A Film and Design for a Neighborhood Health Center:
Image and Identity of a Community Place
Focused on Health

by

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SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE
DEGREE OF
MASTER OF ARCHITECTURE
AT THE
MASSACHUSETTS INSTITUTE OF TECHNOLOGY
FEBRUARY, 1977

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APR 1 1977
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Image & Identity: A Neighborhood Health Center
TABLE OF CONTENTS

ABSTRACT .................................................................................................................. 4

I. INTRODUCTION .................................................................................................. 7

II. IDEAS AND ISSUES ............................................................................................. 14
   A. Neighborhood Health Centers as Social Movement ........................................ 16
   B. Harvard Street Health Center Project Narrative ........................................... 30
   C. Site ..................................................................................................................... 49

III. DESIGN .............................................................................................................. 63

IV. ILLUSTRATIONS ................................................................................................. 72

V. APPENDIX ........................................................................................................... 98
ABSTRACT

A Film and Design for a Neighborhood Health Center: Image and Identity of a Community Place Focused on Health

Ellen Sue Shoshkes
Submitted to the Department of Architecture on February 10, 1977 in partial fulfillment of the requirements for the degree of Master of Architecture

"The poor are likelier to be sick. The sick are likelier to be poor. Without intervention the poor get sicker and the sick get poorer."
Dr. Jack Geiger, Tufts Medical School

The aim of my thesis is the design of a new facility for the Harvard Street Neighborhood Health Center on Blue Hill Avenue in Dorchester, Massachusetts.

The purpose is to identify, understand, and analyze the general issues associated with neighborhood health centers in the context of an architectural proposal for one particular facility; and a film portrait of some aspects of that place and its users. During design emphasis was on change and innovation in the form of health facilities, and on a new and direct response to community needs.

The health center has been designed to achieve "an intermeshing of internal relationships with surrounding ones in a sort of layered continuum." The proposal calls for intense use of the land involving multiple users in a new synthesis. Parts of the total structure are owned separately, but all are oriented toward neighborhood needs.

The primary goal of this program and facility are to provide comprehensive quality health care organized around treatment of the whole person. To provide a focus, a place that is accountable and supportive to the needs of this community. To provide an environment which is accessible, personal, and friendly. To reflect the character of the neighborhood and be influenced by local customs and culture. The underlying hypothesis of this work is that the organization of a neighborhood around one level of need can form the basis for successful action in other substantive areas.
A primary focus of this project was the formation of an attitude based on my personal experiences during the film making process and information gathering phase; and the conclusions of research on background issues (i.e., current health care delivery systems, history of Dorchester, Neighborhood Health Centers as a social movement, architectural considerations, etc.). This attitude and information was used to establish criteria for the design.
DEDICATION-ACKNOWLEDGEMENTS

I am indebted to the many people who helped me during this project, and to whom credit is due...

To Kyu Sung, Bob, Erich, Alcira, Mike and Chet for their advice and criticism...
To Kevin, Eva and Peter for their beautiful work inking the drawings...
To the Horace Badorties Assoc. (Paul and Dan) for getting the model going and general good cheer...
To Victor Cromie for his cooperation and advice...
To Mary for the elegant photographic work and invaluable assistance with the film...
To Jill who really got it all going and to Tony and Claudia and Rob...
To Alva, Lorraine, Alvin, Arlene, Goia , and everyone at Harvard Street...
To Diane and Tom, Barbara, Debbie and Richie, Geneva...
To Ricky and John and Terry and Diane and Ross...
To Ron and RJ and Bruce and Christian...
To Joan and Greg and David, and Frank and Bonnie and Shelly and Mark...
To Dogwood for everything ...
To my parents...
The list goes on...
INTRODUCTION
I. INTRODUCTION

Attitude

"Is there such a thing as health? To heal is to make whole, as in wholesome; to make one again; to unify or reunify; this is Eros in action. Eros is the instinct that makes for union, or unification, and Thanatos, the death instinct, is the instinct that makes for separation, or division."¹

"Any design to be successful must stimulate recognition of the universality of experience... A successful (design) must satisfy the needs of the people who use it. These needs are for logical, economic, esthetic, and spiritual unity. They require the presentation of truth, the satisfaction of a physical need, the apprehension of a complete esthetic totality, and finally man's identification with nature and his god."²

Essentially my attitude is based on a strong sense of the unity in life, which ties people together to the built environment, and to the natural environment.

At the level of the individual this integration is experienced as a unity of personality, an attitude towards life which enables the person to be creative, to unify his work, thinking and knowledge, and achieve his aims in life.³

Socially integration describes a community which supports each member's efforts to be whole, to all they are cabable of becoming.

Referring to work, the principle of integration recognizes the complexity and interconnectedness of every situation, and the need to transcend strict academic or professional boundaries in order to approach problems holistically and successfully.
During this project whenever I went to Roxbury or Dorchester, I was repeatedly affected by the deterioration and neglect which was everywhere. There was no health here, and I could feel it not in medical terms, but in the physical place and social environment itself. Clearly it is our death instinct at work, which has created this state of aggressive division--these ghettos. The damage goes so deep into mens' souls that the condition perpetuates itself.

The split has rendered the people of Boston so far apart that it will take vast determination to heal the wound. The process of healing depends on the recreation of vital communities which will re-integrate individuals with the environment they have grown so apart from.

Renee Dubos has written, "Health for human beings means more than a state in which the organism has become physically suited to the surrounding physico-chemical conditions through passive mechanisms; it demands that the personality be able to express itself creatively."[4]

The goal of medicine is to help men function successfully (创造性地) in his environment. The concern of architecture is for the quality of human experience, and in the relationships between people and their environment. The role of the architect includes a commitment to understand the ways people perceive and use the environment. Addressing the health needs of inner city populations, the tasks of medicine and architecture are especially overlapping. Beyond simple medical conditions, the fundamental human problem here is survival in an overwhelmingly hostile environment. The primary charge for each profession is to help people acquire the confidence and competence they need to cope with the conflicts of the environment and to enjoy full and creative lives.
The health needs of the lower income groups in particular, and of the nation in general, have become more urgent. It is increasingly obvious that our system of health care delivery must be restructured. Current institutions are inadequate and discriminatory in practice. Those people with the greatest needs receive the least and the worst services. Having no political or economic voice, the condition of the poor and their communities is worsening.

An alternative strategy would organize the medical profession around human needs, not efficiency alone, and not on a fee for service basis. Health, education and welfare would be seen as a whole. The physical and social integration of health and welfare will happen on smaller architectural scales also, and at the community level. In the future community care will become the new center of gravity of health services.

Not only the institutional structures, but the whole atmosphere surrounding health and welfare facilities must change in order to meet today's needs more directly and honestly.

The architect must reaffirm his social role, and, sensitive to these political and social issues, take a stand on the size, scale, personality and organization of buildings designed for these public purposes.

This thesis project actually began 3 years ago. I wanted to learn how an architect could use a physical situation as a medium for helping people gain more control over their own lives, and therefore shape their own communities. The idea which interested me was the connection between self and environment, the essential reality of oneness with the environment. It seemed to me that no social or physical intervention could take place without reaching
people on a fundamentally personal ("inner") level, and likewise, any significant personal change would require some response in the "outer" environment.

The inner/outer dichotomy was intriguing and led to collaboration with a friend, Jill Stein, who is studying medicine. In the field of health our range of concern really spanned from the most personal to the microcosmic, to the family and on to every other dimension of public life. Being guided by our interest in the integration of self and environment, we ended up with a project to make and evaluate a film, for the Harvard Street Health Center describing their Pre-Natal Clinic. This project will be described more fully in the Appendix. For now, let it suffice to say that the womb, being the primal environment, seemed at the time to be the perfect and only place to somehow start. If mothers could just relate to the importance of the environment they are creating for their unborn child, their next logical extension of that awareness might be concern for the physical environment they use and create for themselves.

The Harvard Street Health Center is one of the 5 principle ambulatory care facilities in the city of Boston, and has an extremely dedicated administration and staff. They are unmistakably committed to improving the health conditions in the community but they face incredible obstacles. Overcrowded facilities, lack of funds, and cultural attitudes of that population towards health, combine to make their job a difficult one. Beyond these problems the Health Center's environment is depressing and confusing. Walls are dingy, paint is peeling, offices are drab, and spaces poorly planned. I was confused by the economic and human waste, knowing how hard they try to continually reorganize.
Clearly a new building is not the only answer to the Harvard Street Health Center's problems. Somehow the people have to learn to want and seek out better, comprehensive and preventive health care for their families and themselves. Ultimately, the connection has to be made between the health and welfare of the individual and that of the community as a whole. The people themselves have to want to change, to see the future more positively, to believe they can do something to create the future they want. No architect, doctor or politician can impose that change on them. Yet no one in good conscience can ignore the problem.

One building cannot turn the tide in Roxbury-Dorchester even with the full backing and involvement of the people. The problem is manifested throughout municipal, state and national power and social structures. But despite these overwhelming odds, once the desire for change has been firmly planted in the minds of the people, it will be hard to stop them.

The architect who is concerned about social change must acquire the skills to act on many levels of analysis and intervention from the scale of urban systems to that of personal perspectives and responses to the environment. Within such a context architecture can hope to serve to integrate the individual in a "common form". As Christian Norberg-Schulz has put it, architectural space concretizes a public existential space which includes many private existential spaces. 7

At the other end, a health facility is only a means to the ultimate objective of a total health care system. The design of a hospital of health
center is only meaningful within the context of that system of which it is only a part. 

Within this context the health facility must participate in the remaking of its surroundings. Service and educational institutions are becoming increasingly important elements of inner city renewal schemes.

This project attempts to integrate these many lines of thought. In the next section, a look at the current health care delivery system and within it, at neighborhood health centers as a social movement. Following that is a description of the site and criteria for its development; and a historical look which gives some guidelines for modern directions. The next section deals with the architectural design and discusses some details.

Finally, an Appendix including illustrations, descriptions of some other facilities which were visited, and a discussion of the film and evaluation project.
BACKGROUND
A Social Movement
II. IDEAS AND ISSUES

A. Neighborhood Health Centers as a Social Movement

1. Medical Care in the U.S.

Current patterns of American medical care have their roots in the social and economic forces of 19th century industrial growth. To a large extent these forces have molded the urban environment which we have inherited and now must somehow renew. In America both the accelerated growth of cities and the influx of immigrants during the 19th century produced "enormous neighborhoods of the poor", which were defined by some observers even then as major urban problems.¹

These "slums" were the homes of the immigrant work force until they could afford to leave. They were found in certain geographical areas of the city where housing was deteriorated, rents were low, and where poverty, crime, disease, family instability were concentrated. The barriers of bigotry and racism preventing the escape of poor non-whites from these blighted neighborhoods creating what has been called the "Ghetto".

William Ashworth describes the similar conditions of English slums in the early 19th century:

"Their inhabitants were in no position to obtain the constitution of any additional (governing) body, and for a time no one from outside felt much interest in discovering what their problems were or indeed, that they had any special problems of their own. But the societies of the new congested districts were not discrete entities and more and more people outside them gradually became aware of the pressure of their novel, powerful, and alarming qualities. Even if he were not his brother's keeper, every man of property
was effected by the multiplication of thieves; everyone who valued his life felt it desirable not to have a mass of carriers of virulent disease too close at hand....It was morality (or more exactly criminality) and disease that were causing concern. Overcrowding and congestion, poverty, crime, ill-health and heavy mortality were shown to be conditions found together."


Slums were seen as threats to the larger society. The term connoted the complex interaction of poverty, the housing market, and the city's layout. Observations of the conditions of the poor became embodied in the slum itself, represented by buildings. The physical environment was blamed by reformers for the ills associated with the situation of poverty. Housing became a major focus of concern, and was considered to be the key to the elimination of slums.

There have been close parallels between American housing and health care policies since 1920, since both are integral parts of the same national culture and urban system. Social service and health needs are inextricably linked to housing needs; all are caused by the inadequacy and dysfunction of the urban system. This failure is due to the unequal distribution of wealth and opportunity; and the inadequacy and inaccessibility of services needed to support communities. These social and institutional problems have prevented the evolution of a humane environment.

Health care institutions reflect this social structure and distribution of economic power. Within this system the poor have the greatest needs and receive the least and worst care. They have been stranded by the growth of cities, imprisoned by racism, and deprived by the dual standard of existing systems of health care. The middle class uses physicians in private practice, and the low income class uses public clinics, which have been largely inferior not only by medical criteria, but also by human criteria for self-respect. As in the case of housing, the problem has not been a matter of lack of resources, but
of commitment, motivation, and a willingness to restructure power out of the hands of vested interests.

Other trends which have had damaging effects and have widened the gap between ordinary private medicine and the legacy of "charity" medicine include barriers to the use of private physicians and their inaccessibility due to suburban migration; the inflationary pressures of monopolistic practices by medical professionals; declining quality of municipal hospital systems; the increasing use of hospital emergency rooms and outpatient clinics as a primary source of ambulatory care; the deterioration of human services at emergency room and outpatient clinics, where the poor must suffer indignity, abuse and disregard; and the heavy middle glass bias in federal urban social programs which make no real attempt to serve the poor.6

The private practice relationship on a fee-for-service basis is regarded as a basic condition of American medical practice.7 It is essential to note that medical care in the U.S. is not generally regarded as the right of every citizen. Each person or family must demonstrate in what way they deserve/can pay for medical attention. This condition is easiest to show by establishing a relationship with a private physician. The poor experience great difficulty in establishing themselves in a "deserving" category.8 When they do manage to receive help either from a public clinic or private hospital, "the poor person who becomes sick is subject at every stage and in every way to inferior medical care and to human indignity."9

The health reforms of the 60's, like the post-War housing policies, attempt to deal with fundamental urban problems without the necessary basic commitment to
to the full rights of the individual, which include access to all the conditions of a healthy life. What is needed is a national health policy, with a single standard of medical care, which abolishes the means test as the implement of segregated service. There must also be public recognition of the interconnectedness of everyday life—"as long as there is social and economic inequality there will also be a class of people with some health deficit." 10

John C. Norman states that "basic to meeting (this) challenge of medicine in the ghetto is an extensive expansion of the realm of concern traditionally accepted as medicine's domain. In any deprived area medicine must assume responsibility for lobbying for the necessities of life for its patients, or else medical care cannot relieve the toll extracted by social and emotional pathology." 11

2. Poverty and Powerlessness: Towards a Broader Definition of Health

Despite their greater health needs, poorer people are less likely than richer people to take advantage of inexpensive or free health services. 12 Income does not explain this in full. 13 Motivation is regarded as essential for perception and action. Without concern for a particular aspect of their health, people are unlikely to perceive information bearing on their condition, or use this information if it has been perceived. Motivation and concern also determine ways in which the environment will be perceived. 14 It has been found that poorer people are also distinguished from the more economically advantaged by their "anomie" or feelings of helplessness, a psychological inability to cope with a hostile environment. These feelings characterize their response to governmental and social service institutions. 15
The concept of a "cycle of poverty" partially explains the health behavior of the poor. Understood this way, the situation of poverty is seen to perpetuate itself through psychological factors expressed as personality characteristics. Hagstrom has discussed these issues well:

"The situation of poverty...is the situation of enforced dependency, giving the poor very little scope for action, in the sense of behavior under their own control which is central to their needs and values. This scope for action is supposed to be furnished by society to any person in either of two ways. First, confidence, hope, motivation, and skills for action may be provided through childhood socialization and continue as a relatively permanent aspect of the personality. Second, social positions are provided which make it easy for their occupants to be implemented in their futures. Middle class socialization and middle class social positions customarily both provide bases for effective action; lower class socialization and lower class positions usually both fail to make it possible for the poor to act."


This view stresses powerlessness as the critical factor in the psychology of poverty, mirroring the enforced dependency of the poor on social agencies. Economic powerlessness is only one form of this condition, but perhaps the most urgent in the sense that it "allows virtually no options and no sense of self-esteem and participation in one's own fate. It is an ultimate form of enforced situational dependency." In short, poverty as an environment does not favor the acquisition of those personality characteristics which would be useful in breaking away from poverty. Although this "culture of poverty may originally have been based on a history of economic deprivation... (it exhibits) its own rationale, and structure, and (reflects) a way of life that is transmitted to new generations."

In order to eliminate health deficiencies, the whole situation of poverty must be addressed. The major historical direction of reform in this country has been
to make medical care more accessible. Implicitly at least the poor were to remain unchanged—poor but healthy.20 This position is unacceptable today. Health services must now be seen to include not just medical relief, but "are to be instrumental in changing the poor, removing their handicaps to social, economic, and educational achievements."21 Health and illness are now understood to be social as well as medical phenomena.22 Treatment no longer can be aimed merely at the symptom, but needs to become involved with the whole person and his whole environment.

Renee Dubos has defined states of health and disease as "expressions of the successes or failures experienced by the organism in its efforts to respond adaptively to environmental characteristics."23 One trait which distinguishes man from other creatures is that he is not a mere passive component in an adaptive system, but that his responses "commonly manifest themselves as acts of personal creation."24 Man not only reacts with the environment, but also responds to it. He goes on to state that:

"In fact, man's responses are not even necessarily aimed at coping with the environment. They often correspond rather to an expressive behavior and involve the use of the environment for self-actualization. Health in the case of human beings means more than a state in which the organism has become physically suited to the surrounding physicochemical conditions through passive mechanisms; it demands that the personality be able to express itself creatively."

(From Renee Dubos, Man Adapting, Yale University Press, New Haven, 1965, p. xvii)

All aspects of human life being interrelated, ideally the goal of medicine has always been to help man function successfully in his environment. All biological questions regarding man must be seen in the context of the fact that "he is a social, thinking, sensitive, and ethical animal. These attributes are at least
important for understanding him, and for dealing with his medical problems, as are the chemical structures and properties of his body machine." 25

From both a political and a medical perspective, the elimination of poverty and a radical reorganization of the existing health care system are essential if the health needs of the poor and of society at large are to be adequately served. The system of health care includes the nature and design of facilities, and the environmental conditions in which medicine is practiced. The social role of the architect is involved both in the creation of buildings which are "therapy in themselves" and also in the overall consideration of the relationship between environmental factors and human life.


The current generation of neighborhood health centers (also called Comprehensive Health Services Programs) started as federal demonstration projects sponsored under the general provisions of the Anti-Poverty Program. 1 The Federal Government's enthusiasm about neighborhood health programs was partly based on the belief that they provided a way to attack the causes and conditions of poverty in a politically less volatile manner than through the contemporary Community Action Programs. 2

The early demonstration projects in Boston, New York, Denver, Chicago, and Los Angeles were a considerable influence in the development of more recent centers. Their successes led to a Congressional Amendment of the Economic Opportunity Act in 1966 which extended the experiment by authorizing the OEO to fund neighborhood health centers. 3
The centers initially funded by OEO share the "objective of providing some measure of comprehensive health care services under one roof at a location easily accessible to poor residents and delivered in a manner acceptable and attractive to them." Patients were to be provided ways of participating in the planning and running of the centers. Consumer participation is, in fact, one of the basic elements of the neighborhood health center concept. Other federal programs which provide health care services to low-income users do not involve these requirements and possibilities. Such programs include the Children and Youth Programs and Maternal and Infant Care Programs sponsored by HEW.

These early neighborhood health centers were responsible for improvements which represent substantial achievement, even though incomplete. Improving health care in poor areas is not easy. Neither is progress towards the other important goals of the centers: employing poor residents; training persons for new health career roles, securing consumer involvement in planning and running health services, and developing and refining new modes of organization, finance, and management.

It is useful, therefore, to view neighborhood health centers not only as institutions delivering health services but also as a social movement "defined by several impulses towards change that converged in the 1960's." A summary of the forces and events which lead to the growth and development of the neighborhood health center movement during the 60's includes: "decreasing quality of health care in the poor areas; evolving popular definition of the "health crises"; changes in the institutional structure of the health care system (moving away from professionalism and paternalism); development of the Civil Rights Movement; emergence of the "cycle of
poverty" concept; evolution of the federal Anti-Poverty Program; revival of interest in concepts of neighborhood and community; and enthusiasm for administrative and political decentralization."  

The aim of this movement has been to overcome the health deficiencies of the poor by creating new institutions and by modifying existing facilities. Anselm Strauss has described the conditions which the poor seeking help are forced to face:

"Large buildings and departments, specialization, division of labor, complexity, and bureaucracy lead to an impersonality and an overpowering and often grim atmosphere of hugeness... The poor, with their meager experience in organizational life, their insecurity in the middle class world, and their dependence on personal contacts, are especially vulnerable to this impersonality."


Features of the new institutions include accessibility and immediate medical care for the poor; assistance in recognizing and coping with problems, using the center and following advice; acceptance of lower class life styles and culture; user participation; new arrangements of interprofessional work; and an orientation of family centered, comprehensive care with a general strategy of "out-reach" towards non-attending patients.  

Other features essential to the centers' long range success as an organization and the provision of quality care include private management; size limitations based on optimum numbers of staff, the maintenance of personalized service, and benefits of technical aids (i.e., computers x-rays, lab, pharmacy); accessibility to a variety of patients including working class and in some cases middle class patients, in order to avoid
segregated institutions and perpetuation of the existing status quo.

The centers combine curative with preventive services, focusing on major health needs in dental, chronic medical, psychiatric, and maternal and infant care. Mental health care currently organized on a large scale will become decentralized as the scope of the psychosocial work of the centers is enlarged.

Other features necessary for the success of the centers are full time staffing by providers who are able to work in teams; and actual enrollment of poor residents, through active case finding by public health nurses.

The health center is both decentralization of services and also a centralization of community medical practice, in response to the view that personal care cannot be given in large scale institutions and that, in solo practice, the care given is not efficient enough nor as qualitatively as good as it should be.9

The neighborhood health center today revives the theme of this country's approach, historically, to improving the health care of the poor by making it more accessible. But the limited philosophy of reform which accepted the poverty of the poor as long as they were healthy, has been rejected in favor of broader goals. The current primary objective is that better health care should help the poor to escape from poverty. "This new goal accepts the "cycle of poverty" concept but sees health as a point of intervention that can or should be exploited by itself," in the words of Professor Robert Hollister of M.I.T.10
The origin of the neighborhood health centers is in the idea of health centers which took shape in the U.S. around 1910. Motivated by efficiency, public health officials wanted more coordination among the separate clinics spread over the city, which were intended to help the poor; and they wanted to expand the clinic services to the urban poor.

A variety of services were brought together in one building. These included VD, tuberculosis, immunizations for children, nutrition programs, and, occasionally, treatment services also. These centers were located within districts, with the intention of decentralizing health services. Treatment services for the most part, however, remained scattered in traditional facilities, community medical practitioners and the outpatient departments of urban hospitals.

Such "district health centers for the poor" have mostly declined since the 1940's. Among the several factors involved in this, a primary cause was their limited program of health care despite increasingly complex health needs. Not only was this program unrelated to treatment, it was also frustrated by an inability to recruit medical practitioners in sufficient numbers to manage the centers. Or, as John Stoeckle points out:

"Perhaps the real cause of the decline was not the structure and function of the center, but the insufficiency of public funds to combine curative and preventive care, hire salaried doctors, and pay for the treatment of all illnesses."

The revival of interest in neighborhood health centers has partly been sparked in response to the "crises situation" created by public alarm about the medical profession and the quality of health care in the U.S. The 1960's were a period of much public support of proposals for extensive
changes in health care institutions and financing. Federal support of health care programs has increased almost steadily since the passage of the Social Security Acts in 1935. Following World War II federal support expanded again with the enactment of the Hill-Burton Act to finance hospital construction, establishment of the National Institutes of Health to underwrite research, and a variety of health manpower bills. This period of federal spending was guided by the philosophical premis that the government's responsibility was limited to guaranteeing an adequate resource base of facilities, knowledge, and manpower to support the health care system, and that individuals would pay for themselves within it. Government commitment to health was extended during the Kennedy-Johnson era to endorsing adequate care as a basic human right, and beginning to provide more assistance to groups who previously had limited access to health services. Although there have been setbacks during the Nixon years, it seems inevitable that there will be some form of national health insurance in the future.

Today's neighborhood health centers are no longer federally funded projects, nor do they express the original intersecting trends which were the source of the movement. The movement has developed its own dynamic, and has its roots in "simple good sense". As Robert Hollister has put it- "It makes good sense to offer services to people where they live and in tune with how they live....And it remains desirable that this be done in the context of people's neighborhoods." Neighborhood health centers are not the only answer, but they provide an important vehicle for continuing to respond to the unresolved issues of the 1960's which include:
1. "The development of new relationships between consumers and providers, where the institution becomes truely responsive to and under the control of the people it serves."

2. "The development of new kinds of health roles and careers for the more effective delivery of services; and training new sources of manpower for these roles."

3. "The extent to which an institution created for one function (neighborhood health center) can and should become the physical and organizational focus for other kinds of anti-poverty activities (e.g., legal services, day care)."

4. "The modification and refinement of institutional and organizational arrangements to assure personalized care, family oriented care, care that will conform to high-quality standards, and be attractive to professional personnel of high caliber."

Despite its shortcomings, the neighborhood health center represents a significant response to the health needs of low-income areas. The highest aspirations of the proponents of this movement may not be realized (at least immediately), but even limited outcomes are important. By increasing the accessibility and upgrading the quality of health services available to the poor, a great deal can be achieved in terms of patient satisfaction and relief from health problems, and this in itself will improve the quality of life in the communities for both richer and poorer folk.
DISCLAIMER

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B. Harvard Street Neighborhood Health Center Project Narrative

(Note: The information for this section has been obtained directly from the Harvard Street Neighborhood Health Center Certificate of Need. Particular references are footnoted)

1. Goals and Objectives of the Health Center

The Harvard Street Neighborhood Health Center is a comprehensive primary health care facility located in the North Dorchester section of the city. It has developed from its beginning as a city health unit to its present status as a comprehensive ambulatory health care facility beginning in 1969 with the advent of Title V, Maternal and Infant Care, Child and Youth Projects. Expanding from this Title V Project base, the Health Center, over the last five years has developed into what is now one of the busiest and most comprehensive health centers in the city. However, this programmatic and service growth was not accompanied by a concommitant space growth and the current facility of 13,200 square feet is vastly overcrowded and overutilized. Moreover, the site doesn't permit expansion of the existing facility; there are major barriers to handicapped persons; no parking for clients or staff; security problems because of the location and lighting; and the proximity of the Charles Drew Family Life Center presents another conflict. These problems are the primary reason that the Center is seeking to relocate and construct a new health care facility. (See Exhibit 1: Patient Visit Statistics, 1974-1976). A location south of the current facility was determined to be the most desirable and practical alternative for the new health center building. (See Exhibit: Letter from City of Boston).
Exhibit 1
PATIENT VISIT STATISTICS
1974 – 1976

HARVARD STREET NEIGHBORHOOD HEALTH CENTER
The overall goal and general objective of the Center is to provide quality, comprehensive health care to a predominantly Black, Latin, and Haitian population in the North Dorchester, South Mattapan communities. This neighborhood is an economically, socially, and physically depressed area. Urban blight is rampant, health and social needs are desperate. Boston and Massachusetts must begin to redevelop this area, and a new, active health center should be this beginning.¹

2. Identification of the Need: Demographic, economic, ethnic and educational descriptions of the community; patterns of utilization and availability of medical resources in the area.

The increased utilization of the Health Center has resulted in "adding insult to injury" to an already over-utilized and over-crowded facility. The quality of care delivered to patients is already being affected because of the cramped working treatment conditions. The only practical long term solution to these critical space needs is the occupancy of a much larger facility.

Harvard Street Neighborhood Health Center proposes to serve a portion of the population residing in North Dorchester and South Mattapan with zip codes of 02124 and 02026. Based on the 1970 census approximately 75% of the service area population now being served by the Center originates primarily from the following 17 census tracts: 0819, 0821, 0902, 0913, 0910, 0920, 0921, 0922, 0923, 0924, 1001, 1002, 1003, 1004, 1005, 1010, and 1011. (See Exhibit 2: Map of Registered Patient Origin by Census Tract and Exhibit 3: Map of Density of Registered Patients by Census Tract.) In addition, another 11.7% of Harvard Street's patients originate from 15 other census tracts from within and outside the city. (See Exhibit 4: Registered Patient Origin by Census Tracts as of March 30, 1976.)
Other Census Tracts that comprise 10% or 1,682 Registrants:
0802, 0809, 0815, 0816, 0901, 0903, 0906, 0914, 0918, 1000, 1008, 1101, 1105, 1110 & 1403.

Another 1.7% (286) Registrants comes from various Census Tracts within and out of the city. There is approximately 2,870 Registrants for which no Census Tract was listed.

Total Registrants 19,672 as of March 30, 1976.
Other Census Tracts that comprise 10% or 1,682 Registrants:
0802, 0809, 0815, 0816, 0901, 0903, 0906, 0914, 0918, 1000, 1008, 1101, 1105, 1110 & 1403

Another 1.7% (286) Registrants comes from various Census Tracts within and out of the city. There is approximately 2,870 Registrants for which no Census Tract was listed. Total Registrants 19,072 as of March 30, 1976.
EXHIBIT 4
REGISTERED PATIENT ORIGIN BY CENSUS TRACTS*
AS OF MARCH 30, 1976

<table>
<thead>
<tr>
<th>Census Tract</th>
<th>Number of Registrants</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0819</td>
<td>218</td>
<td>1.3</td>
</tr>
<tr>
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<td>50</td>
<td>0.3</td>
</tr>
<tr>
<td>0902</td>
<td>201</td>
<td>1.2</td>
</tr>
<tr>
<td>0913</td>
<td>16</td>
<td>0.1</td>
</tr>
<tr>
<td>0919</td>
<td>218</td>
<td>1.3</td>
</tr>
<tr>
<td>0920</td>
<td>185</td>
<td>1.1</td>
</tr>
<tr>
<td>0921</td>
<td>185</td>
<td>1.1</td>
</tr>
<tr>
<td>0922</td>
<td>201</td>
<td>1.2</td>
</tr>
<tr>
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<td>269</td>
<td>1.6</td>
</tr>
<tr>
<td>0924</td>
<td>2,457</td>
<td>14.6</td>
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<td>1001</td>
<td>2,928</td>
<td>17.4</td>
</tr>
<tr>
<td>1002</td>
<td>2,154</td>
<td>12.8</td>
</tr>
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<td>1003</td>
<td>201</td>
<td>1.2</td>
</tr>
<tr>
<td>1004</td>
<td>33</td>
<td>0.2</td>
</tr>
<tr>
<td>1005</td>
<td>50</td>
<td>0.3</td>
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<td>1010</td>
<td>2,189</td>
<td>1.3</td>
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<tr>
<td>1011</td>
<td>3,281</td>
<td>19.5</td>
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<td>Other</td>
<td>4,838</td>
<td>11.7</td>
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<tr>
<td>TOTAL</td>
<td>19,674</td>
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Note: Other census tracts that comprise 10% or 1,682 registrants: 0802, 0809, 0815, 0816, 0901, 0903, 0905, 0914, 0918, 1000, 1008, 1101, 1105, 1110, 1403. Various census tracts within and outside of the city comprise 1.7% or 286 registrants. Census tracts not listed account for an additional 2,870 registrants.

* Information compiled and prepared by Mr. John Ziegler, Central Support Staff, Community Health Services, Department of Health and Hospitals.
According to the ABT Association study of Ambulatory Care in the City of Boston, 1974, the residents of the service area are currently relying on the following services for their ambulatory care:

<table>
<thead>
<tr>
<th>Service</th>
<th>MEDICAL</th>
<th>DENTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPD</td>
<td>37%</td>
<td>16%</td>
</tr>
<tr>
<td>Emergency Room</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Private Physician</td>
<td>32</td>
<td>78</td>
</tr>
<tr>
<td>Neighborhood Health Center</td>
<td>13</td>
<td>17</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
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</tr>
</tbody>
</table>

The Harvard Street Neighborhood Health Center accounted for 48% of the 20,658 visits delivered to residents of the service area by neighborhood health centers, as recorded in the ABT study.

A study entitled The Origin of Patients Using Ambulatory Services Within Health Facilities in the Health Service Area IV in the Commonwealth of Massachusetts prepared by the Health Planning Council for Greater Boston, Inc., in January 1976, shows that the top five medical facilities used by residents of this community were Carney Hospital, Boston City Hospital, Children's Hospital Medical Center, Massachusetts General Hospital, and Harvard Street Neighborhood Health Center.

Another statistic identified by this study shows that of the three health centers located within the 17 census tract areas (Avenue, Charles Drew, and Harvard Street) Harvard Street has by far the greatest number of visits for the period studied: 407 as compared to 60 for Avenue and 17 for Charles Drew.²
Due to the small and number of physicians and dentists in the community, it's not surprising that patients have to travel quite a distance to receive adequate health care. There are only nine physicians currently practicing in the community, who are elderly with a median age of 61. Younger physicians are not being attracted to the area. By 1980 there will probably be only seven MD's remaining in practice, assuming that two who will have reached 70+ years and retired.³

There are only 16 practicing dentists in this area, including both solo and group practice dentists. The private practice dentist to population ratio in this community based on this data is 1:6181, compared to a nationwide ration of approximately 1:2000.⁴

Population projections for 1980 for the 17 census tract areas show that their total population will be 145,603 (See Exhibit 5: Collapsed Age Distribution, 1980 Population Projection) an increase of 1.2% over the 1970 census total. Over 40% will be under 15, and 27% will be in the child bearing age. These figures represent a 6% and 4% increase, respectively, over the 1970 census figures. In contrast, the elderly population over 65 shows a decrease from 10.9% in 1970 to 9.9% in 1980.⁵

Harvard Street staff used these age distribution figures to calculate the number of physicians needed. On this basis the community will need, in 1980, 28 pediatricians, 14 obstetricians/gynecologists, and 50 internists and general practitioners (See Exhibit 6: Physicians Presently Available and Projected Need, 1980 in 17 Census Tract Areas). A total of 92 physicians in these primary care specialties will be needed in 1980, but there will only be available seven private practice physicians in
### COLLAPSED AGE DISTRIBUTION

**1980 POPULATION PROJECTIONS (17 CENSUS TRACTS)**

*BY 1960-1970 CENSUS FIGURES*

<table>
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<tr>
<th></th>
<th>1960</th>
<th>1970</th>
<th>1980</th>
</tr>
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<tr>
<td><strong>Male</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>0 - 14</td>
<td>12,566</td>
<td>21,133</td>
<td>29,700</td>
</tr>
<tr>
<td>15 - 44</td>
<td>16,745</td>
<td>22,819</td>
<td>28,793</td>
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<tr>
<td>45 +</td>
<td>15,830</td>
<td>12,181</td>
<td>8,532</td>
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<tr>
<td>Total</td>
<td>45,141</td>
<td>56,133</td>
<td>67,125</td>
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<tr>
<td><strong>Female</strong></td>
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<tr>
<td>0 - 14</td>
<td>12,517</td>
<td>20,408</td>
<td>28,299</td>
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<tr>
<td>15 - 44</td>
<td>18,527</td>
<td>27,901</td>
<td>37,275</td>
</tr>
<tr>
<td>45 +</td>
<td>19,816</td>
<td>16,560</td>
<td>12,904</td>
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<tr>
<td>Total</td>
<td>50,860</td>
<td>64,869</td>
<td>78,478</td>
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<tr>
<td><strong>Male - Female Total</strong></td>
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<td></td>
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<tr>
<td>0 - 14</td>
<td>25,083</td>
<td>41,541</td>
<td>57,999</td>
</tr>
<tr>
<td>15 - 44</td>
<td>35,272</td>
<td>50,720</td>
<td>66,168</td>
</tr>
<tr>
<td>45 +</td>
<td>35,646</td>
<td>28,741</td>
<td>21,436</td>
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<tr>
<td>Total</td>
<td>96,001</td>
<td>121,001</td>
<td>145,603</td>
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</table>
Physicians Presently Available
And Projected Need 1980
In 17 Census Tract Areas

*Represents full time equivalent physicians located in the three neighborhood health centers in the 17 census tract area. Avenue, Drew, Harvard Street Health Centers.

**Of the total Physicians needed in 1980 HSNHC will provide 11% of the Pediatricians, 14% of the Obstetricians/Gynecologists, 6% of the General Practitioners/Internists.

Information from 1970 U.S. Census.
the area, only 1/13th of the number needed. Likewise, for 1980 the private practice dentist will meet only 1/3 of the community's dental service need.\textsuperscript{6}

A very recent study on the patient origin of Harvard Street patients is available which analyses the appointments received for June-July 1976. In contrast to the 32 census tracts identified in March 1976, patients originated from 97 census tracts during this two month period; 73\% from the core 17 census tracts and 27\% from the remaining 80 census tracts and unidentified census tracts within or outside the city.\textsuperscript{7}

Obstetrics/gynecology had the largest number of visits with 45\% of the total. Pediatrics followed with 36\% of the total. Internal (adult) medicine accounted for 18\% of the total. If this two month rate is extrapolated over a 12 month period, over 31,000 appointments will be requested by community residents in the next year for these three services alone. The present facility of the Health Center is capable of handling only about 1/3 this many patient visits.\textsuperscript{8}

Further demographic information about the population in these 17 census tract areas can be found in Exhibit 7: Income Characteristics; Exhibit 8: Education: Years of School Completed by People Over 25; and Exhibit 9: Nativity, Parentage, and Country of Origin. These three characteristics are important because they point to some of the additional problems the Health Center faces in the delivery of services to this community. Only 3 census tracts (0922, 1044, and 1010) have median incomes over $10,000. Most registered patients come from census tracts which have median incomes of between $6,000 and $7,000 only. In these census tracts
HARVARD STREET NEIGHBORHOOD HEALTH CENTER

EXHIBIT 7

INCOME CHARACTERISTICS
1970 CENSUS FIGURES

<table>
<thead>
<tr>
<th>Census Tract</th>
<th>Less 1,000</th>
<th>1,000-1,999</th>
<th>2,000-2,999</th>
<th>3,000-3,999</th>
<th>4,000-4,999</th>
<th>5,000-5,999</th>
<th>6,000-6,999</th>
<th>7,000-7,999</th>
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<td>119</td>
<td>150</td>
<td>64</td>
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<td>61</td>
<td>78</td>
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<td>105</td>
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</tr>
<tr>
<td>1003</td>
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<td>53</td>
<td>62</td>
<td>58</td>
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<td>134</td>
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</tr>
</tbody>
</table>

TOTAL 907 729 1,286 1,607 1,570 1,740 1,655 1,831
## HARVARD STREET NEIGHBORHOOD HEALTH CENTER
### EXHIBIT (CONTINUED)

**INCOME CHARACTERISTICS**

1970 CENSUS FIGURES

<table>
<thead>
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<th>Census Tract</th>
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<th>9,000</th>
<th>10,000</th>
<th>12,000</th>
<th>15,000</th>
<th>25,000</th>
<th>50,000 or more</th>
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<th>Mean Income</th>
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**TOTAL** 1,881 1,779 2,962 2,976 2,838 373 39  $7,812 $8,942
HARVARD STREET NEIGHBORHOOD HEALTH CENTER

EDUCATION: YEARS OF SCHOOL COMPLETED BY PEOPLE OVER 25
1970 CENSUS FIGURES

<table>
<thead>
<tr>
<th>Census Tract</th>
<th>No School Completed</th>
<th>Elementary School</th>
<th>High School</th>
<th>College</th>
<th>Median School Years Completed</th>
<th>High School Graduates</th>
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<td></td>
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<td>1,450</td>
<td>1,339</td>
<td>4,751</td>
<td>5,804</td>
<td>11,632</td>
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**HARVARD STREET NEIGHBORHOOD HEALTH CENTER**

**EXHIBIT**

**NATIVITY, PARENTAGE, AND COUNTRY OF ORIGIN**

**1970 CENSUS FIGURES**

<table>
<thead>
<tr>
<th>Census Tract</th>
<th>All Persons</th>
<th>Native of Parentage</th>
<th>Foreign Born</th>
<th>Spanish Speaking</th>
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<td>0819</td>
<td>4,191</td>
<td>3,668</td>
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<tr>
<td>0821</td>
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<td>2,084</td>
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<td>9,428</td>
<td>5,700</td>
<td>1,883</td>
<td>425</td>
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</table>

*Although Hispanic persons make up a significant portion of the patient population, Harvard Street Neighborhood Health Center personnel estimate that since completion of this Census, the French speaking population, primarily from Haiti, exceeds the Hispanic population by about 2:1.*
there are significant number of people who have never attended school and an even greater number who have had less than four years of high school. Although the census reveals that a significant proportion of the patient population in the 17 census tract areas are of Hispanic ancestry, Harvard Street personnel estimate that since this census was completed, the French speaking population, primarily Haitian, exceeds the Hispanic population by about 2:1. The Health Center has attempted to work with the problems created by patients who speak English only as a second language by employing a full time interpreter and a bi- and tri-lingual staff. Financial and educational problems are being addressed also. The social and language requirements increase the space needs of the Health Center because patient needs are greater, making visits last longer and thus reducing the effective capacity of the facility.

In order to more adequately meet the health care needs of these patients through services and educational programs, the provider staff will have to become familiar with many religious and cultural traditions. The new facility should somehow express the values of these cultures in order to enable patients to feel welcome and comfortable.

The relocation of the Harvard Street Neighborhood Health Center to a site somewhat south of its present location will make the Health Center much more accessible to the center of the area from which most its patients originate. The increase of the size of the facility and scope of services will mean both shorter waiting lists for appointments and an increase in the quality of care being delivered; further upgrading the level of health resources available to the community. By putting a maxi-
mum limit of 100,000 patient visits/year, the Health Center will preserve the personal quality and scale which distinguish neighborhood based health facilities from huge, impersonal public institutions. The much improved efficiency of additional services and staff which will be obtainable in a new facility will not substantially increase the current operational budget of the Center.  

3. Proposed Program

The proposed program for the Harvard Street Neighborhood Health Center was based on the background information summarized above. It has been designed to meet the expected increase in registered patients and the particular health care needs of the communities served by this Center. A task force for area providers and consumers have developed the program based additionally on the efficient use of provider teams, community characteristics, and the acceptibility of the program to the community. The conceptual framework utilizes the Nurse Practitioner as well as physicians as primary providers with the physicians assuming responsibility for acute and complicated cases. Within the framework, the program as planned will provide complete individualized family care in terms of acute and chronic illnesses in the areas of Adult Medicine, Pediatrics, Obstetrics/Gynecology, Family Planning, Social Service, Nutrition, Mental Health, as well as specifics in the sub-specialty areas. Ancillary services will include laboratory, pharmacy, and x-ray. (See Exhibit 10: Volume of Services; Exhibit 11: Square Footage Chart, Program Narrative).
### Exhibit 10
HARVARD STREET NEIGHBORHOOD HEALTH CENTER

**VOLUME OF SERVICES**

<table>
<thead>
<tr>
<th>Type of Clinic or Organized Program/Service (list)</th>
<th>Number of Cases</th>
<th>Number of Visits</th>
<th>Hours Available Per Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Adult Medicine</td>
<td>5,527</td>
<td></td>
<td>47.5</td>
</tr>
<tr>
<td>2. Obstetrics/Gynecology, Family Planning</td>
<td>10,352</td>
<td></td>
<td>47.5</td>
</tr>
<tr>
<td>3. Pediatrics</td>
<td>10,219</td>
<td></td>
<td>47.5</td>
</tr>
<tr>
<td>4. Dental</td>
<td>7,251</td>
<td></td>
<td>55.5</td>
</tr>
<tr>
<td>5. Nutrition</td>
<td>820</td>
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<td>47.5</td>
</tr>
<tr>
<td>6. Social Service</td>
<td>3,078</td>
<td></td>
<td>47.5</td>
</tr>
<tr>
<td>7. Specialty Clinics</td>
<td>507</td>
<td></td>
<td>47.5</td>
</tr>
<tr>
<td>8.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td><strong>19,674</strong>*</td>
<td><strong>38,154</strong></td>
<td></td>
</tr>
</tbody>
</table>

* Health Center has 19,674 registrants but they are not separated according to department.*
SITE
C. Site

1. Site Selection and Development Criteria

Sites for health care facilities must be considered both "inwardly as direct instruments of care, treatment and professional education, and outwardly for their impact, benign or otherwise, on their urban surroundings." The criteria for selecting and developing a site for neighborhood health centers are especially important factors affecting their long range success in achieving their goals. The goals of the Neighborhood Health Center include providing help to people in the context of their environment, furnished in a manner responsive to their needs and accepting of their lifestyles; and also of becoming a focus for community organization and renewal.

Sites for health care facilities can be analyzed "outwardly" at 3 levels of urban development: the community/region; the neighborhood; and the site.

The community/region can be thought of as the area being served, where most registered patients reside.

The neighborhood is the immediate vicinity in which the site is located. It is defined by a characteristic land use and by a network of physical edges, i.e., streets, railroad tracks, buildings, water.

The site is the land being used for the proposed facility and all its land use determinants both natural and man-made.

The following is a partial listing of some criteria for site selection and development for the new facility of the Harvard Street Neighborhood Health Center. Most of these could be applied to other urban sites for social services and health care facilities.
"Outwardly"

At the level of the community/region

1. Siting should support a long range plan for development of the North Dorchester-South Mattapan community based on a thorough analysis of available resources, community needs and goals, regional growth pressures, and other issues.

2. Site should be readily accessible to all residents of the community.

3. Site should be on the main north-south transportation route (Blue Hill Avenue) close to the center of the area where the majority of registered patients live; and there should be adequate links to crosstown (east-west) transportation routes, and public transportation to all community neighborhoods and supporting services.

At the neighborhood level

4. Site should be capable of providing a focal point for local neighborhood activity and organization, and serve as an anchor for neighborhood development.

5. Proximity to existing or planned activity "magnets" (i.e., shopping centers, entertainment, athletics).

6. Visibility from main road.

7. Development of the site should enhance and complement the positive qualities of existing land use patterns and vernacular architecture. New ideas should be introduced in a way acceptable to community values and lifestyles.

8. Land use plan should be based on a long range plan for community development. Emphasis on the public domain and organizations which enhance community activity.

9. Landscaping to be used for the revitalization of the streetscape and to provide usable, safe neighborhood open space.

At the level of the site

10. Orientation and landscaping for maximum benefits of environmental control—sun, shade, wind, noise; and impact on neighborhood height, scale, access, security, parking.

11. Adequate parking facilities for 60 cars initially will be provided on the north side of the parcel. Access will be via a side street, and parking will be below grade, screened by planting and well lit.

12. There will be 2 main entry zones; a) on Blue Hill Ave, adjacent to public transportation; b) on the north side (Balsam Street) adjacent to parking. These 2 entries will be linked at the main registration area.
13. The Blue Hill Avenue frontage will be primarily a zone for commercial and public activity-shops, restaurant, public library and exhibit area. These facilities could be managed separately, but coordinated with health center goals. They could be locked when not in use.

14. Balsam Street (northern edge) and Ashton Street (eastern edge) will be for clinical zones and service entry.

15. Ansel Street (southern edge) will become a pedestrian street, and community activities and public garden will open onto it.

16. Environmental assessment

a) On the proposed site the present traffic volume on Blue Hill Ave. is over 30,000 vehicles per day and the volume on Morton Street is over 25,000 vehicles per day. At capacity the Center will have a maximum of 400 visits per day, about 200 of these involving cars. Regardless of the location of the Center, Blue Hill Ave. will be the major line of access. The current center has 200 visits per day. Thus, the impact of the new building at capacity will be to increase traffic by another 36%.

b) The parking lot will be paved and the project will not generate any dust or significant noise.

c) There is currently no pervious surface on the site. It is intended to create planting areas which would add to the limited pervious surface in the immediate area.

d) The current requirement for storm drainage from this site will not be changed by the new facility.

e) The project will create a demand for sewage treatment less than 19% of the remaining capability in the system.

f) The project will be located on 1.2 acres of land. The new building will leave .7 acre of green space.

g) There is no significant vegetation or animal habitation on or adjacent to the site. The project would have a positive effect in that it will introduce a small amount of vegetation.

h) The area is generally one of urban blight and has no scenic value.

i) There are no historical or archeological structures on sites in the area.

j) The existing water facilities, as well as sewage and storm drainage, solid waste disposal, and existing power and gas facilities adjacent to the site are adequate to receive the new project.
The only official plan for the area is that formulated by the Boston Redevelopment Authority. This project is entirely consistent with that plan.

2. Neighborhood Description and Analysis
The site is located at the intersection of 2 main arteries in the Dorchester-Mattapan area; Blue Hill Avenue and Morton Street. This neighborhood is suffering from both social disorganization and physical deterioration. Most houses are of sub-standard condition and many are abandoned. Vacant lots puncture the streets. Adjacent to the site piles of rubble and garbage lie in the midst of blocks nearly totally cleared of houses. These rubble piles have been there for years and no removal seems imminent. The commercial strip along Blue Hill Avenue consists primarily of one story structures subdivided into long, narrow shops. The majority of these are vacant and boarded up. The remaining stores are barricaded behind heavy iron grills and except for an occasional customer, it would be hard to distinguish the living from the dead enterprises. Barber shops, lunch counters, shoe repair, records, notions and markets are common. Frequently stores and even houses have been converted to churches with names like "Faith Revival Church", and "The Living Spirit Temple". The facades of what remains on the street are either bricked up, boarded up, or behind bars.

Crime is a major problem. Unemployment, lack of adequate education and training and discrimination compound the problems of human isolation, economic waste and tension which accompany the neglect and inadequacy of municipal services.

I became familiar with the problems and characteristics of the site by 1) mapping information at 1000th, 100th, 40th, and 16th scale; 2) walking around, making notes on the maps, and photographing and talking with people; 3) researching the history of the area and 3) making a film about and for some of the
clients of the Health Center (See Appendix). (See Context Analysis Map, 40th scale map).

3. History

While there is nothing of significant historical nature on the site itself, the information and insights gathered in this study were invaluable in the formulation of attitudes and design criteria expressed in the actual design.

In the words of Sam B. Warner, "Roxbury and North Dorchester stand today as visible remains of a particular system of city building. It was a system whereby thousands of small land owners put up houses for themselves in the style and dimensions of the moment. The, when new land and new styles of living were open to them, this group moved on, discarding what they had built to those who could not afford new housing. The destruction of these neighborhoods was an integral part of their creation...the habit of building for discarding was an old tradition in American society and its works could be seen everywhere. The farmer burned the forest, planted his wheat until the soil turned to sand, and then moved on." 4

Since the turn of the century, this part of Boston has absorbed successive waves of Irish and Jewish immigrants and in the last 40 years increasing number of non-whites. The section closest to downtown and the South End, contains the oldest, most deteriorated and cheapest housing and has traditionally been the entry point for low income families. Further to the south west part of the district can be found more typically middle class housing. 5

Almost all of the houses of Roxbury-North Dorchester were built during the 50 year period before World War I. They have been discarded both by their
builders and those who inherited them. It is important to remember when speaking of reviving these neighborhoods that to remake what was before "is to speak of reviving a self-destructive habit of city building."6

Between 1650 and 1800 Roxbury and North Dorchester were outlying villages to Boston; farm towns which provided the city with goods. They were based on traditional New England village clusters. These patterns persisted until the end of the colonial period.

During the middle of the 18th century wealthy men bought land in this area and built country estates and this development was very significant for the future. Roxbury-North Dorchester became the first American suburbs.

Between 1800 and 1850 town development took 2 directions: industrialization and suburbanization. The building of summer homes were the first demonstration of the suburban style. When the railroad came in 1835 and 1845, the upper middle class imitate this trend. These first railroad commuters established the model for nearly all city dwellers to imitate. By 1850, the suburban pattern was in full swing as a result of the installation of street railways.7

Lower Roxbury (between Dudley Street and the Boston Line) became a new England mill town. Industry was based on proximity to the port of Boston, water from Jamaica Pond, and powder from Stony Brook. The mill workers lived in wooden tenements surrounding the industry. The mill owners also lived in the town, and the class differences at work continued into politics and other community affairs. The government of both Roxbury and Dorchester was controlled by local businessmen and suburban land owners.
According to Warner, the destruction of the old town organization (in Dorchester the town meeting form of government persisted until annexation by Boston in 1865) began with suburbanization. Since the idea of the suburb was contradictory to the township tradition, it was difficult to adapt that tradition to the conditions developing in Boston and Roxbury at that time.\footnote{8}

The suburban idea as it was shaped in the 1830's and 40's included a set of attitudes about family life both in itself and in the context of the community and physical environment. These attitudes can be seen as part of the 19th century romantic reaction to industrialization, and the subsequent idealization of motherhood and "the hearth".

The women and the home became the center of a morality, "placed in opposition to the world of work".\footnote{9} Inherent in this view was the destruction of the city, since the suburb avoided the harder realities of solving the urban and industrialization problems. As Warren puts it, "Unable to make the city a proper environment for the mother and family, the romantics abandoned it."\footnote{10} Suburban ideal held that natural surroundings were necessary for "sane and moral" lives.

Neither the city of Boston in 1850 nor the township tradition could satisfy these suburban criteria. The townships integrated town and farm-the community was not specialized for child rearing, but a "microcosm" where all elements of life were interconnected.

The point of this historical insight is that in order to change the old suburbs like Roxbury-Dorchester, we must understand what motivated their creation and their destruction. This motive was not merely speculative selfishness, but
to create in the domestic environment what was missing in the world of work.

The suburban idea of 200 years ago is still active today. As long as there is a dual standard for the domestic and the work environments, any significant urban renewal is impossible.

The deteriorating buildings of Roxbury and Dorchester essentially record the history of these towns. This record is of compromises made of each generation between their means and their suburban ideals. 11

Between 1885 and 1925, improvements in cross town and radial street railway systems brought all of Roxbury-Dorchester within commuting distance to Boston for all income groups. This meant the emerging immigrant groups were freed from the tenements, and could relocate in the outer suburbs.

Town building also reflected the successive improvements in street railway transportation.

The lower income group which followed the middle class art of the city had a less landed lifestyle. The suburban building of the late 19th and 20th century in Roxbury-Dorchester is below modern standards. Building was controlled by the conditions of the streetcars, and land allocations were only slightly larger than in the previous era.13 These standards were a compromise even then-better than a tenement but less than desirable for the middle class.

"The process of building in Roxbury and Dorchester was self-destructive" even in terms of the land plans and structures themselves."14 These suburbs would have been abandoned with or without shifts in transportation and income distribution. These buildings of the lower income groups crowded the land
to the point that the area was destroyed for those with more means. By 1914 there was no more room left upon which to build.\textsuperscript{15}

The homes that were left behind by the middle class did not satisfy the new tenants' needs. The buildings had to be subdivided. The resulting increased densities further destroyed the basic land plans and facilities of the suburbs. By 1950, most of the lower Roxbury and North Dorchester were physically deteriorated.

It is not that the low income groups destroyed a once pleasant physical environment, creating present conditions, rather, no group was successful "in building a satisfying environment either for itself or its successors."\textsuperscript{16} The waste of this process of building discardable cities is felt in both economic and human terms.

To stop this cycle the escapist compromise of the suburban ideal must be reconsidered. The urban revival of Roxbury and Dorchester must be founded on a new kind of community life based on equality and freedom. This community life must also incorporate a new rapport between the family, the community and work.

Referring to Warner again, I am suggesting that the township idea of the 17th and 18th centuries is perhaps the best model for this revival process. According to that idea, all aspects of men's lives were accountable to the community. There should be a unity between the residential and work environments, and community concern for the quality of the life we share.
The conditions of Roxbury and Dorchester present Boston with the opportunity (and maybe the last chance) to strengthen this area. Instead of the current policy of triage (neglect leading to further decay and death) the city could help Roxbury-Dorchester to become a stable, creative community which ensures the independence and well being of each individual. Within a broader vision of the renewal of the community and the region, plans for a new health center take on a richer meaning and significance. The goals of the Harvard Street Health Center go beyond mere medical treatment, to concern about the health of the whole community.
4. Program Summary and Space Model

I based the program for this thesis project on the recommendations of the Program Development Committee of the Harvard Street Neighborhood Health Center Expansion Program Task Force. (See Figure: Square Footage Chart)

On the basis of my own research and for the sake of exploring the potential of the design problem, certain additions (albeit unconventional, even perhaps, impractical ones) were made.

A. Square Footage Chart

B. Program Additions.

<table>
<thead>
<tr>
<th>Name of Functional Area</th>
<th>Approximate Square Feet</th>
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</thead>
<tbody>
<tr>
<td>1. Education</td>
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<td>2. Community Activities</td>
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</tr>
<tr>
<td>a. internal access</td>
<td>4500</td>
</tr>
<tr>
<td>b. external access</td>
<td>2700</td>
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<tr>
<td>3. Commercial (total)</td>
<td>5700</td>
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<tr>
<td>4. Public Space</td>
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</tr>
<tr>
<td>a. internal (promenade, balconies)</td>
<td>500</td>
</tr>
<tr>
<td>b. external (front plaza, garden)</td>
<td>5000</td>
</tr>
<tr>
<td>5. Parking (for 60 cars)</td>
<td>15,000</td>
</tr>
</tbody>
</table>
C. Totals

<table>
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<th>Category</th>
<th>Value</th>
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</thead>
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<td>Health Center (Clinic Adminis. Support)</td>
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<tr>
<td>Community, Education</td>
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<tr>
<td>Commercial</td>
<td>5700</td>
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<tr>
<td>Int. Public Space</td>
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<tr>
<td>Parking, external open space</td>
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</tbody>
</table>

Total: 66,500
**Exhibit II**

**SQUARE FOOTAGE CHART**

<table>
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<tr>
<th>NAME OF FUNCTIONAL AREA *</th>
<th>PRESENT SQUARE FEET**</th>
<th>SQUARE FEET TO BE: **</th>
<th>TOTAL SQUARE FEET **</th>
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</thead>
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<tr>
<td></td>
<td></td>
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<td>RENOVATED</td>
</tr>
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<td>1. ADULT MEDICINE</td>
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<td>3750</td>
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<tr>
<td>2. PEDIATRICS</td>
<td>1450</td>
<td>3975</td>
<td>---</td>
</tr>
<tr>
<td>3. OB/GYN/FAM PLAN/AB</td>
<td>1950</td>
<td>5175</td>
<td>---</td>
</tr>
<tr>
<td>4. DENTAL</td>
<td>575</td>
<td>1800</td>
<td>---</td>
</tr>
<tr>
<td>5. ADOLESCENT</td>
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<td>---</td>
</tr>
<tr>
<td>6. SOCIAL SERV/MENTAL H</td>
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<td>---</td>
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<tr>
<td>7. SPECIALTY CLINICS</td>
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</tr>
<tr>
<td>8. ANCILLARY SERVICES</td>
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</tr>
<tr>
<td>9. RECORDS/REGISTRATION</td>
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<tr>
<td>10. P. H. NURSES</td>
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<td>500</td>
<td>---</td>
</tr>
<tr>
<td>11. TRIAGE</td>
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</tr>
<tr>
<td>12. ADMIN &amp; SUPPORT</td>
<td>2400</td>
<td>6350</td>
<td>---</td>
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</table>
DESIGN
III. DESIGN

The basic function of the Health Center is to provide a suitable environment for the provision of quality, comprehensive health care. This implies at least three tasks: a) satisfying community criteria for accessibility, comfort, and accommodation of lifestyles; b) matching professional needs and technical conditions; and c) providing for non-medical activities which are important to the quality of life in the community, and by extension its health.

The building is expressing more than the single function of providing medical care. It represents the community itself-local cultures and the social structure. It also stands for the people's determination to improve both their environment and their lives.

A goal of the building, design, therefore, is that the neighborhood will identify with the place, making it a center of local activity. Hopefully, the building will express values and goals important to the community. Recognizing this, people might slowly begin to see the environment at large as an integral part of themselves. This insight is essential for any substantial change which must originate from within the community itself. Moreover, if the designed environment holds meaning for people, they will comprehend and use it more effectively.

During design emphasis was on creating an environmental image of openness, clarity, richness, and with a strong link to nature. Visual images are among the primary means by which we comprehend the external world. These images contribute to and enhance our moods, preferences, direction, orient-
tation, and esthetic enjoyment. What we see becomes our shared reference for experiencing the environment - "the search for meaning." ²

Ideally the health center environment will be responsive to human needs, encouraging and supporting people to meet the challenges and conflicts of daily life.

Referring again to Renee Dubos: "...As more persons gund the opportunity to express their biological endowment under diversified conditions, society becomes richer, civilization continues to unfold. In contrast, if the surroundings and ways of life are highly stereotyped, the only components of man's nature that flourish are those adapted to the narrow range of available conditions... Most young people raised in featureless environments will be crippled intellectually and emotionally." ³

The physical and cultural environments of Roxbury-Dorchester is as impoverished as the social conditions. As a step away from this state of stagnation, the new health center, a major building in this area, is intended to provide a rich and stimulating atmosphere with multiple possibilities for and way of combining uses.

SPACE

The building is organized around three major use zones—medical clinics, community activities, and commercial, tied together by a sunlit, park like public passageway (or internal street) which leads into a public garden.
A. Medical Structure

How medicine is practiced is one of the key questions to be answered by the design of the building. Organization of medical personnel has a great effect on the quality and character of users' experiences and satisfaction. Rather than base this organization on efficiency and the conditions of clinical techniques alone, the focus should be on treatment of the whole person.

An alternate approach is to structure a "team" of doctors of different disciplines around one physical clinic area to which all patients from one established group are directed. The patient always returns to the same team as he would if seeing a family doctor. For this reason the "team" concept is meant to provide the most personal type of care. Taking this approach is to group the different specialties that would be treating a family, so that all doctors can more easily learn about the health of the entire family. This system may improve the quality of care being given to each individual and also expand preventive care. This idea is in operation already at the Roxbury Comprehensive Community Medical Center.

Traditionally, doctors of one specialty are grouped together. Separate clinics are made for pediatrics, adult medicine, etc. This organization seems to be more satisfactory from the professional's point of view. The advantages include the gains from exchanging knowledge with similar specialists, and the more efficient use of specialty nurses and supplies. Also, separate clinics can be expanded to meet changing community needs independent of services. Waiting areas clustered by specialty might be more comfortable (from the patient's point of view).

The Harvard Street Health Center has chosen a combination of elements of both organizational forms. Clinics are essentially based on specialties, but each includes accommodations for supporting services, and for team consultation and treatment. As a policy all providers work as a team, cooperating and sharing between the teams and clinics is encouraged.

B. Laboratory and Diagnostic Center

In this area storage of patient's routine histories, and an extended laboratory and diagnostic facility are centralized. As better and more comprehensive health care becomes more available there will be more need to check up on apparently well populations. A more efficient record system saves the time of specialists; with the help of computers, they receive a thorough background and a clear printout to study.
The Harvard Street Neighborhood Health Center has already developed a Central Information System, which includes a computerized appointment system. A pilot project has begun which uses a computer-based medical records system. In addition to speeding up communications of vital medical information, this system can potentially keep medical records up to date and readily accessible in both Boston City Hospital and Harvard Street.

The proposed design includes an ample, centralized area for these services—lab, x-ray unit, computers, and record room. It is accessible to the public directly upon entry from either the main lobby or from parking, located at the parking level (-5'). Natural light is brought down into the work areas by means of skylights and overhead glazing, which also provides both privacy and security. (See Diagram C, portion of north wall).

Triage is also adjacent to this area, in order to increase the effectiveness and efficiency of patient screening, intake and diagnosis. All patients coming to the health center without an appointment will be seen by a triage person (nurse practitioner) who will determine the appropriate disposition. Patients with urgent problems can be sorted out from those with non-urgent problems. Those who need immediate attention can be worked into the day's schedule.

C. Ancillary Services

A wide range of secondary services are included in order to provide more comprehensive and better quality health care. Among these are social workers, welfare consultants, nutritionists, public health programs, etc. Wherever appropriate, the offices and facilities for these programs are integral parts of the medical clinics, since their identity should be of a medical-related nature. They should be both available to doctors for referrals, and also accessible to the public independent from the doctors. The design recognizes this dual relationship.

D. Combined Consulting/Examination Room

Another feature of the design which bears on medical practice is the combined consulting/examination room. The size (approximately 180 sq. ft.) and layout allows a screened-off area within which there is an examination table, approachable from both sides. The rest of the room is left free for the doctor to work in.

Advantages to the patient include:

1. Avoiding delays, inconveniences of moving from room to room for interview, examination, and treatment.
combined consulting/examination room

1. bracket for sphygmomanometer
2. ceiling mounted curtain track
3. coat hooks
4. high level storage
5. worktop
6. low level storage
7. sink
8. writing shelf
9. mirror
10. paper towel dispenser
11. chair
12. disposal
13. equipment cart
14. examination couch
15. mobile examination lamp
16. swivel chair
17. desk
18. couch steps
19. waste paper bin
20. scales
21. couch cover dispenser

Condition when adjacent to standard examination room

2. Receiving the individual attention of the doctor.

3. More privacy than in conventional examination rooms with a door leading off to a corridor.

4. Enough room for a companion, nurse or trainee to be present.

Changes in clinical practice will increasingly require the participation of a nurse, colleague or specialist. As screenings of geriatric and pediatric patients occur more regularly the likelihood that companions will be present during examination will increase. There is also an increased demand for more ample dressing accommodations. Whenever possible, clinical spaces must be capable of use in a variety of situations. The design must reflect this flexibility also.

E. The Public Realm

In many respects the most important component of the plan is the public realm, i.e., entries, circulation, informal gathering places and waiting areas. These places offer the best opportunity for the design to express the qualities of friendliness, openness, personal respect, and liveliness. The main public entry on Blue Hill Ave. faces the corner bus stop. The restaurant opens onto this corner plaza with an outdoor eating area. This cafe is sheltered by arches supporting the small rounded tower, within which is located the administrative offices. A pharmacy is potentially accessible from both inside the building and externally. A branch library and small exhibition space opens onto the lobby at the entry. Over the entry itself is a greenhouse-gallery, where clients and users can comfortably view the activity below. Balconies from other activities also offer hints of things to come inside.

From the entry a 12' wide sunlit promenade on the park like internal street brings people to the various clinics, activity rooms, and casual gathering places. At the far end of the building this pathway opens onto a partially enclosed garden. The promenade itself could be likened to a stream, which flows past and joins together a variety of places, like rocks and coves lodged in its course and lining its banks. At the garden this imaginary "stream" joins an actual one, which flows from a small reflecting pond out through the building and into the garden.
Waiting areas are clustered around the various clinics, each with its own sub-reception area. These places are reached via the promenade, and overlook this interior garden-like space. The promenade and a health theater are available as alternative waiting areas. Each waiting area itself has a more private nook where films can be shown on tabletop projectors without making too much of a disturbance. The health theater would provide a more ample environment for film showings of greater general interest, performances of any kind, health fairs, classes, lectures, etc.

Bright colors, warm materials, plants, and lively, easily understood graphics locating various functional areas will help make a comfortable and relaxed, yet stimulating environment. A range of spaces and possibilities of uses insure the availability of choice for the users.

In the garden the elements of water, rocks and plants are combined to create a harmonious, peaceful contemplative place. The landscaping is naturalistic, informal yet planned to unify the built environment within its natural and man made surroundings creating an image of balance and integration. Inspiration for this garden is in the Japanese style of gardening, which aims to inspire the imagination, and "convey a sense of repose and identification within nature's own harmony."6

F. Community Activities

The Health Center is designed to become an identifiable focus for community activities, with opportunities for both formal and informal events. A pedestrian street runs parallel to the interior promenade along the southern edge of the building. Both paths meet at the corner, where the garden ties together building, man and nature. From the child care center, a level above the garden, a play deck climbs down like a jungle jim into a protected yard for the children. The corner is being celebrated as a natural place for people in order to reinforce and enhance the potential for this intersection to provide a focus for local activities and attention. Already a new day care center, 2 churches with educational classes, and a small store are forming the basis for such a central neighborhood place.

Security is a serious problem here, so access to the building had to be controlled. This need created a conflict with the desire to provide public access to community activities. The situation was resolved by dividing the activities between 2 levels. Those on the ground level (0') would be open to all from the pedestrian street, but not from inside. Those above (at 9') would be reached from within the Health Center using the promenade. A terrace (at 6') half a level between the
promenade (at 3') and the activities ties the two together and provides a middle ground which the activities can spill out onto.

Balconies, bridges and windows overlooking this place from the clinics and program rooms above serve to bring natural light inside, provide visual accessibility to many parts of the building, and increase the dramatic interest of events taking place within this setting.

The public activities accessible from within the Health Center include the library and exhibition space at ground level at the entry; a child care program, adult education and a senior citizens lounge with kitchen facilities are also included in this area. Ground level activities might include a food coop and self-help resource center, (with its own garden adjacent to the public one at the corner), a teen place with a pool hall or workshop, offices for local civic groups, the Girl Scouts, or a social club, thrift shops, etc.

G. Commercial Zone

The frontage along Blue Hill Ave. is devoted to commercial activities. This is in keeping with the existing neighborhood use pattern. The shops would replace those removed for this new construction, and would also be a shot in the arm of the local economy. Additionally, the activity of shoppers and eyes of the shopkeepers would increase the security of the whole block.

Adjacent to the Health Center is planned a soul food restaurant and snack shop, serving natural style and ethnic foods and responsive to local cultural tastes. This restaurant can also be opened to the Health Center lobby. For special events it could provide catering or kitchen facilities.

H. Architectural Concept

The next question was: what is a place that has a major health center, shops, a restaurant, community activities, adult education and a garden? After considering these multiple images, and looking to the neighborhood context, I first tried basing the form on a rambling Victorian style building. These structures are among the finest and most interesting of the architecture in the neighborhood. They provide the most positive contextual elements to respond to. However, these buildings also represent a past authoritarian social structure, and the middle class values which motivated the creation and destruction of this area (See Section C-Site).
What was needed was an image which was respectful of the existing neighborhood, but which did not lock it in past and present patterns. A newer and more direct idea for such a large and eclectic structure would be to base the form on a microcosmic community. Within such a framework many separate entities could coexist in a rich, new blend; autonomous yet guided by shared principles and mutually cooperative. The image should be strong, substantial, enduring but not formidable or overwhelming. People want to feel comfortably secure inside, not vulnerable and also not imprisoned.

The promenade truly becomes the main street of this community. Kiosks and stands can be casually set up along its path. People can call to each other from the balconies. Sunlight and greenery make it a cheerful, pleasant place to be. In nice weather the glazed garden doors can be opened to really let the outside in.

Portions of the structure were left incomplete as a framework for definition by future users. Large vertical dimensions and exposed beams or posts in the art space in the mental health clinic leave room for further expansion. Ground level windows are primarily small, for the sake of security and privacy. The walls are potential canvases for murals or graffiti on the eastern (Ashton Street) side, facing the neighborhood, structural posts are expressed in the outer wall as pilasters. These are intended to be further defined by colorful tiling. During construction the lower portions of these "stripes" can be left unfilled. They can be completed by the people as a community mosaic, using recycled bits of tile, glass, etc. Over the shops a framework for extension of community or business activities can be completed by the future users.
PEOPLE
play deck which goes down to yard at 9'
PLAN at 33, partial roof
Details

A. view of
   inner street

B. transition
to garden
C. portion of northern wall

D. roofs, terraces, greenhouse
E. section diagram

F. section diagram
form studies
public entry
parking entry
roof detail
view from ashton street
APPENDIX
APPENDIX

A. The Pre-Natal Film Project

"The world is our mother: the outside world is the mother's body in an extended sense."

"From mythology and poetry we may take towns, citadels, castles, and fortresses to be further symbols for women." Jerusalem, "a city, yet a woman."

Klein, "The Importance of Symbol Formation", p. 218

Blake, Night IX 1.222

both in N. O. Brown, Love's Body, p. 36.

"Man Cannot plan the world without designing himself," Rudolf Schwartz in Norberg-Schulz, Existence, Space and Architecture, p. 15.

During last spring and summer I made a film for the Pre-Natal Clinic of the Harvard Street Health Center. This project was funded through M.I.T. Department of Architecture (Bemis Fund and Graham Fund) and Harvard University School of Medicine (Department of Community Medicine, Milton Fund).

Included in the project is an evaluation of the effect of the film on the prenatal population at Harvard Street. The evaluation is being conducted by Jill Stein, a medical student, and friend, and collaborator in the project. It will be concluded in June, 1977.

Entitled "Preparing for Childbirth", the film is intended to be shown in the Pre-Natal Clinic's waiting area on a table type projector, and during Pre-Natal education classes. Evaluation is to determine if any change in appointment keeping rates or class enrollment and attendance patterns can be correlated with film showings. The purpose of the film is to help the health center more efficiently meet its goal of serving the community.
Designed as a non-didactic environmental (not dramatic) piece, the film will hopefully make sense even if portions were missed. Aimed primarily at pregnant women, it presents a collage of conversations, portraits of patients and providers, and descriptions of the various places and procedures which may be encountered during the course of pre-natal care at Harvard Street, and delivery at Boston City Hospital. The sound track is formed of the words of the people themselves. In many ways it is "of the people, by the people and for the people" of Harvard Street.

A goal of the film is to connect women with the human aspects of the clinic in a personally meaningful way. We assumed that if women had a strong idea of what lay in store for them, what to prepare for, pursuing pre-natal care would make more sense, be more relevant. This enhanced meaning would enable them to use the physical environment more.

In a sense the film was designed as a sort of map, charting a region which wanders into internal, external, and conceptual places. Having some guide through new territory is good encouragement for sticking to the path even when difficult, lonely or scary.

Harvard Street is one of the largest ambulatory care facilities in Boston. Obstetrics/Gynecology and Family Planning at Harvard Street handles the greatest volume of services among the clinics. (See Exhibit 10: Volume of Services). Harvard's Street's patients account for one third of the total deliveries at Boston City Hospital. The number of high risk pregnancies in the Center's service area is very high. This reflects inade-
quate pre-natal care (it's available, but not used), poor nutrition, and other problems associated with low income, medically poor communities.

In this context, beginning an intervention with the pre-natal population made good sense. They represent a majority of the health center's population, and a large proportion of the users of the city hospital, and they are at a significant turning point in their lives. ("They have 9 months to get it together or not")

Working with pregnant women was symbolically fitting on many levels. The womb is the first environment we all experience. We continue to refer to the world around us as if it were a woman's (our mother's) body, unconsciously. Learning to control the wombic environment by extension is the first lesson in controlling and shaping the external environment.

I feel that change in our physical environment goes hand in hand with real social and personal changes. These changes are part of one process which transpires on many levels. Any intervention to improve the physical world must take social, economic, political and psychological variables into consideration. Substantial changes in our world must occur from both the inside out and outside in.

A woman strengthened with knowledge about her self and other objective factors affecting her can control her own life better and cope with situations in the external world more directly. (For example, in the past BCH has been notoriously insensitive to the rights of lower income people)

With the self assurance and sense of competence ("I can do that") gained from these initial experiences, these women can extend themselves and gain
control over more aspects of their lives, and larger portions of their external environment. But the motivation and the belief in themselves and their futures must start somewhere.

In any situation it always makes sense to start out from what you know best, personal experience. For myself at least, film making can be an intensely direct way of experiencing a situation, as a complex interaction of people, places, events and moods. The process is not only an effective way of recording fleeting perceptions and experiences; it is also a useful means of discovering subtle realities, startling revelations of the general conditions held within a particular observation. Also, the making of the film itself is a unique framework for non-verbal thinking and analysis.

An architect or designer who wants to be able to assist groups who think and live differently from him/her needs some means of becoming sensitive to their problems and their identity. Conventional information gathering cannot convey the often elusive characteristics of people and their lives. It is also a one way process. Making the film involved the people of Harvard Street directly; it gave them an opportunity to express themselves. It showed them something about me, too. As a result of working together I gained their trust and cooperation (and it did not come easy!) Most of all, the film is both valuable to them in itself as an educational tool, as well as being a richly rewarding experience and aid in design for me.
B. Observations of Similar Facilities

During September and October I visited several health care and multi-service facilities. I also talked with some of the architects of these places. I was interested in what neighborhood health care and multi-service centers actually were like; what they evolved from, how they assumed their present form, and what directions they were likely to take in the future. Some other questions I had were, what are the components of "good" and "bad" environments; what role did administration, staff, clients and professionals play in the planning process; and what would they change if they could.

Visited were the Charles Drew Family Life Center; Roxbury Multi-Service Center, Dorchester House, Upham's Corner Neighborhood Health Center, and the Harvard Community Health Plan at Mission Hill. I talked with architects at Health Facilities Planners (Jamaica Plain Neighborhood Health Center), Don Spiel (Charles Drew) and Victor Cromie (Harvard Street).

Each place was observed in terms of 8 categories: building type, site conditions (in relation to streets); overall ambience, entry and reception characteristics, waiting areas, circulation, public areas, services offered.

I learned a great deal from each place. The following is a selection of some conclusions which were made:

1. First of all, in spite of physical conditions (good or bad), people make a place. A friendly, concerned and dedicated staff is more important for the success of an institution than if it's visually pleasing.

2. It is important for people to identify with the place; feel that it's their own, a real community institution.

3. Main entries should be clearly visible from the street and marked with an easily recognizable sign or logo. Shelter, seating and generous dimensions are good elements. Outside views in also make entering easier.

4. Too large, unusable circulation areas are wasted space. They do not become "people plans" without some definition or activity.

5. Combinations of services in multi-service facilities or by housing separate institutions under the same roof, to a certain extent, made sense, from the point of view of clients/users and institutions. Trying to put too many different activities within one framework requires rethinking the whole organization and form.
6. A homely atmosphere seemed to be most desired - with laughter and plants. Beautiful colors, warm materials, non-glare surfaces, natural light and informative, bright graphics are other components of a comfortable environment. Too much "modernization" may create an unwanted "slick" atmosphere, however.

7. Community conference rooms should be accessible directly from the main entry, and have a clear view into the neighborhood.

8. A rich environment which contains a range of spaces from very open ones to cozy nooks, provides an interesting and lively setting for all activities. Primarily achieved through slight level changes with openness preserved by visual access further enhances environmental interest and possibilities for interaction. Too much busyness and not enough privacy can make this sort of place as overwhelming and impersonal as a more conventional design, however.

9. Wherever possible, staff, friends, and members of the community should be invited to help personalize the place, e.g., designing logos, contributing plants, art work, larger scale decorating projects, etc.

10. Although the overall image should be pleasant and even fun, a seriousness of purpose needs to be conveyed as well.

11. A good work environment will provide for the full range of human activities, including socializing, eating and even sleeping.

12. Separation of staff and clinic circulation increases efficiency and convenience, and screens the public from possibly disturbing clinic operations.

13. Waiting areas clustered nearby particular clinics creates a more personal atmosphere and provide more privacy.
EXPLANATION OF PHOTOGRAPHS

a. A familiar sign and logo are helpful at the entry.
b. Reception area should be easy to approach.
c. A window onto the neighborhood is a good component of community and board rooms.
d. Uniqueness and complexity can add up to a rich and interesting environment or can be overdone and produce confusion.
e. Small windows make sense in this neighborhood.
f. Easily read information is useful both internally and externally.
g. Natural light and plants enhance any space. High windows let light in while preserving privacy.
h. Receptionist has visual control over a wide area.
i. Entry should mark a place.
j. Simple elements can create a harmonious relaxed environment.
k. A renovated building preserves the neighborhood fabric.
FOOTNOTES

Attitude
3. Dubos, Renee, Man Adapting, p. xviii.

Introduction
2. Engel, Japanese Gardens for Today, p. 10
4. Dubos, Renee,
7. Schultz, C. N., Existence, Space and Architecture, p. 36.

Ideas and Issues - Medical Care
1. Greer, Scott, Urban Renewal and American Cities, p. 15.
2. Ibid., p. 15.
4. Roth, Julius, "Treatment of the Sick", in Poverty and Health, p. 24.
5. Ibid., p. 242.
7. Roth, Julius, "Treatment of the Sick", in Poverty and Health, p. 215.


11. Norman, J. C., Medicine in the Ghetto, p. 64.

Poverty and Powerlessness

12. Rosenstock, "Prevention of Illness and Maintenance of Health", in Poverty and Health, p. 175.


15. Ibid., p. 187.

16. Fried, "Social Differences in Mental Health", in Poverty and Health, p. 151.

17. Ibid., 152.


19. Rosenstock, op. cit., p. 188.


24. Ibid., p. xviii.

25. Ibid., p. xix.

Historical Precedence and Current Trends


2. Ibid., p. 67

3. Ibid., p. 4
4. Ibid., p. 45
5. Hollister in Neighborhood Health Centers, p. 3.
9. Ibid., p. 313.
SITE

2. Gordon-Collins, Thesis, p. 34
3. City of Need, p. 77
7. Ibid., p. 4.
8. Ibid., p. 5.
10. Ibid., p. 8.
11. Ibid., p. 10.
15. Ibid., p. 12.
Design
2. Perin in With Man in Mind, p. 36.
3. Ibid., p. 39.

Appendix
BIBLIOGRAPHY

SITE

"Dorchester-Existing Characteristics", Boston Redevelopment Association, Spring, 1969.


"North Dorchester: Postulated History", MIT, Department of City and Regional Planning, Fall, 1966.


NEIGHBORHOOD HEALTH CENTERS AS AN INSTITUTION: PRACTICE OF MEDICINE


Kosa, John, Antonovsky, Aaron, and Zola, Irving, (eds) Poverty and Health: A Sociological Analysis,

DESIGN, CRITERIA, METHODS

Alexander, Christopher, Pattern Language, Center for Environmental Structure, Berkeley, CA, 1971


GENERIC EXAMPLES


Viselter, Archur, "The Watts Hospital", USDHEW, Arlington, VA. Medical Care Administration, Case Study #5, 1975.

THEORY, MISCELLANEOUS


