paradigm of decison-making assumes an elaborate mechanism of decomposing problems involving values, uncertainty, and the coordination of many actors. Within this paradigm, competing values are balanced and alternative outcomes calculated. Arising from analytic decision-making is causal learning--the inclusion of overlooked environmental elements for consistent consideration by the decision-maker. Steinbruner, John, The Cybernetic Theory of Decision, Princeton University Press, 1974, pp. 1-140.

8. This simple decision-making process is termed cybernetic by John Steinbruner. The cybernetic paradigm assumes a less elaborate decison-making mechanism. A short-cycle information feedback loop avoids calculating outcomes. Stability is maintained by: (1) a narrow emphasis on subsets of the environment; and (2) minimal articulation of values. Cybernetic decision-making depends upon a regular and simple environment, where uncertainty is assumed, information is received only through established channels and employees are constrained by organizational precedent when faced with new problems. Decisions are short range and learning is slower and more sporadic. Ibid.

9. Research of this sort has helped executives analyze their learning process as it relates to organizational activity. For the past 10 years, the Norwegian Center for Organizational Learning has helped about 1000 executives discover their learning processes. The requirements for executives learning about their organizations are: (1) an interest in what is learned; (2) awareness of consequences if such learning does not take place; (3) willingness to make one's behavior part of the inquiry. Similar requirements are needed for BCH.

Three assumptions are embedded in this chapter. First, that

persons in BCH are not aware of learning as a major influence on their work situation. Secondly, only by seeing the connection between behaviors and consequences will BCH personnel be in a position to change their behavior. Thirdly, change will not occur unless it is actively pursued. See: Knudsen, Kjell, "Diagnosing and Changing Organizational Learning Through the Use of Experimental Simulation and Process Analysis", Vol. 3 Journal of Experimental Learning and Simulation, No. 3-4, 1981, pp. 129-131.

CHAPTER THREE

The Methodology

Approach

The approach of this methodology is to have a consultant facilitate the self-diagnosis of the three selected departments. In the role as facilitator, the consultant will hold regular meetings with each department to jointly define the problem of uncertainty and modify the definition as needed. Self-diagnosis is important as a means to analyze the process of coping with and adapting to uncertainty. Furthermore, self-diagnosis will play a key part in understanding the organizational behaviors and systems that lead to particular responses to uncertainty. The consultant will use the case of the Addiction Services' response to uncertainty as a means of exploring the other departments' perceptions of how uncertainty impacts them. The concerns emanating from uncertainty such as reduced access to health care, lowered program effectiveness and a change in the nature of BCH will be explored. Each department will be encouraged to engage in this research by discussing the problems uncertainty has caused their operations. During the process other cases will develop and will be used for futher exploration.

Methodology

The methodology is concerned with collecting data for two time periods. In order to reconstruct departmental coping strategies in place before Chapter 372, documents will be reviewed and oral interviews conducted. This type of reconstruction will require the

consultant to synthesize multiple views of former attempts to cope with uncertainty. The same process of information gathering will be used for the post Chapter 372 period. The manner in which these data will be compiled is further explained below. Due to the interference this research may introduce the amount of time will be negotiated with BCH to insure minimum interruption of operations.

Introduction to the Problem

The initial meeting of the three departments will take place with the consultant. At this meeting, the consultant will encourage a joint definition of the problem of uncertainty as perceived by the departments. In subsequent meetings data which are common to the three departments will be shared. Documents containing pre and post Chapter 372 descriptions of patient sponsorship and deficits will be used. The departments may similarly share information the evolution of their informal structures and interdepartmental networks. After this, the Planning, Fiscal, and Addiction Services departments will separate and engage in team analysis.

Specific Framework for Each Department

The departments shall select a team leader. This person will be responsible for coordinating the department's analysis of its definition of and reaction to uncertainty. The consultant will meet with each team to facilitate the process. Each department should then explore its perceptions of uncertainty and the change in behavior and operations emanating from it. The following steps should be

undertaken.

A. Personal Description

First, each member should complete a questionniare prepared by the consultant on how uncertainty modified the way he performs his job. Information not received from the questionnaire may be gleaned by reviewing the department's policy directives.

B. Sharing

Second, all of the questionnaire's answers will be shared and discussed by the team. Further elaboration and clarification will be given as needed.

C. Interviews

Many coping strategies will not be committed to written form. Thus interviews must be conducted. The consultant shall interview the team leader alone. In turn, the consultant shall interview the other members individually. These interviews will be tape recorded for future reference by the consultant in drawing his conclusions.

The aim of the interviews is to uncover individual hypothesis about the consequences of uncertainty on members' behavior and expand on the questionnaire.

Conclusion

Until this point in the research, each department has diagnosed its own goals, information flows, and decision making as they teach interact and impact BCH's anticipation of deficits and response to

uncertainty. After amassing a myriad of impressions on the problem through written and oral data, the departments will meet again. The teams will engage in joint analysis to ascertain how individual behavior culminated in departmental strategies to cope with uncertainty.

CHAPTER FOUR

Conclusion

This proposal suggested questions to guide BCH's diagnosis of whether its way of coping with uncertainty has changed because of Chapter 372. This research will make BCH more conscious of its decison-making patterns, formal and informal structures and information networks. The knowledge gained form this analysis, I feel, will have three positive impacts for BCH.

First, perceptions of fiscally-produced uncertainty will be shared among the departments in BCH. From initial interviews by the author with department personnel it was felt that patient service units and the administrative departments had little interdependence. A minimum of integrating and coordinating decisions was also sensed. Thus the BCH is often perceived as a hospital of "little kingdoms" each trying to expand their power in acceptable ways. The process of self-analysis may affect the degree and quality of problem solving among the Fiscal, Planning and Addiction Services departments.

Second, acknowledging and comprehending the problem of uncertainty may initiate new ways to cope. In search of more effective coping strategies, the Fiscal, Planning and Addiction Services departments may experiment with their operations. Strategies that are ineffective in dealing with uncertainty can be more easily discarded.

Third, the need for greater certainty may prompt BCH to negotiate with aspects of the external environments on which it depends. More

aggressive adaptation may be undertaken. For example, the House Officers Association ("HOA") may propose legislation to more equitably distribute the care of the indigent among all Boston hospitals. BCH would then be more proactive in its approach to the problem of free care.

Because Chapter 372 has existed since 1982, BCH's coping strategies in place before the law may still be in use. Any change may be gradual and this research may tap into this change as it is occurring. If this is the case, the questions in Chapter Two would serve to heighten the quality of analyzing present coping abilities.

Reconstructing past ways of detecting deficits and responding to uncertainty through oral interviews, questionnaires and policy review is not perfect. The memories of personnel may be fallible. Written documents may not give needed insight into the compromises leading to final decisions. The turnover of personnel after Chapter 372 will disrupt the flow of information and perceptions around uncertainty.

Any changes in coping with uncertainty may be abated by political, structural, and regulatory constraints. BCH must consider the demands of its unions, the Civil Service, and the hospital's place in Boston's budgetary system. Yet these constraints should not diminish the opportunity BCH decision-makers have to engage in a self-diagnostic process to see how each one alone and together influence their ability to endure uncertainty.

APPENDIX

Organizational Learning

Introduction

This appendix addresses the concept of organizational learning--a process which enriches BCH's knowledge and enables it to adapt its operations to uncertainty. Because BCH learns through its individual members a brief description of the theory of individual learning is presented first. Next, the frictions prompting organizational learning are discussed. Types of learning are contrasted. Different models of organizational learning have been proposed by organization theorists. Significant models are described and a model applicable to BCH is fashioned as the premise for the research questions and methodology in Chapters two and three respectively.

Individual Learning

BCH is composed of people who learn various functions in differing degrees. Learning in and of itself mandates the acquisition of knowledge.[1] New knowledge as part of learning is also the practice of new methodologies, new skills and new attitudes and values. Learning at the personal level is, then, the process of preparing to deal with new situations.[2] Dealing with new situations requires the flexibility to learn how to learn, to thoughtfully transfer knowledge from problem to problem.[3] As a person's experience grows, responding to changes becomes easier and solutions are arrived at not so much by trial and error but by insight.[4] Thus experience plays a very

important role in learning. Through experience and the building of competence problems of a more complex nature may be attacked.

When individuals work together to achieve goals, imbalances and disorder over fixed procedures are likely to occur. The stress from the imbalance is of concern to the organization. Adapting to this stress requires learning on the part of an organization's subsystems (i.e. departments) and the total system.

The Impetus for Learning

Learning occurs in three organizational levels: 1) units; 2) the entire organization; and 3) interaction between the units and the whole workplace. Discomfort stress and performance stress result from environmental complexities and their uncertainty, which overload limited resources.[5] Excessive demands frustrate workers to the point that the threat of failure is quite real. Individual learning as part of adaptation occurs to ameliorate this stress placed on the worker.

Organizations are subject not only to performance stress, but to disjunctive stress. This stress is created by the conflict arising when individuals and subgroups behave divergently. "When individual and subgroup adaptation produce divergence and conflict beyond what the organization can tolerate, total-system learning is likely to take place."[6] If the tasks of departments are poorly coordinated, services may be severely impeded. Learning improves the quality of coordination.

When financial difficulties are not addressed by scrutinized, definite and reliable procedures, such uncertainty may act as a catalyst for organizational learning.[7] Moreover, the difficulties BCH

now faces in fund shortages, falling net revenues, etc. provide the need to re-examine current policies.[8]

Major Forms of Learning

As organizational learning may occur at different levels, the type of learning may similarly differ. The type of learning which may explain the strong tendency to protect the status quo is maintenance learning.[9] Persons engaging in maintenance learning are concerned with applying rules and a static outlook to known or recurring situations. Values are given to the decision-maker by the organization that employs him. Excluding values which are not inherent in the organizational structure cripples the decision-maker's ability to act on unfamiliar situations.[10]

However, innovative learning provides for the smoothing over of incongruent values. This form of learning recognizes "the existence of a multiple and flexible system of values that is under a myriad of pressures for change."[11] Thus values are not stagnant. Rather they allow decision-makers to choose between courses of action and strategies. In times of turbulence, discontinuity or uncertainty, innovative learning initiates the reformulation of problems.[12]

The two main features of innovative learning are anticipation and participation. Anticipation consists of preparing for possible contingencies and long-range future alternatives.[13] Participation is the active involvement of persons in the process. Innovative learning is more demanding than maintenance learning. To engage in innovative learning, conventional assumptions must be questioned, problems

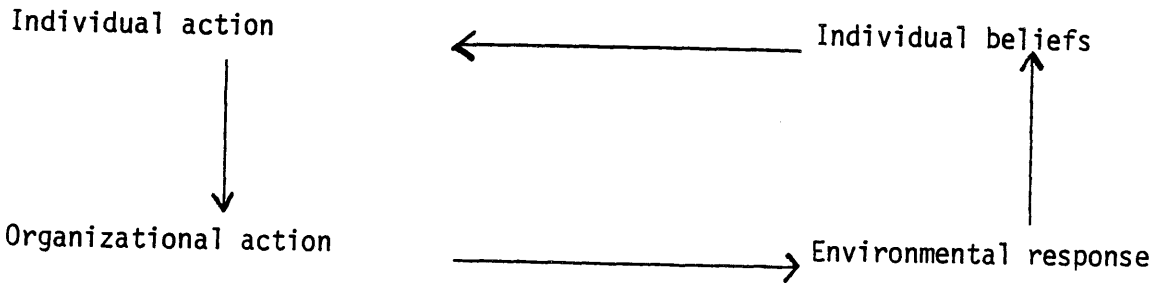
formulated and the range of options enlarged. The need for the Fiscal, Addiction and Planning departments to cope with fiscally-induced uncertainty mandates innovative learning. It is this form of collective inquiry that serves as a "means of preparing individuals..to act in concert in new solutions..."[14]

Theorists have modeled organizational learning in various ways. In most of the models examined, the role of interaction, either interpersonal, individual organizational or organizational environmental is evident. A summary of these models follows.

Hedberg's Model

Hedberg notes the omission in current literature about whether organizations learn in their own right or if organizations learn and remember through current members. Referring to the model in Figure 1 below, Hedberg states that organizational learning is the interaction between an individual and the organization. Individuals act and learn from acting, but "organizations are the stages where acting takes place."[15] For Hedberg, organizational learning involves discarding obsolete knowledge and manipulating and enacting a changing environment.[16]

Figure 1: The Cycle of Organizational Learning [17]



"Organizational learning includes both the processes by which organizations adjust themselves defensively to reality and the process by which knowledge is used offensively to improve the fit between organizations and their environments."[18] Thus an organization which is threatened by environmental discontinuity may unlearn old behavior and learn new behavior.

The learning of BCH is not the total of the learning of its employees. The departure of persons results many times in the subtraction of their knowledge from BCH. Their learning would remain for BCH if it were committed to written policies or memoranda or otherwise shared with remaining employees.[19]

At the organizational level, theories of action,[20] myths and sagas parallel an individual's cognitive structure. These provide a perceptual filter to select stimuli from numerous data. So while the City of Boston provides material on deficits, they become meaningful for BCH when these data are filtered.[21]

When an organizational learning cycle is complete, one of three modes of learning may be used to adjust to change. With minor changes in the environment, the organization employs <u>adjustment</u> learning, where certain response repertoires are negotiated with the environment.[22] <u>Turnover</u> learning occurs when significant, irreversible and partial changes prompt an organization to unlearn old behavior.[23] When an organization is faced with substantial environmental changes, <u>turnaround</u> learning demands complete restructuring of responses.

When the relationship between an organization and its environment

is unclear, the links in the learning cycle may be severed. Such ambiguity may cause faulty understanding of reality and invalid strategies for coping with change.[24] Complex, hostile environments[25] may contribute to ambiguity and confusion as well as overloading information--processing capacities.

Hedberg notes that a crucial part of organizational learning is unlearning. "Organizational unlearning is typically problem-triggered. Fund shortages, falling revenues...are some examples. These triggers cause hesitancy and build up distrust in procedures...A turbulent period then frequently follows."[26] During unlearning, established perceptions, responses to stimuli and reactions to new situations are jettisoned. Keeping in mind the previous discussion, one may model organizational learning as learning, leading to unlearning and needed relearning for continued survival. The result of this process is to embellish an organization's flexibility by discovering continuities in its environment.

Kolb's Model

Kolb stresses the role of experience in organizational learning. Figure 2 displays his experimental learning model.

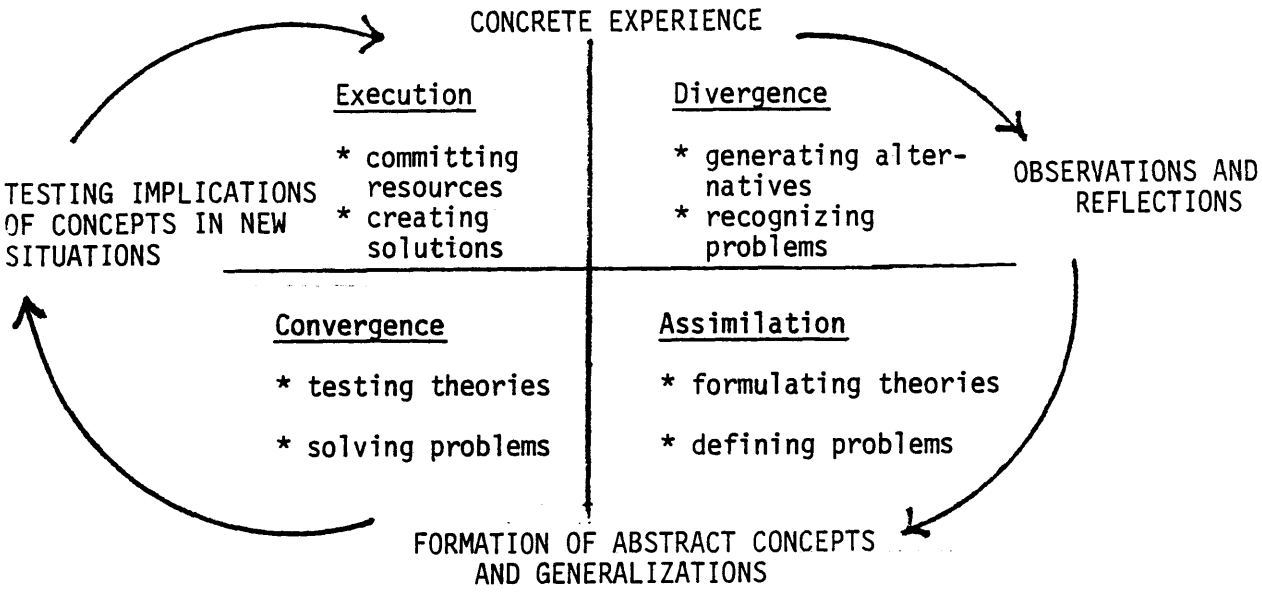


Figure 2: Kolb's Experiential Learning Model[27]

He proposes this model to help managers enhance the organization's ability to learn. As one follows the clockwise direction of the model, "one moves in varying degrees from actor to observer, from specific involvement to general analytic detachment."[28] The success of implementing this model depends upon individual learning styles.[29] The combination of these styles greatly impacts the quality of learning the specifics of a particular subject and learning how to learn from experience.[30]

Kolb states that an organization will differentiate itself into

units to respond to segments of the external environment. And while organizational differentiation may be "the difference in cognitive and emotional orientation among managers in different functional departments"[31] such differences may distort organizational learning. Kolb suggests that as learning is actively pursued, different perspectives should be tolerated.[32] Such toleration will, he feels, prevent the dominance of one organizational unit over the others. Kolb's experiential learning model has been used to assist individuals in identifying learning styles.[33] As managers at Procter and Gamble learned more about the model, they developed an appreciation of the contributions of the other members of the group. Working relationships improved. The participants concluded that "[t]o the extent that...social and political turbulence is forcing even the most stable organizations...to adopt a learning orientation--if they are to survive, we expect the Learning Model to be increasingly useful."[34]

Dery

David Dery contributes the notion of error as absolutely essential to organizational learning.[35] An error is an unexpected outcome--a mismatch of outcomes to expectations. The factors leading to errors are the internal communication network which determines how data are converted into information. Thus interpretation of data is bound by organizational premise and the employee's role.[36] The conversion of data are influenced by the organization's factual and value premises.

To recognize error, the organization must first define what it would perceive as error. Having accomplished this, "the learning task

of an organization is thus interpreted as the need to move from one set of premises to a competing set of premises, yet on the basis of the previous set."[37] The shift in premises depends on the elements in the environment the organization selects as its frame of reference. The frame of reference may be either political or substantive.[38] With knowledge of its organizational premises, grounds for recognizing error and interdepartmental networks, BCH may be able "to pose certain questions to the environment and adopt behavior on the basis of experience."[39]

Shrivastava's Typology of Learning Systems

This author summarizes various descriptions of organizational learning which are useful for this appendix.[40] Organizational learning has been defined as adapting goals and rules on the basis of experience to meet environmental demands. "In short, organizational learning is a function of the organization's experience with the knowledge base that underlies decision processes."[41] Learning in organizations is gradual and moderated by intra-organizational conflicts and procedures.[42]

Drawing upon the work of Schon and Argyris, organizational learning has been viewed as the sharing of assumptions, where errors are detected to maintain the present mode of operation. When an organization's operations (theory-in use) change as the result of individual and collective inquiry, learning is said to have occurred.[43] When the values and norms embedded in the operations remain constant after an inquiry, single-loop learning has occurred. If the values and norms of the operations have been restructured,

double-loop learning has taken place.[44]

Borrowing from the work of Duncan and Weiss, Shrivastava notes that organizational learning is the development of a knowledge base where the relationship between actions and outcomes is known.[45] In other words, the people engaged in coordinated activities to secure outputs realize the impact of external forces on what they do.

Learning Systems

The work of Shrivastava is important to this research proposal because it sets forth the concept of learning systems. Without learning systems, learning would not be perpetuated and institutionalized in BCH. A learning system takes note of the many contexts in which organizational learning occurs. Figure 3 presents the characteristics and types of learning systems most relevant to BCH.

Figure 3: Characteristics of Organizational Learning Systems [46]

CHARACTERISTIC	MYTHOLOGICAL LEARNING SYSTEMS	INFORMATION SEEKING CULTURE	FORMAL MANAGEMENT SYSTEM	BUREAUCRATIC LEARNING SYSTEM
1. Type of knowledge	Subjective/ mythical	Subjective/ mythical	Objective	Objective
2. Scope of system	General	General	Task or area specific	Task specific
3. Media for communication	Stories	Word of mouth	Reports	Memos, reports
4. Motivation of activity	Social norms	Social norms	Periodic requirements	Specific decision
5. Organizational make up	Informal network	None	Divisions or departments	Departments

The different learning systems represent ideal systems. However, BCH contains a mixture of these systems due to its formal and informal structures, communication networks and bureaucractic flavor. The learning systems in BCH vary in explicitness, systematization, formality and sophistication. But each system acquires and interprets knowledge relevant for decison-making in BCH. These systems are rooted in the practices of BCH. Even though these systems may not be verbalized or documented, persons in BCH have at least an intuitive sense of their existence.

Organizational Learning and BCH

The concept and application of organizational learning presents a challenge to BCH. The goal of this proposal stated at the outset is, in effect, to make BCH an organization that learns how to learn[47] from reviewing its methods of coping with uncertainty by self-diagnosis. Deutero-learning demands an effective, shared inquiry to integrate diverse perceptions of BCH phenomena; to test interpretations of these phenomena to create new policies, and to respond to conflicts through inquiry.

The benefits of deutero-learning lie in the increased effectiveness resulting from public testing of operations, values, information and a high freedom of choice, internal commitment and risk taking. Such learning reverses the private or self-sealing mode of learning that inevitably decreases effectiveness.[48] The concept of deutero-learning should assist BCH in coping with future problems similar to those addressed in this proposal.

FOOTNOTES: APPENDIX

1. It is knowledge which enables an employee to complete successfully a class of work tasks. Moreover, knowledge "is that inferred capability which makes possible the successful performance...that could not be performed before the learning was undertaken." Gagne, Robert "The Acquisition of Knowledge," Vol. 69 Psychological Review, No. 4, 1962, p. 355.

2. Botkin, James W. No Limits to Learning, Pergammon Press, 1979, p. 8.

3. Harlow, Harry "The Formation of Learning Sets," Vol. 56, Psychological Review, 1949, p. 53.

4. Trial-and-error and insight are points on a continuum. Both approaches strive to realize perceived goals. Trial-and-error refers to random, blind moves toward a goal and trying to test the practicabilty of relations to the goal. Between trial-and-error and insight lies gradual analysis, a series of analytic steps which add to the understanding of a problem. The accumulation of these steps leads to insight, where there is an abrupt change from relatively random to directed behavior. This limitation narrows the scope of inquiry. Durkin, Helen "Trial-and-Error, Gradual Analysis,and Sudden Reorganization: An Experimental Study of Problem Solving." Vol. 30, Archives of Psychology, 1937, pp. 5-72.

5. Cangelosi, Vincent and Dill, William "Organizational Learning: Observations Toward a Theory", Vol. 10 Administrative Science Quarterly, 1965, p. 200.

6. Ibid at p. 202.

7. The ambiquity of reimbursement laws and pending legislation illustrates the unroutinized new nature of possible BCH funding sources. See Dery, David "Decision-making, Problem-solving and Organizational Learning," Vol. 11 Omega-International Journal of Management Science, No. 4, 1983, p. 326.

8. Ibid.

9. Botkin, James, W. No Limits to Learning, 1979, p. 8.

10. The content of organizational communication, such as job descriptions, may also limit novel responses to situations on the periphery of the organization's value system. See also: Botkin at p. 43.

11. Ibid at p. 10.

12. Ibid.

13. Anticipation is proactive and contrasts with adaptation, which Botkin believes is reactive adjustment to external pressure.

14. Botkin at p. 12.

15. Hedberg, B.O., "How Organizations Learn and Unlearn," Vol. 1, Handbook of Organizational Design, Nystrom Paul and Starbuck, William editors, Oxford University Press, 1981, p. 3.

16. Ibid.

17. Ibid.

18. Ibid.

19. Ibid at p. 6.

20. A theory of action is a strategy realized in procedures geared toward sustaining a particular set of outputs.

21. See generally: Hedberg, B.O., pp. 7-9.

22. Ibid at p. 11.

23. Ibid.

24. Ibid.

25. BCH depends on unpredictable political, financial and economic environments for inputs and other resource exchanges. Given the position of BCH in the Boston health care system uncertainty and dependence go hand in hand. The environment in which BCH functions may be classified as both "disturbed-reactive" and "turbulent". The disturbed-reactive nature of the environment results from other Boston hospitals using strategies to buttress their financial position as allowed by current and proposed reimbursement laws. The outer environment of BCH is turbulent in that complex causal interconnections have forced BCH to review the importance of its values in responding to fiscal uncertainty. See: Emery, F.E., and Trist, E.L., "The Casual Texture of Organizational Environments", Vol. 18 Human Relations, pp. 21-31.

    These environments add to the complexity of factors that are in a continual process of change. Persons in decision units, such as the Fiscal, Addiction and Planning departments, "with dynamic-complex environments experience the greatest amount of uncertainty in decision-making." See: Duncan, Robert "Characteristics of Organizational Environments and Perceived Environmental Uncertainty", Vol. 16, Administrative Science Quarterly, 1972, pp. 313-327.

26. Hedberg, B.O., at p. 19.

27. Kolb, David, "Management and the Learning Process," Vol. 18, California Management Review, No. 3, 1976, p. 22.

28. Ibid.

29. Kolb lists four learning styles: 1) converger, 2) diverger, 3) assimilater, and; 4) accommodator.

30. Ibid at p. 26.

31. Lawrence, Paul and Lorsch, Jay, Organizational and Environment (Boston: Division of Research, Graduate School of Business Administration, 1976), p. 11.

32. Conflict is a creative force which may generate innovative approaches to problems and allows the expression of diverse views. See also: Kolb, David at pp. 28-9.

33. Carlson, Barbara "R and D Organizations as Learning Systems." Vol. 17, Sloan Management Review, No. 3, 1976, pp. 1-15.

34. Ibid at p. 14.

35. Dery, David, "Erring and Learning: An Organizational Analysis," Vol. 7 Accounting Organizations and Society, No. 3, 1982, pp. 217-223.

36. Ibid at p. 217.

37. Ibid at p. 219.

38. A political frame of reference seeks data to obtain support for a decision. A substantive frame of reference seeks data regarding the "relatedness of decisions to outcomes..." Ibid at p. 221.

39. Ibid at p. 220.

40. Shrivastava, Paul, "A Typology of Organizational Learning Systems" Vol. 20 Journal of Management Studies, No. 1, 1983, pp. 7-28.

41. Ibid at p. 10.

42. Ibid at p. 11.

43. Ibid at p. 12.

44. Ibid at pp. 11-12.

45. Ibid at p. 13.

46. Ibid at p. 21.

47. Learning how to learn is also termed deutero-learning. See: Schon, Donald, "Deutero-Learning in Organizations for Increased Effectiveness," Vol. 4, Organizational Dynamics No. 1, 1975, pp. 2-16.

48. Deutero-learning promotes public and shared learning, Model II, as opposed to the secretive, rational and defensive type of learning often engaged in to maintain operations at their present level, Model I. For a more detailed discussion, See: Argyris, Chris, "Double Loop Learning in Organizations", Vol. 55 Harvard Business Review, No. 5, 1977, pp. 115-125; Argyris, Chris, Reasoning, Learning, and Action (San Francicso-Jossey-Bass, Inc., Publishers, 1982).

ATTACHMENT ONE

DEPARTMENT OF HEALTH AND HOSPITALS BALANCE SHEET

JUNE 30, 1981

DEPARTMENT OF HEALTH & HOSPITALS
BALANCE SHEET
JUNE 30, 1981

ASSETS	MATTAPAN	LONG ISLAND	B.C.H.	TOTAL
Cash - Checking A/C & Petty Cash	$ 8,320	$ 56,896	$ 127,294	$ [illegible]
Cash - Salary Advance	6,459	6,023	30,611	[illegible]
Cash & Cash Equivalents	$ 14,779	$ 62,919	$ 157,905	$ 235,603
A/R Billed - Inpatient	977,519	1,334,779	11,998,532	[illegible]
A/R Unbilled - Inpatient	562,320	376,007	28,525,368	[illegible]
A/R - Outpatient	-	-	11,463,514	[illegible]
A/R - Alcoholic Rehab.	5,181	5,415	-	[illegible]
A/R - Allowance for Doubtful Accounts	(378,629)	(376,517)	(28,600,000)	[illegible]
Due From 3rd Parties - Settlements - 1980 Blue Cross	(164,599)	(89,895)	-	(254,494)
Due From 3rd Parties - Settlements - 1981 Medicare	58,860	101,563	782,569	942,992
Due From 3rd Parties - Settlements - 1981 Blue Cross	(170,772)	(81,524)	-	(252,296)
Due From 3rd Parties - Appeals - 1980 Pension (Choate Hall)	320,149	465,323	-	[illegible]
Due From 3rd Parties - Appeals - 1981 Pension (Choate Hall)	313,174	382,686	491,928	[illegible]
Due From 3rd Parties - Appeals - Pay As You Go Payment (Difference Between Provision & Funding) 1980	206,244	288,743	1,567,464	[illegible]
Due From 3rd Parties - Appeals - Pay As You Go Payment (Difference Between Provision & Funding) 1981	148,650	208,110	1,129,738	[illegible]
Due From 3rd Parties - Unemployment & Workmens Comp. - 65% Settlement	58,045	81,263	[illegible]	
Due From 3rd Parties - Appeals - 1979 Medicaid	(433,636)	9,758	548,164	[illegible]
Due From 3rd Parties - Appeals - 1980 Medicaid	(375,565)	1,736	337,327	[illegible]
Due From 3rd Parties - Appeals - 1981 Medicaid	(138,869)	166,622	-	[illegible]
Due From 3rd Parties - Appeals - 1979 Medicare	-	-	75,509	[illegible]

DEPARTMENT OF HEALTH & HOSPITALS
BALANCE SHEET
JUNE 30, 1981

	MATTAPAN	LONG ISLAND	B.C.H.	TOTAL
ASSETS (Cont.)				
Due From 3rd Parties - Appeals - 1980 Medicare	$ -	$ -	$ 461,412	$ 461,412
Due From 3rd Parties - Appeals - 1981 Medicare	-	-	122,566	122,566
A/R - Interest	-	-	8,604	8,604
A/R - Social Disease	-	-	39,444	39,444
A/R - Nursing Tuition	-	-	13,904	13,904
A/R - Cat Scans	-	-	7,162	7,162
A/R - Salary Advance	1,023	2,514	-	3,537
A/R - Settlement Suspense	(52,313)	(70,458)	1,505,969	1,383,198
Conservatism	10,512	(90,387)	(350,951)	(430,826)
Accounts Receivable	$ 947,294	$ 2,715,738	$ 30,569,365	$ 34,232,397
Central Stores	26,811	59,061	421,266	507,138
Dietary	5,578	10,649	15,567	31,794
Pharmacy	62,390	107,226	384,489	554,105
Inventories	$ 94,779	$ 176,936	$ 821,322	$ 1,093,037
Cash	(13,320)	(64,896)	(157,903)	(236,119)
Tax Withholding Payable	37,040	61,254	406,275	504,569
Other Withholding Payable	27,415	39,079	202,185	268,679
Accounts Payable	416,718	283,983	6,787,212	7,487,913
Accrued Salaries & Wages	122,332	190,090	1,248,550	1,560,972
Due From City of Boston	$ 590,185	$ 509,510	$ 8,486,317	$ 9,586,012

DEPARTMENT OF HEALTH & HOSPITALS
BALANCE SHEET
JUNE 30, 1981

ASSETS (Cont.)	MATTAPAN	LONG ISLAND	B.C.H.	TOTAL
Current Assets	$ 1,647,037	$ 3,465,103	$ 40,034,909	$ 45,147,049
Due From Trustees	-	-	1,824,950	1,824,950
Land	65,000	146,100	487,341	698,441
Land Improvements	122,257	3,013,896	77,655	3,213,808
Building & Improvements	6,102,034	8,443,342	103,037,460	117,582,836
Equipment	757,253	1,069,335	12,417,295	14,243,883
Accumulated Depreciation - Land Improvements	(105,138)	(2,213,659)	(49,566)	(2,368,363)
Accumulated Depreciation - Buildings & Improvements	(4,168,336)	(4,625,550)	(32,196,694)	(40,990,580)
Accumulated Depreciation - Equipment	(474,658)	(637,774)	(5,270,569)	(6,383,001)
Property, Plant and Equipment	$ 2,298,412	$ 5,195,690	$ 78,502,606	$ 87,996,708
TOTAL ASSETS	$ 3,945,449	$ 8,660,793	$ 120,362,464	$ 133,968,706

DEPARTMENT OF HEALTH & HOSPITALS
BALANCE SHEET
JUNE 30, 1981

	MATTAPAN	LONG ISLAND	B.C.H.	TOTAL
LIABILITIES				
Accounts Payable	$ 416,718	$ 283,983	$ 6,787,[illegible]	$ 7,[illegible]
Advances From Dept. of Public Welfare	-	-	3,000,000	3,000,000
Accrued Salaries & Wages	122,332	190,090	1,248,550	1,560,[illegible]
Accrued Sick Pay	132,263	157,540	1,270,000	1,[illegible]
Accrued Vacation Pay	184,458	291,294	1,507,178	1,[illegible]
Meal Tax	-	-	(290)	(290)
Tax Withholding	37,040	61,254	406,275	[illegible]
Other Withholding	27,415	39,079	202,185	[illegible]
Accrued Interest	-	-	729,756	[illegible]
Blue Cross Working Capital	-	-	265,000	[illegible]
Refunds in Process	-	-	11,395	[illegible]
Accrued Liabilities	$ 503,508	$ 739,257	$ 5,640,049	$ [illegible]
Current Liabilities	$ 920,226	$ 1,023,240	$ 15,427,[illegible]	$ [illegible]
Accrued Judgement & Claims	-	-	800,000	[illegible]
Accrued Retirement Costs	$ 2,721,770	$ 3,810,478	$ 21,568,[illegible]	[illegible]
TOTAL LIABILITIES	$ 3,641,996	$ 4,833,718	$ 37,796,136	$ 46,271,852
FUND EQUITY				
Contributed Capital	$ 7,512,664	$ 14,353,252	$ 125,[illegible]	[illegible]
Accumulated Deficit	$(5,625,575)	$ (11,178,709)	$ (44,264,[illegible]	$ (61,[illegible]
Total Fund Equity	$ 1,887,089	$ 3,174,543	$ 81,635,[illegible]	$ 86,[illegible]
TOTAL LIABILITIES AND FUND EQUITY	$ 5,529,085	$ 8,008,261	$ 119,431,360	$ 132,[illegible]

ATTACHMENT TWO

STATEMENT OF REVENUE AND EXPENSE

JUNE 30, 1981

DEPARTMENT OF HEALTH AND HOSPITALS
STATEMENT OF REVENUE AND EXPENSE
6/30/81

	MATTAPAN	LONG ISLAND	B.C.H.	COMMUNITY HEALTH	[illegible]
GROSS REVENUE FROM SERVICES TO PATIENTS:					
Room & Care	$ 14,236,090	$ 22,446,841	$ 31,470,006	-	$ 68,[illegible]
Special Service	63,854	107,205	39,691,200	-	39,[illegible]
Clinics	-	-	21,591,128	-	21,[illegible]
Gross Revenue From Services to Patients	$ 14,299,944	$ 22,554,046	$ 92,752,334	-	$ 129,606,3[illegible]
DEDUCTIONS FROM GROSS PATIENT REVENUES:					
Inpatient Billed/Published	$ -4,741,894	$ 10,392,446	$ 4,208,085	-	$ 19,3[illegible]
Write Down of Free Care to Cost Basis	-	-	4,173,226	-	[illegible]
Write Off Balance of 1980 Medicare AFS (AFS-3)	29,953	(53,085)	780,139	-	[illegible]
Increase AFS Liability to 1980 Blue Cross (AFS-4)	74,802	26,498	-	-	101,300
Write Off Unadjusted Balance of 1979 Medicare AFS (AFS-6)	16,660	7,683	(38,051)	-	[illegible]
Adjust Prior Year Appeals to Proper Levels at 6/30/81 (AFS-8)	-	(5,151)	957,924	-	952,773
Record Cash Receipts in 1981 on Welfare Settlements and Write Off Ending AFS Liability to Cost. Adj. (AFS-9)	-	(153,611)	-	-	[illegible]
Record 1981 AFS BCH Based on Welfare Retro Rate Adj. (AFS-10)	-	-	(122,566)	-	[illegible]
[illegible] Adjustment to Accrued Pension Exp. for 1981 Welafre Rate Adj. (AFS-11)	(313,174)	(382,686)	(491,928)	-	[illegible]
Record AFS Liability at 6/30/81 Based on B/C Audit Retro Rate Adj. (AFS-12)	-	-	122,845		[illegible]
[illegible] Cash Receipts in 1981 on Medicare Settlements and Write Off Ending AFS Liability to Cost. Adj. (AFS-13)	-	-	(560,000)		
Record Cash Receipts in 1981 on Medicare Settlements and Write Off Ending AFS Liability to Cost. Adj. (AFS-14)	-	-	(483,105)		[illegible]
Record Cash Receipts in 1981 on Welfare Settlements and Write Off Ending AFS Liability to Cost. Adj. (AFS-15)	-	-	(468,721)	-	[illegible]
Record Estimated Medicare TEFRA Cost Exception from 1980 Cost Report (AFS-16)	-	-	(137,167)	-	[illegible]

DEPARTMENT OF HEALTH AND HOSPITALS
STATEMENT OF REVENUE AND EXPENSE
6/30/81

	MATTAPAN	LONG ISLAND	B.C.H.	COMMUNITY HEALTH	[illegible]
DEDUCTIONS FROM GROSS PATIENT REVENUES (cont.)					
Establish AFS Related to Funded Pension Exp. for 1980 Welfare Rate Adj. (AFS-17)	$ (320,149)	$ (465,323)	$ -	-	$ [illegible]
Reserve Fully for 1981 Pension Related Rate Adj. (AFS-18)	313,174	382,686	491,928	-	[illegible]
Reserve Fully for 1980 Welfare Rate Adj. (ASF-19)	320,149	465,323	-	-	[illegible]
Reserve Against the Effect of a Welfare Rate Increase (ASF-20)	-	-	12,566	-	[illegible]
Reserve Against AFS for Welfare Retro Rate Adj. (AFS-21)	-	-	97,000	-	[illegible]
Reserve 1980 Medicare Routine 223 Cost Exception (AFS-22)	-	-	20,000	-	[illegible]
Record AFS on 1981 Cost Report Issues (AFS-23)	-	-	(690,696)	-	[illegible]
Record an Allowance Against 1981 AFS	-	-	301,000	-	[illegible]
Provide 65% Reimbursement for W/C & Unemployment (AJE-35)	(58,045)	(81,263)	(441,142)	-	[illegible]
Accrue for Receivable from 3rd Parties - Legal Letter from Choate Hall (AJE-37)	(633,212)	(847,860)	(491,928)	-	(1,973,0
Accrue 3rd Party Benefit as Receivable for Difference between Provision & Funding	(354,894)	(496,853)	(2,697,202)	-	(3,[illegible]
Estimated Contractual Allowance	$ 3,817,158	$ 8,788,804	$ 4,602,207	-	$ [illegible]
[illegible]	$ 1,426,463	$ 1,980,255	$ 32,[illegible]583		
[illegible] to Free Care	(1,355,140)	(1,881,242)	(27,314,205)		
[illegible]	$ 71,323	$ 99,013	$ 4,[illegible]378		
[illegible]	$ 3,888,481	$ 8,887,817	$ 9,511,585		$ [illegible]
[illegible]	$ 10,411,463	$ 13,666,229	$ 83,[illegible]749		
OTHER OPERATING REVENUE					
Cafeteria	$ -	$ -	$ 254,403		$ [illegible]
Medical Record Fees	-	-	9,578		
OPD Pharmacy	-	-	160,233		

DEPARTMENT OF HEALTH AND HOSPITALS
STATEMENT OF REVENUE AND EXPENSE
6/30/81

	MATTAPAN	LONG ISLAND	B.C.H.	COMMUNITY HEALTH	
OTHER OPERATING REVENUES: (cont.)					
Mobile Canteen	$ -	$ -	$ 36,012	-	$
T.B. Bureau	-	-	259,310	-	
Security - Parking & ID's	-	-	991	-	
Space Rental - Mallory	-	-	281,000	-	
Miscellaneous	-	1,306	(11,357)	-	
Trustees O/H	-	-	751,202	-	
Laboratory	143,174	-	-	-	
Interest	-	-	52,689		
Social Disease	-	-	163,325	-	
Nursing Tuition	-	-	45,322	-	
BURC	-	-	226,979	-	
Space Rental - Trustees	-	-	45,322		
Space Rental - [illegible]	-	-	50,999	-	
Subsidy Reconciliation	-	-	29,950		
Total Other Operating Revenues	$ 143,174	$ 1,306	$ [illegible]		
Total Net Revenue	$10,554,637	$ 13,667,535	$ 85,696,707		
[illegible]					
Salaries, Wages & Fr[illegible] - Regular Employees					
1981 Cash Expenditures	$ 5,464,048	$ 8,071,119	$ 51,[illegible],816		$
1981 Change in Accruals - Payroll, Vac. & Sick Pay	19,903	99,596	(45,712)		
[illegible]	(234,296)	(260,011)	(5,043,888)		
[illegible]	-	-	(3,919,300)		

DEPARTMENT OF HEALTH AND HOSPITALS
STATEMENT OF REVENUE AND EXPENSE
6/30/81

	MATTAPAN	LONG ISLAND	B.C.H.	COMMUNITY HEALTH	TOTAL
PATIENT SERVICES EXPENSES (Cont.)					
Salaries, Wages & Fringe Benefits - Regular Employees (cont.)					
Add'l Allocation to Comm. Health - Overhead P/R Items	$ -	$ -	$ (414,154)	-	$ (414,154)
1981 Trustees Expenditures	-	-	252,383	-	252,383
	$ 5,249,655	$ 7,910,704	$ 42,559,147	-	$ 55,719,506
Salaries & Wages - CETA Employees					
1981 Cash Expenditures	$ 12,929	$ 17,464	$ 719,711	-	$ 750,104
Reclass to Community Health	-	-	(135,584)	-	(135,584)
	$ 12,929	$ 17,464	$ 584,127	-	$ 614,520
Professional Fees					
Reclass from S & W - Regular Employees	$ 234,296	$ 260,011	$ 5,043,868	-	$ 5,538,175
Reclass from A & P Direct Contracts Paid B.U. for Doctors)	-	-	4,034,727	-	4,034,727
Reclass to Community Health - 1981 Exp.	-	-	(120,000)	-	(120,000)
Add'l Allocation to Comm. Health - Overhead P/R Items	-	-	(15,390)	-	(15,390)
1981 Trustees Expenditures	-	-	33,941	-	33,941
	$ 234,296	$ 260,011	$ 9,577,146	-	$ 9,471,453
	$ 916,305	$ 1,[illegible]	[illegible]		
Provision for Accrued Retirement Costs	$ 520,187	$ [illegible]	$ [illegible]		

DEPARTMENT OF HEALTH AND HOSPITALS
STATEMENT OF REVENUE AND EXPENSE
6/30/81

	MATTAPAN	LONG ISLAND	B.C.H.	COMMUNITY HEALTH	
PATIENT SERVICES EXPENSES (cont.)					
Materials And Supplies					
1981 Expenditures per Exp. Analysis	$ 848,858	$ 1,532,737	$ 9,811,562	-	$ 12,[illegible]
Accounts Payable 6/30/81	160,853	149,943	1,920,781	-	2,[illegible]
Decrease in Inventory	12,976	14,079	57,454	-	[illegible]
Reversal of A/P 6/30/80	(269,054)	(386,318)	(2,477,557)	-	(3,[illegible]
Allocation to Comm. Health - Overhead	-	-	(240,000)	-	([illegible]
1981 Trustees Expenditures	-	-	62,012	-	[illegible]
Reclass to Community Health - FY 81 Exp.	-	-	(82,187)	-	[illegible]
	$ 753,633	$ 1,310,441	$ 9,052,065	-	$ 11,[illegible]
Provision For Accrued Judgements & Claims	$ -	$ -	$ (440,000)	-	$ (440,[illegible]
Administrative And General					
1981 Expenditures per Exp. Analysis	$ 1,118,718	$ 1,[illegible]	$ 21,045,344		[illegible]
Accounts Payable 6/30/81	255,865	[illegible]	4,174,135		[illegible]
Decrease in Inventory	(196,437)	[illegible]	[illegible]		[illegible]
1981 Trustees Expenditures	-		[illegible]		
Reclass to Pat. Rev. (Contracts Pd. B.U. for Doctors)	-		(4,033,[illegible]		([illegible]
Reclass to Comm. Health - FY 81 Exp.			[illegible]		[illegible]
Employee Relations Exp. - Telephone Charges	-		(9,535)		[illegible]
	$ 1,178,146	$ 1,[illegible]	$ 12,[illegible]		[illegible]

DEPARTMENT OF HEALTH AND HOSPITALS
STATEMENT OF REVENUE AND EXPENSE
6/30/81

	MATTAPAN	LONG ISLAND	B.C.H.	COMMUNITY HEALTH	[illegible]
PATIENT SERVICES EXPENSES (cont.)					
Interest					
1981 Interest Expenditures (COB)	$ 14,421	$ 215,314	$ 3,513,919	-	$ [illegible]
Decrease in Interest Payable	(3,521)	(52,576)	(17,975)	-	[illegible]
Allocation to Comm. Health - Overhead	-	-	(840,068)	-	[illegible]
	$ 10,900	$ 162,738	$ 2,655,876	-	$ [illegible]
Depreciation					
Buildings	$ 202,835	$ 251,895	$ 2,481,802	-	$ [illegible]
Land Improvements	2,936	96,158	6,257	-	[illegible]
Equipment	47,553	79,379	1,019,126	-	[illegible]
	$ 253,324	$ 427,432	$ 3,507,185	-	$ [illegible]
Total Patient Services Expenses	$ 9,129,375	$ 13,258,721	$ 89,910,750	-	$ [illegible]
Gain/(Loss) From Services [illegible]	$ 1,925,262	$ [illegible]	$ [illegible]	[illegible]	[illegible]
OTHER OPERATING [illegible]					
[illegible]					
1981 Expenditure [illegible] Analysis	$ -	$ -	$ -	$ [illegible]	$ [illegible]
Accounts [illegible]	-	-	[illegible]	[illegible]	[illegible]
Reversal [illegible]	-	-	[illegible]	[illegible]	[illegible]
Allocation [illegible]	-	-	[illegible]	[illegible]	[illegible]

DEPARTMENT OF HEALTH AND HOSPITALS
STATEMENT OF REVENUE AND EXPENSE
6/30/81

	MATTAPAN	LONG ISLAND	B.C.H.	COMMUNITY HEALTH	TOTAL
OTHER OPERATIONS [illegible] SUBSIDIES: (cont.)					
Community Services, Special Programs & Real Estate Operations (cont.)					
1981 Trustees Expenditures	$ -	$ -	$ -	$ (127,705)	$ [illegible]
Reclass FY 81 Exp. from M & S and A & G	-	-	-	3,027,740	[illegible]
Reclass FY 81 Exp. From S & W - Regular Employees	-	-	-	4,039,300	[illegible]
Add'l Allocation for [illegible] P/R Items	-	-	-	[illegible]	[illegible]
Reclass from S & W [illegible] Employees	-	-	-	135,5[illegible]	[illegible]
Pension Expense	-	-	-	985,000	[illegible]
From COB - Restaurant License Fees (Health Inspectors) A/C 10221	-	-	-	[illegible]	[illegible]
From COB - [illegible] A/C 41231 - 41234	-	-	-	348,371	[illegible]
Depreciation [illegible]	-	-	-	[illegible]	[illegible]
Depreciation [illegible]	-	-	-	[illegible]	[illegible]
Interest - [illegible]	-	-	-	[illegible]	[illegible]
	$ -	$ -	$ -	$ [illegible]	[illegible]
[illegible]					
[illegible]	$ 1,355,1[illegible]	$ [illegible]	$ [illegible]	$ [illegible]	[illegible]
Write Down [illegible]	-		(4,[illegible],226)		[illegible]
	$ 1,355,140	$ 1,981,242	$ 25,7[illegible],706	$ [illegible]	[illegible]
[illegible]	$ 1,355,1[illegible]	$ [illegible]	$ [illegible]	[illegible]	[illegible]
Gain/(Loss) [illegible]	$ 70,122	$ ([illegible])	$ (30,9[illegible],749)	$ ([illegible])	[illegible]

DEPARTMENT OF HEALTH AND HOSPITALS
STATEMENT OF REVENUE AND EXPENSE
6/30/81

	MATTAPAN	LONG ISLAND	B.C.H.	COMMUNITY HEALTH	
OPERATING TRANSFERS:					
General Fund					
Interest Cash Receipts	$ (14,421)	$ (215,314)	$ (3,513,919)	-	
Pay As You Go Retirement Costs	(916,305)	(1,282,828)	(7,080,492)	-	
Fringe Benefits - City Hall	(332,739)	(596,732)	(3,182,164)	-	
Payroll Expense - GAAP Basis	(5,162,512)	(7,537,255)	(47,773,131)	-	
Purchases - GAAP Basis	(1,849,143)	(2,414,769)	(31,208,641)	-	
Capital Items Included in Purchases	-	-	144,347	-	
Cash Receipts	8,316,151	10,375,046	61,194,319	-	
Cash Receipts - Health Dept. License Fees	-	-	254,598	-	
Cash Disbursement - Medical Examiners	-	-	(348,371)	-	
Change in Cash in Bank	6,147	53,919	125,681	-	
W/C and Unemployment	(89,300)	(125,020)	(678,680)	-	
	$ (42,122)	$ (1,742,953)	$(32,066,453)		
[illegible]					
[illegible]	$ (12,929)	$ [illegible]	$ (719,711)		
[illegible]	[illegible]	[illegible]	[illegible]		
[illegible]	$ 125,173	$ 287,989	$ 2,687,415	$(14,[illegible]	[illegible]
Accumulated Deficit, Beginning of Year	$ 5,691,095	$ 9,965,699	$ 48,913,002	$(13,[illegible]	[illegible]
*Accumulated Deficit, End of Year	$ (5,565,922)	$ (9,677,710)	$(46,225,587)		

ATTACHMENT THREE

BALANCE SHEET

JUNE 30, 1983

DEPARTMENT OF HEALTH AND HOSPITALS
BALANCE SHEET
6/30/83

	BOSTON CITY	MATTAPAN	LONG ISLAND	TOTAL
Cash and Cash Equivalents	$ 2,294,825	$ 605,459	$ 1,186,310	$ 4,086,594
Net Receivables	18,275,232	1,995,829	1,700,502	21,971,563
Due From City of Boston	4,265,627	(137,894)	(122,741)	4,004,992
Inventory	1,022,545	135,896	217,604	1,376,045
Due From Trustees of Health and Hospitals	2,265,890	-	-	2,265,890
Property, Plant and Equipment	79,272,877	2,089,919	4,688,600	86,051,396
Total Assets	$ 107,396,996	$ 4,689,209	$ 7,670,275	$ 119,756,480
Accounts Payable	$ 4,992,432	$ 474,760	$ 599,291	$ 6,066,483
Accrued Salaries and Wages	5,211,701	384,168	586,461	6,182,330
Due To Third Parties	18,452,601	(576,805)	(2,684,820)	15,190,976
Accrued Pension Liabilities	32,432,981	3,890,050	5,637,205	41,960,236
Accrued Judgements and Claims	1,600,000	-	-	1,600,000
Lease Obligation	7,394,144	131,301	131,301	7,656,746
Total Liabilities	$ 70,083,859	$ 4,303,474	$ 4,269,438	$ 78,656,771
Contributed Capital	$ 129,294,441	$ 7,592,047	$ 14,488,297	$ 151,374,785
Accumulated Deficit	91,981,304	7,206,312	11,087,460	110,275,076
Total Fund Equities	$ 37,313,137	$ 385,735	$ 3,400,837	$ 41,099,709
Total Liabilities and Fund Equity	$ 107,396,996	$ 4,689,209	$ 7,670,275	$ 119,756,480

DEPARTMENT OF HEALTH AND HOSPITALS
STATEMENT OF REVENUES, EXPENSES, OPERATING TRANSFERS
AND ACCUMULATED DEFICIT
6/30/83

	BOSTON CITY	MATTAPAN	LONG ISLAND	TOTAL
Gross Revenue From Patient Service:				
Routine Services	$ 45,522,991	$ 12,139,440	$ 17,847,360	$ 75,509,791
Special Services	261,810,627	-	-	261,810,627
Clinics	51,030,065	-	-	51,030,065
Gross Revenue From Patient Service	$ 358,363,683	$ 12,139,440	$ 17,847,360	$ 388,350,483
Gross Patient Revenue Deductions:				
Contractual Allowances	$ 134,653,411	$ 2,378,700	$ 5,831,049	$ 142,863,160
Provision for Uncollectible Accounts	148,170,765	4,455,015	1,540,649	154,166,429
Gross Patient Revenue Deductions	$ 282,824,176	$ 6,833,715	$ 7,371,698	$ 297,029,589
Net Revenue From Patient Service	$ 75,539,507	$ 5,305,725	$ 10,475,662	$ 91,320,894
Other Operating Revenue	4,697,357	221,553	47,661	4,966,571
Total Net Revenue	$ 80,236,864	$ 5,527,278	$ 10,523,323	$ 96,287,465
Patient Service Expense:				
Salaries & Wages	$ 46,991,042	$ 5,649,029	$ 7,894,101	$ 60,534,172
Professional Fees	10,142,124	303,470	265,284	10,710,878
Pay-As-You-Go Retirement Costs	6,999,181	808,281	1,074,748	8,882,210
Provision For Accrued Retirement Costs	4,809,636	650,397	864,813	6,324,846
Materials and Supplies	7,883,341	650,506	1,082,952	9,616,799
Provision For Accrued Judgements and Claims	698,507	-	-	698,507
Administrative and General	11,890,675	1,199,460	1,414,532	14,504,667
Interest	2,570,135	33,927	153,620	2,757,682
Depreciation	4,219,801	208,868	394,420	4,823,089
Patient Service Expense	$ 96,204,442	$ 9,503,938	$ 13,144,470	$ 118,852,850
Loss From Patient Service	$ (15,967,578)	$ (3,976,660)	$ (2,621,147)	$ (22,565,385)
Provision For Medicaid Contingency	15,532,000	-	-	15,532,000
Loss After Medicaid Contingency	$ (31,499,578)	$ (3,976,660	$ (2,621,147)	$ (38,097,385)
Community Health and Real Estate	12,218,796	-	-	12,218,796
Loss Before Operating Assistance Subsidy	$ (43,718,374)	$ (3,976,660)	$ (2,621,147)	$ (50,316,181)
Operating Assistance Subsidy	15,831,888	3,384,371	2,284,092	21,500,351
Loss After Subsidy	$ (27,886,486)	$ (592,289)	$ (337,055)	$ (28,815,830)
Beginning Deficit	64,094,818	6,614,023	10,750,405	81,459,246
Ending Deficit	$ 91,981,304	$ 7,206,312	$ 11,087,460	$ 110,275,076

ATTACHMENT FOUR

DESCRIPTION OF THE SELECTED DEPARTMENTS

The Planning Office[1]

This office is basically administrative in character and has existed since September 1983. Before this office was created, planning functions were shared among other units, most notably the Administration Services Department. This department is structured simply, having one Vice President and one Assistant.

Functions are divided into analytic and political categories. An example of the analytical function is performing a cost/benefit analysis of the level of programmatic resources required to meet the changing health needs of BCH's catchment population. This unit serves as an intermediary when two or more units have conflicts. Thus at times political common sense must be called upon. Persons in this office prepare strategic plans for the utilization of BCH resources in light of projected demand.

Fiscal Services[2]

This department is the administrative unit which is principally responsible for detecting deficits and responding to them by three major control mechanisms. First, fiscal control is exercised when the 250 cost centers in BCH submit their individual budgets to Fiscal Services. The individual budget requests of the cost centers are reviewed and modified if needed. The altered request is then returned to the cost center. After all of the cost center budget requests are reviewed and aggregated, they are submited to the Boston City Council. At this stage the BCH budget request for the fiscal year is voted upon. Adjustments are made as deemed proper. The request is

forwarded to the Mayor's Budget Office for approval at this point.

After securing a budget for the fiscal year, Fiscal Services implements a second control to reduce the variance between budgeted allocations and actual costs. The control mechanism centers around the department's monitoring and billing functions. Fiscal Services monitors charges for services and observes the spending patterns of the other seven units in BCH to ensure compliance with budgetary guidelines. If a discrepancy between the actual budget and expenditures is detected, a third control measure is employed. The goal of this mechanism is to secure additional resoruces for BCH by applying for supplemental monies from the City of Boston. Thus further funds awarded to BCH after the initial budget results from this department's detection of and response to fiscal shortage. It is headed by a Chief Financial Officer and is heirarchially structured.

Addiction Services is headed by one Deputy Commissioner and staffed by two Assistants. Because of its substantial network throughout the health community, Addiction Services occassionally refers its patients to the staff of other centers where care remains consistent and of professional quality. The department is divided into three main functional areas. I have described them below.

The Narcotics Program

The narcotics division supports 120 drug-dependent persons in a methodone treatment program. Eighty of the 120 clients receive free service. Costs of the treatment average $350 per day per person. Thus at the rate of 43,800 visits per year, expenses total about $15.3 million. Treatment may last for a maximum of two years and consists

of therapy, establishing goals for decreasing chemical dependence and enhancing interpersonal relationships.

The budget request for fiscal year 1985 for this program is $394,000. With 66 percent of the clients receiving free care and an estimated revenue of $30,720 from the remaining uninsured persons who pay a one-time fee, deficits and the uncertainty it prompts will continue.

The Alcohol Program

Clients are brought to this service by the diagnostic and referral section in the emergency room of BCH. Persons who are deemed to benefit from treatment are placed in a detoxification program lasting twenty-eight days. BCH incurs an operating expense of $25 per person per day which is reimbursed by the Department of Welfare at the rate of $6.10 per person per day. The $225,000 budget request for fiscal year 1985 will not cover all of the expenses. Deficits will again be a financial reality for this program.

The Homeless Program

This program is located at the Long Island Hospital and serves about two hundred guests. The budget request for the 1985 fiscal year is $719,000. It is estimated that $330,000 of this amount will be funded by the City of Boston; $300,000 will be funded by the U.S. Federal Government through Massachusetts. Remaining funds will come from Boston through CDBG. Persons in the Addiction Services department forecast substantial in city support in the forthcoming

years.

Homeless persons are received into this facility between 3:00-6:00 pm each day. Care is given by qualified medical personnel to lessen the multiple medical, psychological and social problems of this population. Some of the health issues with which the program is concerned are: infections, infestations (i.e., body lice), states of nutritional deficiency, cellulitis and leg ulcers, trauma and sexual assault, alcoholism, tuberculosis and alienation.

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