SPECIAL ARTICLE

NEIGHBORHOOD HEALTH CENTERS AS PROVIDERS OF PRIMARY MENTAL-HEALTH CARE

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Abstract The 19 Boston neighborhood health centers with mental-health programs were studied to investigate the delivery of mental-health services as part of a primary health-care system.

Staff-time utilization data show these programs focus on the provision of primary mental-health services to neighborhood residents and indirect consultative and collaborative services to general health staff to co-ordinate health care. Forty-eight per cent of referrals for mental-health services were patients first identified and referred by general health staff. Children constituted a disproportionately high percentage of the patients served (43 per cent), and 22 per cent of the services were outreach visits, primarily in patients' homes.

Quantitative studies are necessary to confirm my qualitative findings that the conjoint health and mental-health delivery site at the neighborhood level increases the accessibility and psychologic acceptability of mental-health services and enhances case finding, successful referral, and co-ordination of primary health care. (N Engl J Med 295:140-145, 1976)

In the last decade there has been increasing interest in the provision of primary health care in a variety of settings ranging from solo private office practice to group practices, neighborhood health centers and teaching hospitals. The importance of psychologic factors to primary health-care delivery has been emphasized by primary physicians' reports that they spend a substantial portion (estimates range from 20 to 70 per cent) of their time evaluating and treating the emotional problems of their patients, including both defined symptoms of mental illness per se and the anxiety, tension or depression associated with either somatic illness or the stresses of modern life.

The clinical importance of psychologic variables to the primary physician's practice is further illustrated by the prominence of their discussion in the relevant literature — e.g., 27 per cent of the articles in the 1975 issues of Primary Care have a psychiatrist author writing on the psychologic considerations of a segment of primary care. In recent reports national, international, and public-health professional groups have urged the provision of mental-health services as a co-ordinated part of primary health care. General and community psychiatrists have begun to work alongside primary-care physicians in many delivery sites. In these settings they provide not only indirect consultative services to nonpsychiatric primary-care givers dealing with the emotional difficulties of patients but also the direct services of diagnostic and problem evaluation, crisis intervention, time-limited therapy, family therapy, supportive counseling, post-hospital care, and psychoactive medication; these services, constituting the "frontline" ambulatory psychiatric interventions, are herein defined as primary mental-health care. One active locus of recent efforts to deliver co-ordinated primary health and mental-health care has been the comprehensive neighborhood health center. These centers have flourished in many urban lower- and working-class neighborhoods, and Macht has recently reported in the Journal the progress made by neighborhood health centers in the Boston area in providing accessible family-focused primary health care.

The delivery of primary mental-health services as part of a neighborhood primary-health-care system is a relatively new and evolving concept in the United States. It represents an area of intersection of the neighborhood health and community mental-health movements of the 1960's, as the former enlarges its scope to include services for emotional as well as physical needs and the latter focuses on smaller and more realistically sized (subcatchment), ethnic-related or destiny-related population areas. The literature to date on mental-health services in neighborhood health centers consists primarily of single program "case reports." In this paper I present an aggregate picture of the functioning of this primary mental-health delivery system in one metropolitan area based on a "consecutive case series" study of the 19 Boston neighborhood health centers with mental-health programs (Table 1).

METHOD

Under the sponsorship of the Massachusetts League of Neighborhood Health Centers, a Mental Health Task Force designed a questionnaire and structured interview that were administered in person by a League-employed doctoral candidate to the 19 mental-health program directors of neighborhood health centers in individual interviews during August-October, 1973. Basic quantitative data were collected for fiscal-year 1973 on patient demography, services and staffing as well as more qualitative information on the working relations and linkages within the health center, with the community mental-health center that served their neighborhood, and with outside neighborhood care givers. The quantitative data were tabulated, and mean values determined for descriptive purposes; the primitive quality of the quantitative data available in these relatively new programs and the small number of centers with comparable data on all the variables necessitated the use of different "n's" for different variables. Each section of the qualitative data about the programs' operations and relations was independently classified into descriptive categories by at least two members of the Task Force, and this independent work was then scrutinized by the entire Task Force to minimize bias until a consensus was reached.
Table 1. Boston Neighborhood Health Centers (NHC's) with Mental-Health Programs.

<table>
<thead>
<tr>
<th>NHC</th>
<th>MAJOR NEIGHBORHOOD POPULATION</th>
<th>TYPE OF MENTAL-HEALTH PROGRAM</th>
<th>AFFILIATED COMMUNITY MENTAL-HEALTH CENTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boston Chinese Community HC</td>
<td>Chinese</td>
<td>Part time</td>
<td>Bay Cove-Tufts</td>
</tr>
<tr>
<td>Bridge over Troubled Waters</td>
<td>Street youth</td>
<td>Part time</td>
<td>Harbor-Lindemann</td>
</tr>
<tr>
<td>Brookside Park Family Life Center</td>
<td>Black, Irish &amp; Spanish-speaking</td>
<td>Full time</td>
<td>Massachusetts Mental HC</td>
</tr>
<tr>
<td>Bunker Hill HC of the Massachusetts General Hospital</td>
<td>Irish</td>
<td>Full time</td>
<td>Harbor-Lindemann</td>
</tr>
<tr>
<td>Charles Drew Family Life Center</td>
<td>Black</td>
<td>Full time</td>
<td>Boston State Hospital</td>
</tr>
<tr>
<td>Columbia Point Health Center</td>
<td>Black</td>
<td>Full time</td>
<td>Bay Cove-Tufts</td>
</tr>
<tr>
<td>Dorchester NHS</td>
<td>Irish</td>
<td>Full time</td>
<td>Bay Cove-Tufts</td>
</tr>
<tr>
<td>East Boston NHS</td>
<td>Irish-Italian</td>
<td>Part time</td>
<td>Harbor-Lindemann</td>
</tr>
<tr>
<td>Family Health Care Program</td>
<td>Mixed white ethnic &amp; black</td>
<td>Full time</td>
<td>Massachusetts Mental HC</td>
</tr>
<tr>
<td>Harvard Community Health Plan</td>
<td>Prepaid</td>
<td>Full time</td>
<td>Massachusetts Mental HC</td>
</tr>
<tr>
<td>Laboure HC</td>
<td>Irish</td>
<td>Full time</td>
<td>Bay Cove-Tufts</td>
</tr>
<tr>
<td>Martha Eliot HC</td>
<td>Black &amp; Spanish-speaking</td>
<td>Full time</td>
<td>Massachusetts Mental HC</td>
</tr>
<tr>
<td>Mahoney Family Life Center</td>
<td>Black</td>
<td>Part time</td>
<td>Fuller-Boston University</td>
</tr>
<tr>
<td>Neponsett HC</td>
<td>Irish</td>
<td>Part time</td>
<td>Boston State Hospital</td>
</tr>
<tr>
<td>North End Community HC</td>
<td>Italian</td>
<td>Full time</td>
<td>Harbor-Lindemann</td>
</tr>
<tr>
<td>Roxbury Comprehensive Community HC</td>
<td>Black</td>
<td>Full time</td>
<td>Fuller-Boston University</td>
</tr>
<tr>
<td>South End Community HC</td>
<td>Spanish-speaking</td>
<td>Part time</td>
<td>Fuller-Boston University</td>
</tr>
<tr>
<td>Southern Jamaica Plain HC</td>
<td>Irish &amp; Spanish-speaking</td>
<td>Part time</td>
<td>Massachusetts Mental HC</td>
</tr>
<tr>
<td>Uphams Corner HC</td>
<td>Irish, Spanish-speaking &amp; black</td>
<td>Part time</td>
<td>Fuller-Boston University</td>
</tr>
</tbody>
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**FINDINGS**

Findings describing the various organizational models used by the mental-health programs of the neighborhood health centers, their internal linkages for health and mental-health co-ordination, and linkages with community mental-health centers and other care-giving systems in the neighborhood are reported elsewhere. This report will focus on the patterns of mental-health services provided by the neighborhood health centers, explore hypotheses about the accessibility, acceptability and efficiency of this primary mental-health-care system, and discuss persistent problem areas.

**Services (n = 19).** Most of the efforts of these programs were focused around the provision of primary mental-health services to neighborhood patients and co-ordination of their general health and mental-health care. A little more than two thirds (69 per cent) of the total mental-health-program hours were devoted to providing direct services to a patient or a patient's family. Of this direct service effort, 29 per cent was spent in problem evaluation, 25 per cent in linking the client after the evaluation into another service system (i.e., general health services, social services, welfare or employment services, and other psychiatric treatment facilities), and almost half (46 per cent) in providing direct treatment services. The direct treatment was focused mainly on the primary mental-health-care services of time-limited or crisis therapies (43 per cent), supportive aftercare (18 per cent), and family and couple therapies (15 per cent); less time (24 per cent) was devoted to secondary-level treatments such as long-term insight-oriented psychotherapies for which patients were often referred to the allied community mental-health center or teaching hospital (Fig. 1).

Indirect services (Fig. 2), accounting for almost a third (31 per cent) of the program hours, were provided to other care givers both inside the neighborhood health centers and in the neighborhoods at large. The principal consumers of indirect services

![Figure 1. Direct Mental-Health Services Provided by Neighborhood Health Centers.](image1)

![Figure 2. Indirect Mental-Health Services of the Neighborhood Health Center (NHC).](image2)
were the medical-care staff of the neighborhood health center. Sixty-one per cent of indirect service time was used for consultation, mental-health education, and co-ordinated treatment and program planning with the medical-care staff. Sixteen per cent of the time was spent on in-service training and supervision of the mental-health staff itself, and prevention services (13 per cent) and consultation to outside care givers in the neighborhood (10 per cent) accounted for the rest of the indirect service time.

Locus of service \( (n = 19) \). An important advantage of the neighborhood-health-center locus was the ability to provide acceptable outreach services into the neighborhood itself. Twenty-two per cent of the mental-health services were provided outside the center in other neighborhood settings, primarily patients’ homes. Sixteen of the 19 programs reported making regular home visits to patients who could not, or would not, have come initially to the center to receive needed services.

Referral sources \( (n = 19) \). The case-finding efficacy of housing mental-health services with general health services was shown by the fact that almost half (48 per cent) of all referrals to the mental-health programs (Fig. 3) were of patients first seen and identified as in need of mental-health services by the general health staff. Also reflected in referral source data was the visibility and community acceptability of a mental-health program provided in the center; on the average, 25 per cent of the patients were self-referred by their own family or friends, and another 21 per cent were referred by other neighborhood agencies that had begun to see the neighborhood health centers’ mental-health programs as helpful resources. Only 6 per cent of the referrals came directly from the allied community mental-health centers.

Patients \( (n = 11) \). The 11 neighborhood health centers that had comparable data on the number and age distribution of mental-health patients served in fiscal year 1973 reported having seen 9657 different patients for a total of over 57,000 patient visits. The 11 centers served a disproportionately high percentage of children, a population habitually underserved by other mental-health delivery systems; almost half (43 per cent) of the patients seen in the neighborhood mental-health programs were under the age of 18. Although aggregate utilization-rate data are not yet available, one of the centers (the Bunker Hill Health Center of the Massachusetts General Hospital) has recently reported a treated incidence rate for the first six months of 1975 of 531 per 10,000, a fivefold increase over the national rate for all outpatient services (95 per 10,000) and a 20-fold increase over outpatient service rates in community mental-health centers (26 per 10,000) (Jacobson AM, Regier DA, Burns BJ: unpublished data).

Co-ordination of health and mental-health care \( (n = 19) \). In each program, specific linkages between the health and mental-health providers and services had evolved. The neighborhood health centers fiscally fortunate enough to have full-time mental-health staff and programs interacting with and under the same roof as full-time general health programs had the opportunity and usually a higher priority for integrating health and mental-health services. Centers that had to rely on part-time staffs in either or both the health and mental-health programs had less opportunity for offering integrated services and often provided parallel but separate health and mental-health services at different times in the same location. Linkages for clinical purposes ranged from informal referral mechanisms to active, on-going collaboration and conjoint service of multi-problem patients by health, mental-health, and social-service staff organized into interdisciplinary health-care teams.12

Boston is geographically divided into five mental-health service areas ("catchments"), each of which has a state-supported community mental-health center responsible for providing comprehensive mental-health services to the 75,000 to 200,000 residents of the area. These large catchment communities each contain several diverse, often geographically or ethnically discrete neighborhoods, and some community mental-health centers have set up smaller satellite clinics within neighborhoods to meet specific mental-health needs. Although neighborhood health centers are not currently part of the state-supported community mental-health system and have separate organizational and funding bases, most of the health centers have initiated collaborative alliances with the community mental-health center responsible for their neighborhood and have begun to co-ordinate services by determining which mental-health needs can most effectively be met in the centralized community mental-health center, the decentralized but strictly mental-health-service-providing community mental-health satellite, or the decentralized primary health and mental-health-service-providing neighborhood health center. Such co-ordination is necessary to avoid competitive and costly duplication of service so that together the neighborhood health-center and com-

Figure 3. Sources of Referral (NHC Denotes Neighborhood Health Center, and CMHC Community Mental-Health Center).
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senior citizen with medication and verbal support despite some community pressure to remove him through inappropriate institutionalization. In the working-class neighborhoods studied, the high level of consumer trust earned by neighborhood health centers (often coexisting with distrust of the large teaching hospitals) has made them acceptable therapeutic entry points for care of complaints ranging from problems of living to severe psychoses. It should be added that the totally nonmedical-care locus would be of limited helpfulness to persons with severe and disruptive symptoms for whom psychoactive medication has been demonstrated to improve their level of functioning and ability to live productively in the community. Although neither accessibility nor acceptability is a measure of the quality of care actually received in any setting, they do influence both the likelihood that patients will either seek care for emotional problems or remain untreated and the time lapse between onset of illness and therapeutic intervention.

Hypothesis 2: As an integral part of a primary health-care system, neighborhood-center-mental-health programs will be beneficiaries of early case finding, successful referrals for treatment, and co-ordination of health and mental-health care. Multiple studies have shown the primary-care physician to be an important case finder of mental illness, since he is one of the first professional care givers consulted for emotional problems.7,8,26,27 The directors reported that the single location and ongoing working relations with neighborhood-center mental-health colleagues encourage the physician case finder to discuss and when necessary refer patients across the hall for mental-health care, with a low rate of “loss” in the referral process; the proximity also fosters greater patient acceptance of a referral for emotional help when it is made by the trusted health-care giver to someone who is part of the same care-giving system. This hypothesis is supported by the finding that nearly half the mental-health referrals in our series came from neighborhood-center general health providers.

Having health and mental-health services in the same location can facilitate co-ordination of primary care for patients with multiple problems, foster integrated treatment planning, and decrease the possibility of fragmented and contradictory treatment goals by allowing easy communication and collaboration between care givers.13,17,28 Although the Boston mental-health programs devoted almost a fifth of their total program hours to co-ordination of efforts with the general health staff, there was great variance in the degree and method of utilizing the potential advantages of the single location for integrated primary care. At a minimum almost all the programs shared major health and mental-health findings and medications in a common record and insisted that new mental-health patients have a current physical work-up. Although problems persist and fully integrated care has not yet been achieved in the Boston neighborhood health centers, the degree and potential for co-ordinated primary-health care provided in such centers far exceeds that in the setting of the free-standing community mental-health center.

Hypothesis 3: Co-ordinated health and mental-health care at the neighborhood-center delivery site adds to the efficiency of the primary health-care delivery system. Studies from other settings have reported a decreased use of general health services when mental-health needs are met early in a joint health and mental-health system.29,30 A recent study from one of the Boston centers (Brookside Park Family Life Center) costed out the care of a patient with chronic schizophrenia over a 10-year period and demonstrated the effectiveness and decreased cost of her treatment in the neighborhood health center as compared to a teaching hospital and a state hospital.31 The directors noted the acceptability and appropriateness of less expensive indigenous paraprofessional personnel as providers of many types of neighborhood mental-health services. However, they acknowledged that the primitive state of their data did not permit the necessary quantitative testing of this hypothesis through comparison of the program of the neighborhood health center with other delivery modes of primary mental-health care.

Problem Areas

Many neighborhood-center mental-health programs are experiencing problems in the areas of co-ordination, funding, and evaluation of care that must be resolved if the potential advantages of the centers’ delivery system are to be realized. Co-ordination of mental-health with general health care has been especially difficult in neighborhood health centers employing part-time physicians, and even in the programs fortunate enough to have full-time staff physicians, patient demand for direct medical services often relegated co-ordination of care to a lesser priority. It is difficult in these situations to allocate expensive physician time to co-ordination of care, especially since such efforts are usually not reimbursable. If specific mechanisms for co-ordination are not worked out, the joint health and mental-health setting can promote “dumping” through inappropriate referral of difficult patients rather than collaborative efforts to treat the difficulties. Some neighborhood health centers have approached this problem area by channeling their co-ordination efforts through full-time, less expensive nurse practitioners, who work closely with both the part-time physicians and the mental-health staff to keep abreast of care plans in both areas and promote their integration.

There are substantial funding difficulties in providing co-ordinated primary mental-health services in the neighborhood health centers. Frequently located in poor or working-class areas, the centers cannot support themselves on patient fees and must rely on an increasingly tenuous and unstable funding base of state or federal grants and private and governmental third-party insurers of mental-health services; currently, the
latter preferentially reimburse inpatient and general-hospital outpatient care settings. Insurers thereby reward the use of the emergency room and centralized hospital settings for the delivery of primary health and mental-health services despite the acknowledged incapacity of such settings to follow through with primary health-care needs, and disfavor such care in decentralized neighborhood health centers, where co-ordination, follow-through and outreach are more feasible. In addition, the small number of third-party insurers that do pay for primary mental-health services exclude payment for many of the services that can be distinctly helpful in the setting of the neighborhood health center — i.e., co-ordination of health and mental-health care, the effective therapeutic services of nondoctorate-level professional and indigenous para-professional therapists, and indirect consultative and preventive services in the neighborhood. The Task Force has recently negotiated a new reimbursement format for neighborhood-center mental-health services with Medicaid of Massachusetts that addresses many of these issues, and it is hoped that future funding mechanisms, including National Health Insurance systems, will reward continuity and integration rather than fragmentation of primary care.

Lastly, it is evident that additional systematic evaluation is both a scientific and a fiscal necessity for this developing field and that quantitative comparison to other existing models of psychiatric care, including free-standing community mental-health centers, must precede any substantial policy changes or reallocation of mental-health service dollars. One of the problems inherent in a decentralized system of autonomous providers is the lack of a common data system to compare programs. The Task Force is currently developing a reliable comparable data base in some of its member centers to allow quantitative examination of the delivery, health and mental-health co-ordination, care quality, and efficiency of mental-health services within neighborhood health centers and their comparison with the nonmedically linked delivery system of the community mental-health centers. In addition, utilization rates developed from these aggregate data can compare the neighborhood delivery system to analogous attempts to co-ordinate primary health care in middle-class settings such as health-maintenance organizations, community hospitals, and private group practices.

I am indebted to the Massachusetts League of Neighborhood Health Centers whose sanction and sponsorship of this study was an essential ingredient in "opening doors" to the Task Force and gaining the co-operation of the participating neighborhood health centers; to Task Force members Lawrence A. Janowitch, M.S., Frances Kieffer, M.A., Richard G. Morrill, M.D., Lee Reich, Ph.D., Edward Simone, M.A., and Lila Towl, M.S.W., for their collaborative efforts in this study; and to Gerald L. Klerman, M.D., for a constructive review of this manuscript.

References