As part of a project involving innovation and diffusion of certain health care programs in hospitals and health departments, this study reports on the introduction of social work in such institutions. It tried to find out how far social work was introduced, the variables associated with implementation, and to evaluate the implications for health planning and administration. The findings are presented and discussed.

Promoting the Adoption of Social Work Services by Hospitals and Health Departments

John T. Gentry, M.D., M.P.H.; James E. Veney, M.D.; Arnold D. Kaluzny, Ph.D.; and Jane B. Sprague, M.A.

Introduction

There are three objectives of this paper. One is to identify the level at which social work services have been implemented by acute general hospitals and health departments in the United States. A second is to identify some of the community, organizational and personal variables associated with implementation. The third is to assess findings for their importance to the health planner and administrator interested in extending the availability of social work services.

The paper describes a portion of a more extensive research project involving innovation and diffusion of selected health care programs in hospitals and health departments. The objective of the project is to examine significant social, psychological, and economic factors that influence the comprehensiveness of community health services.

Social scientists have long been concerned with variables affecting the diffusion of various kinds of information and activities (Rogers, 1962; Carlson, 1967; Lionberger, 1960; Miles, 1964), but work has largely been confined to non-health fields. With few exceptions (Eliot, 1966; Mytinger, 1968; Meyers, et al., 1968), the diffusion and adoption of health care programs have not been studied. Program adoption has been viewed either in aggregate terms (Kaplan, 1967; Hage and Aiken, 1967), or on a case study basis (Hage, 1963). The importance of attitudes as a determinant of behavior is seen as crucial to understanding the adoption of new programs (Rogers, 1962).

Current study activities include an examination of social work services and activities through the use of National and New York State samples of hospitals and health departments. The social work services and activities selected for the purposes of this paper include: 1) psychological and social consultation for patient diagnosis and therapy, 2) information and referral services, 3) patient predischarge planning, and 4) assistance with legal problems.

Methods

Data used in this study were collected from three sources. The first consisted of a national sample of short-term acute hospitals and health departments. Stratified probability samples were proportional to approximate population coverage. Information was obtained from 480 hospital administrators and 205 health officers by mail questionnaire.

The second source included 25 county and 4 city health jurisdictions in New York State, exclusive of New York City, and a sample of 70 short-term acute hospitals located within the respective health department jurisdictions. Information was obtained from all participating hospital administrators and health officers by structured interviews. In addition, information from self-administered questionnaires was obtained from personnel associated with 67 participating hospitals and 28 participating health departments.*

The third source of data included information from administrators of funding, regulatory, and planning agencies serving the respective New York State organizations cited. These agencies included Blue Cross, Blue Shield, and commercial health insurance carriers; regional offices of the New York State Health Department and State Welfare Department; and area health planning agencies (314 B), health councils, and regional hospital councils.

The following information was obtained from the National survey:

1. Presence or absence of study services and activities,

* Hospital questionnaire data were obtained from respective administrators (N=48), trustees (N=371), administrative staff (N=347), controllers (N=44), and medical staff (N=529). Health department questionnaire data were obtained from health officers (N=24), professional staff (N=127), board of health members (N=106), staff public health nurses (N=204), and county legislators and city councilmen (N=65). Questionnaire response rates ranged from a high of 86 percent of health officers and health department professional staff to a low of 46 percent for elected officials. New York data were collected in 1971; National sample data, in 1969.

2. The administrators' view of the importance of specific services for meeting community health needs, and
3. Limited data about the hospital or health department itself, such as size, population served, and control in the case of hospitals.

The interview schedule used in New York State provided additional information regarding:

1. Factors that influenced decisions to implement study services,
2. The priority with which implementation of services would be considered if funds were available, and
3. The degree to which health related social work service needs were satisfied.

The self-administered questionnaire schedule used in New York State provided additional information about study respondents, characteristics of the organizations with which they were affiliated, and the relationships between study organizations and regulatory, funding and planning bodies. Respondents were also queried regarding the provision of health related social work services, the degree to which community needs for these social work services were met, and reasons why services were not implemented.

Findings

Preliminary study findings are summarized under the following headings: 1) Social work service implementation levels; 2) factors influencing implementation and referral arrangements; 3) the role of planning, funding and regulatory agencies; and 4) service utilization levels.

Social Work Service Implementation Levels

Table 1 provides information concerning the level of implementation of the specific social work services under study. U.S. data are summarized for both hospitals and health departments, by size of the hospital and size of the health department jurisdiction. Almost without exception, the size of the organization is directly related to level of implementation. Ninety-one per cent of hospitals over 500 beds and 60 per cent of health departments with jurisdictions over 250,000 people have implemented some social work services. In contrast, only 39 per cent of hospitals with less than 500 beds and 32 per cent of health departments with jurisdictions of less than 250,000 have implemented services. Although not as pronounced, the same relationship holds for implementation of each of the specific services as well.

Table 2 illustrates the level of implementation of social work services by region of the country and size of the community in which the facility is located. Although not as pronounced as for organizational and jurisdictional size, implementation of social work services is related to the size of the community in which study organizations are located. This relationship is most pronounced for hospitals in communities of more than 25,000 individuals. The proportion of these communities providing social work services is consistently higher than the proportion not providing such services. This relationship is similar but less pronounced for health departments. Regional configurations are illustrated in Figure 1.

Regionally, implementation of social work services is highest for hospitals in the Northeast and lowest in the South. In contrast, the highest level of implementation of social work services by health departments occurs in the West, with the Northeast at a slightly lower level. The North Central region is lowest for health departments.

Implementation of social work services by hospitals and health departments for the U.S., the Northeast alone, and New York State is summarized in Table 3. Social work services are more widely implemented in the Northeast by both health departments and hospitals than they are in the remainder of the U.S. Health department provided services are not as widely available in New York as in other parts of the Northeast.

The implementation of social work services in New York State follows patterns already noted for the nation as a whole. Tables 4 and 5 summarize the implementation levels of social work services by size and ownership of hospitals,

Table 1—National Implementation of Social Work Services in Hospitals and Health Departments by Size of Hospital or Size of Health Department Jurisdiction

	Hospitals Beds				Health Departments Jurisdiction			
	≤500		>500		<250,000		≥250,000	
Services	Yes	No	Yes	No	Yes	No	Yes	No
Social work services	159 (38.7)	252 (61.3)	63 (91.3)	6 (8.7)	51 (31.9)	109 (68.1)	27 (60.0)	18 (40.0)
Psychological and social consultation for patient diagnosis and therapy	88 (21.4)	323 (78.6)	54 (78.3)	15 (21.7)	30 (18.8)	130 (81.3)	17 (37.8)	28 (62.2)
Information and referral service	143 (34.8)	268 (65.2)	62 (89.9)	7 (10.1)	42 (26.3)	118 (73.8)	18 (40.0)	27 (60.0)
Patient pre-discharge planning (hospitals only)	135 (32.8)	276 (67.2)	57 (82.6)	12 (17.4)				
Assist families with legal problems (health depts. only)					6 (3.8)	154 (96.3)	9 (20.0)	36 (80.0)

New York State regions, and the population of the county within which study organizations are located. Table 4 data indicate that adoption of social work services by hospitals is directly proportional to hospital size and the size of the jurisdiction in which the hospital is located. Hospital sponsorship presents a less clear picture. In general, church-sponsored hospitals provide social work services most frequently, closely followed by county or city hospitals. Partnerships and corporations have the lowest implementation levels. Regional differences in implementation levels also occur in New York State. In general, the level of implementation is highest in the Rochester and Northeast areas, intermediate in the Western and Central regions of the state, and lowest in the New York City Metropolitan area. State regions are identified in Figure 2.

Implementation levels for health departments are also directly proportional to county size. With respect to regional differences, however, the picture is not as clear as for hospitals. The North Metropolitan area is highest for psychological and social consultation. In contrast, the Rochester region exceeds all others in information and referral services and provision of legal assistance.

In addition to the implementation of services by study organizations, the study also obtained information concerning the existence of referral relationships with other agencies providing such services. This information was obtained because of the opportunity for patients to receive services through other agencies. Table 6 enumerates organizations having referral relationships with other agencies and the types of referral relationship that exist. Although 55.2 per cent and 57.1 per cent of hospitals and health departments had formal referral relationships with other agencies with social work services, only 7.5 and 7.1 provided summaries of information from patients' records.

Table 2—National Implementation of Social Work Services in Hospitals and Health Departments by Region and Size of Community in Which Facility Is Located

	Hospitals					Health Departments					Total hospital and Health Dept. by Region
	Community Size					Community Size					
	≥250,000	<250,000 but ≥25,000	<25,000 SMSA	<25,000 Non-SMSA	Total by Region	≥250,000	<250,000 but ≥25,000	<25,000 SMSA	<25,000 Non-SMSA	Total by Region	
Northeast											
Yes	22	23	8	9	62	8	10	2	1	21	83
	(35.5)*	(37.1)	(12.9)	(14.5)	(80.5)	(38.0)	(47.6)	(9.5)	(4.8)	(51.2)	(70.3)
	95.7†	88.5	50.0	75.0		80.0	37.0	100.0	50.0		
No	1	3	8	3	15	2	17	0	1	20	35
	(6.7)	(20.0)	(53.3)	(20.0)	(19.5)	(10.0)	(85.0)	(0.0)	(5.0)	(48.8)	(29.7)
	4.3	11.5	50.0	25.0		20.0	63.0	0.0	50.0		
North Central											
Yes	36	30	2	4	72	6	3	2	1	12	84
	(50.0)	(41.7)	(2.8)	(5.6)	(50.0)	(50.0)	(25.0)	(16.7)	(8.3)	(20.3)	(41.4)
	85.7	60.0	4.8	40.0		37.5	12.0	66.7	6.7		
No	6	20	40	6	72	10	22	1	14	47	119
	(8.3)	(27.8)	(55.6)	(8.3)	(50.0)	(21.2)	(46.8)	(2.1)	(29.8)	(79.7)	(58.6)
	14.3	40.0	95.2	60.0		62.5	88.0	33.3	93.3		
South											
Yes	27	23	3	4	57	6	11	4	7	28	85
	(47.7)	(40.0)	(5.3)	(7.0)	(31.3)	(21.4)	(39.3)	(14.3)	(25.0)	(37.8)	(33.2)
	64.3	34.3	5.2	26.7		54.6	37.9	66.7	25.0		
No	15	44	55	11	125	5	18	2	21	46	171
	(12.0)	(35.2)	(44.0)	(8.8)	(68.7)	(10.9)	(39.1)	(4.4)	(45.6)	(62.2)	(66.8)
	35.7	65.7	94.8	73.3		45.4	62.1	33.3	75.0		
West											
Yes	12	13	3	3	31	7	7	1	2	17	48
	(38.7)	(41.9)	(9.7)	(9.7)	(40.3)	(41.2)	(41.2)	(5.9)	(11.8)	(54.8)	(44.4)
	75.0	40.6	15.8	30.0		87.5	43.8	100.0	33.3		
No	4	19	16	7	46	1	9	0	4	14	60
	(8.7)	(41.3)	(34.8)	(15.2)	(59.7)	(7.1)	(64.3)	(0.0)	(28.6)	(45.2)	(55.6)
	25.0	59.4	84.2	70.0		12.5	56.3	0.0	66.7		

*Percentages within yes or no response by region.
†Percentages by yes or no response within community size.

Figure 1—Health Service Regions of the U.S.

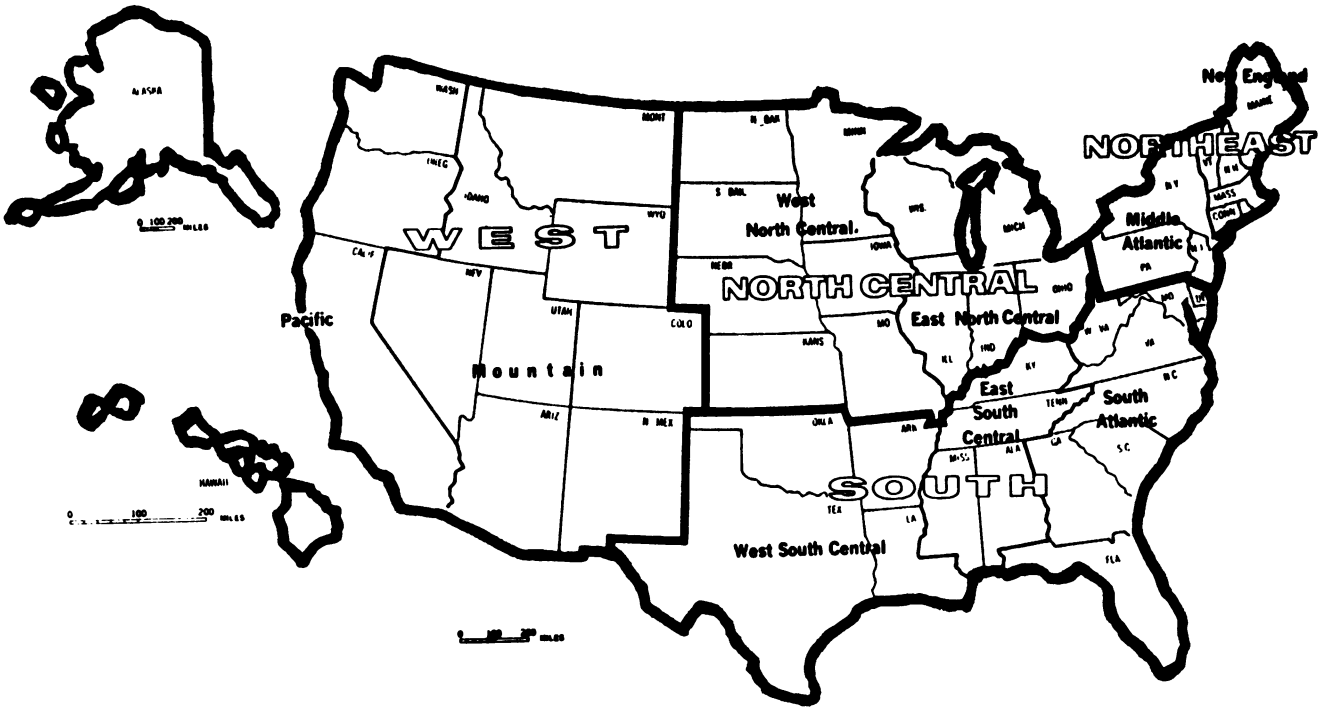


Table 3—Hospitals and Health Departments Providing Social Work Services for the Total U.S., Northeast Region, and New York State

	U.S.				Northeast				New York State			
	Hospitals		Health departments		Hospitals		Health departments		Hospitals		Health departments	
Service	N	%	N	%	N	%	N	%	N	%	N	%
Social work services	222	46.3	78	38.1	62	80.5	21	51.2	55	82.1	12	42.9
Psychological and social consultation for patient diagnosis	142	29.6	47	22.9	49	63.6	11	26.8	41	61.2	5	17.9
Information and referral service	205	42.7	60	29.3	61	79.2	16	39.0	50	74.6	12	42.9
Patient pre-discharge planning (hospitals only)	192	40.0			58	75.3			52	77.6		
Assist families with legal problems (health departments only)			13	6.3			4	9.8			10	35.7

Factors Perceived to Influence Implementation and Referral Arrangements

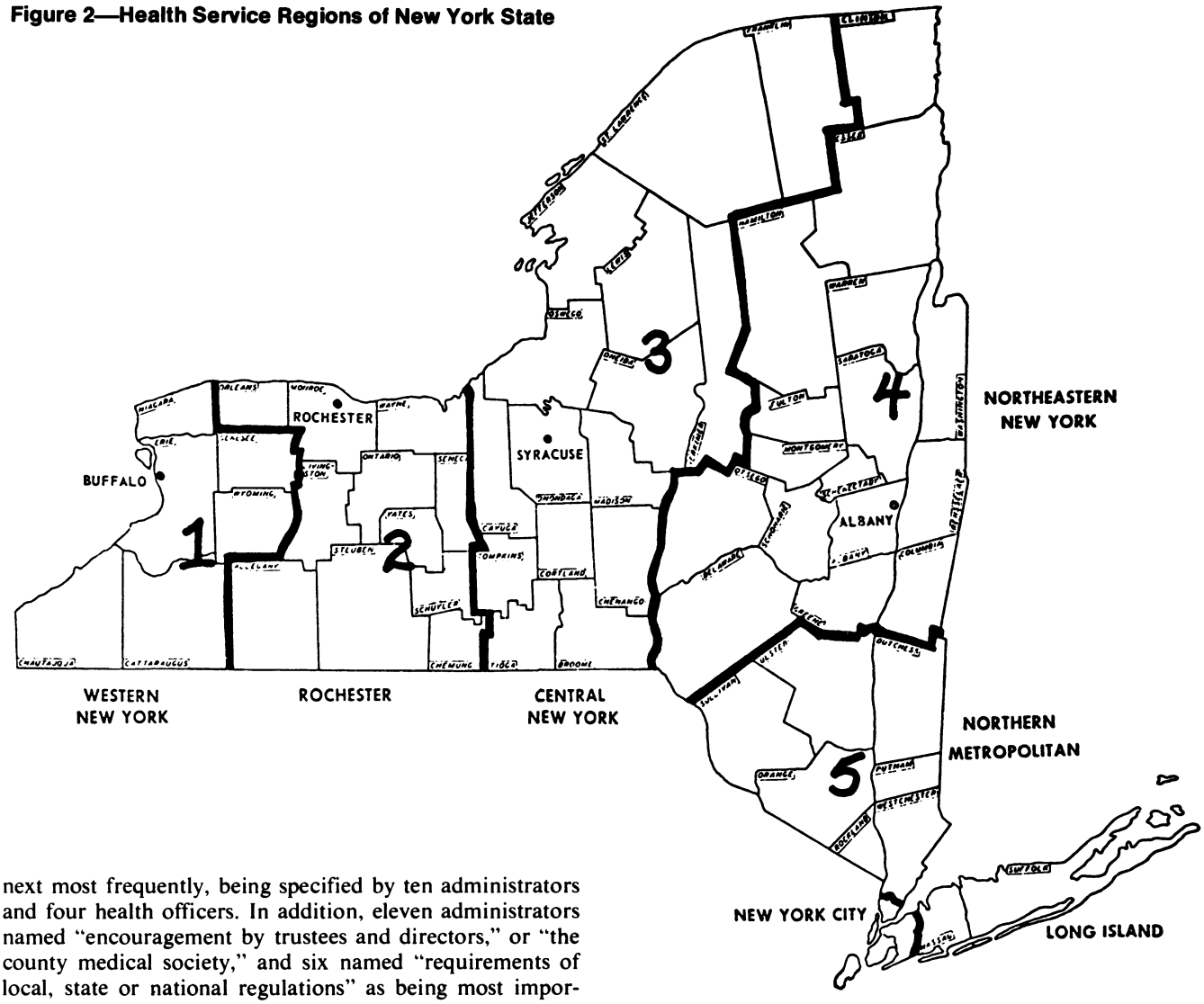
The importance of social work services was reported by hospital administrators and health officers participating in the national survey. These data are summarized in Table 7 by size of hospital and health department jurisdiction. Without exception, the administrators of large hospitals see social work services as more important than do the administrators of small hospitals or health departments. There is no difference by size of health department jurisdiction.

New York data concerning perceptions of need for services, community demand, availability of resources, and appropriateness of services for a particular agency are summarized by respondent categories.

The View of the Administrator

Fifty New York hospitals and eleven health departments have implemented social work services. "Community demand" was named by sixteen of the hospital administrators and five of the health officers as the single most important reason for implementation of these services. "Encouragement by professional health workers" was named

Figure 2—Health Service Regions of New York State



next most frequently, being specified by ten administrators and four health officers. In addition, eleven administrators named "encouragement by trustees and directors," or "the county medical society," and six named "requirements of local, state or national regulations" as being most important. When asked whether community needs for social work services were being adequately met by existing resources, 23 of the 67 hospital administrators and 7 of the 28 health officers responded that needs were being entirely met.

Various reasons were given why the 17 hospitals and 16 health departments did not provide social work services. Both hospital administrators (4) and health officers (10) gave "provided by another agency" as the reason for not implementing social work services. Five health officers also mentioned "lack of appropriations" or "funding" as the reason for non-implementation. Funding was not as critical a factor for hospital administrators who variously gave "lack of staff" or "board approval," "low demand" or simply "lack of time" as reasons for non-implementation. Despite the fact that administrators did not identify lack of funds as a major reason for non-implementation, eight of those not having social work services said implementation of such services would get high or intermediate priority if funds became available. Five of the health officers responded in a similar manner.

The reasons given for not developing formal referral relations with other agencies included "unimportance" and the "adequacy of informal referrals." Hospital administrators and health officers did not differ in their responses.

The Views of Hospital Trustees, Physicians, Members of Boards of Health, and Elected Officials

Knowledge of social work services was tested by asking certain respondents if social work services were provided by the organizations with which they were affiliated. Table 8 summarizes the results from four categories of respondents: hospital trustees, physicians, members of Boards of Health, and County Supervisors responsible for appropriating health department funds. The physician was the only respondent group that approximated the correct level of implementation. Trustees underestimated while Board members and Supervisors greatly overestimated actual implementation levels.

Individuals indicating that services were not provided were queried further as to reasons for non-provision. Of the 79 physicians who indicated that services were not provided, 64 could not give a reason. The remaining 15 physicians stated that "lack of staff or funds," or "low demand" were the major reasons. Of the 121 Hospital Trustees who said social work services were not

Table 4—Hospitals in New York State Providing Social Work Services by Specific Service and Selected Characteristics of Facility

Hospitals	Psychological and social consultation				Information and referral				Pre-discharge planning			
	Have		Don't have		Have		Don't have		Have		Don't have	
	N	%	N	%	N	%	N	%	N	%	N	%
Hospital size												
No. of beds: 0-150	6	40.0	9	60.0	9	60.0	6	40.0	9	60.0	6	40.0
151-250	13	59.1	9	40.9	14	63.6	8	36.3	15	68.2	7	31.8
251-350	9	69.2	4	30.8	11	84.6	2	15.4	12	92.3	1	7.7
351-826	13	76.5	4	23.5	16	94.1	1	5.9	15	88.2	2	11.8
County size												
>1,000,000	10	83.3	2	16.7	10	83.3	2	16.7	10	83.3	2	16.7
<1,000,000 but ≥250,000	10	58.8	7	41.2	12	70.6	5	29.4	13	76.5	4	23.5
<250,000	21	55.3	17	44.7	28	73.7	10	26.3	28	73.7	10	26.3
Sponsorship												
County and city	5	71.4	2	28.6	4	57.1	3	42.9	7	100.0	0	0
Church	12	85.7	2	14.3	14	100.0	0	0	13	92.9	1	7.1
Other	23	56.1	18	43.9	30	73.2	11	26.8	29	70.7	12	29.3
Partnership & corporation	1	20.0	4	80.0	2	40.0	3	60.0	2	40.0	3	60.0
State region												
Western New York	10	62.5	6	37.5	11	68.8	5	31.3	13	81.3	3	18.8
Rochester area	6	85.7	1	14.3	7	100.0	0	0	6	85.7	1	14.3
Central New York	6	54.5	5	45.5	8	72.7	3	27.3	8	72.7	7	87.5
Northeastern	7	87.5	1	12.5	7	87.5	1	12.5	7	85.5	1	12.5
Northern Metropolitan area	12	48.0	13	52.0	17	68.0	8	32.0	17	68.0	8	68.0

Table 5—Health Departments in New York State Providing Social Work Services by Specific Service and Selected Characteristics of Agency

Health departments	Psychological and social consultation				Information and referral				Assist families with legal problems			
	Have		Don't have		Have		Don't have		Have		Don't have	
	N	%	N	%	N	%	N	%	N	%	N	%
County size												
>1,000,000	2	100.0	0	0	2	100.0	0	0	2	100.0	0	0
<1,000,000 but ≥250,000	2	40.0	3	60.0	4	80.0	1	20.0	4	80.0	1	20.0
<250,000	1	4.8	20	95.2	6	28.6	15	71.4	4	19.0	17	81.0
State regions												
Western New York	1	16.7	5	83.3	2	33.3	4	66.7	2	33.3	4	66.7
Rochester area	0	0	3	100.0	2	66.7	1	33.3	2	66.7	1	33.3
Central New York	1	16.7	5	83.3	2	33.3	4	66.7	2	33.3	4	66.7
Northeastern	0	0	4	100.0	2	50.0	2	50.0	2	50.0	2	50.0
Northern Metropolitan area	3	33.3	6	66.7	4	44.4	5	55.6	2	22.2	7	77.8

provided, 41 were not able to give a reason. Over half of the remainder saw "provision by another agency" as the major reason for non-implementation within their hospital. Others stated "limited staff or funds," and "low community demand" as major reasons for non-implementation. Twenty-seven Board of Health members responded that their health department did not provide medical social work services. Of the 19 respondents who gave a reason for non-implementation, "provided by another agency," or "low demand" were by far the most common. Only 4 of the 13 members of the Board of Supervisors gave reasons for the non-implementation of social work services. They mentioned either "limited funds" or "low demand" as the reason.

Table 6—Hospitals and Health Departments in New York State that Have Established Referral Relationships with Other Community Agencies and Types of Relationships Established

Relationships with other agencies that provide social work services

	Hospital		Health department	
	N	%	N	%
No referral	10	14.9	4	14.3
Formal referral of patients	37	55.2	16	57.1
Provision of summaries of pertinent information from patients' records	5	7.5	2	7.1
Provision of personnel services or provision of funds or equivalents	0	0	1	3.6
Membership on planning or evaluation committee	1	1.5	1	3.6
No formal relations	14	20.9	4	14.3
Total	67		28	

Relationships with other agencies that do not provide social work services

	Hospital		Health department	
	N	%	N	%
No referral	45	67.2	21	75.0
Formal referral of patients	15	22.4	5	17.9
Provision of personnel services or provision of funds or equivalents	0	0	2	7.1
Membership on planning or evaluation committee	1	1.5	0	0
No formal relations	5	7.5	0	0
Informal referral	1	1.5	0	0
Total	67		28	

Table 7—Perceived Importance of Social Work Services for United States Hospital Administrators and Health Officers by Size of Hospital and Health Department Jurisdiction

	Hospital size						
	500 beds or less			More than 500 beds			
Service	Very important	Somewhat important	No imp. & other	Very important	Somewhat important	No imp. & other	χ^2 Level of significance
Social Work Services	.62	.31	.07	.87	.10	.03	.01
Information and referral service	.64	.28	.08	.86	.12	.03	.05
Patient pre-discharge planning	.61	.28	.11	.87	.10	.03	.01
Psychological and social consultation	.56	.33	.11	.75	.22	.03	.05

	Health department jurisdiction						
	<250,000			≥250,000			
Service	Very important	Somewhat important	No imp. & other	Very important	Somewhat important	No. imp. & other	χ^2 Level of Significance
Social work services	.61	.31	.08	.56	.33	.11	N.S.
Assist families with legal problems	.30	.44	.26	.36	.40	.24	N.S.
Psychological and social consultation	.57	.31	.12	.58	.29	.13	N.S.
Information and referral service	.59	.31	.10	.64	.22	.13	N.S.

Table 8—Perception of Level of Implementation of Social Work Services by Specific Hospital and Health Department Representatives in New York State

	Respondent	Response: Services perceived as implemented N	%	Services perceived as not implemented N	%
Hospital implementation level: 82.1%	Hospital representatives				
	Physicians	452	85	79	15
	Board of Trustees	252	67	121	33
Health department implementation level: 42.9%	Health department representatives				
	Board of health	80	75	27	25
	Board of supervisors	52	80	13	20

The Role of Planning, Funding, and Regulatory Agencies Serving New York State

Administrators of planning, funding and regulatory agencies were queried about provision of health related social work services within their jurisdictions and the level at which needs for services were being met. Six of the 17 health planners who responded did not know whether medical social work services were provided in their area. Of the remainder, four did not know if needs were met, and six responded that needs were not met. Nine administrators of regulatory agencies responded, of whom seven agreed that medical social work service needs are not met in their areas. Only four funding administrators responded, two of whom said that needs were not being met.

Only 3 of 17 health planners were actively promoting or funding social work services. Reasons given for not promoting these services included "lack of funds" to do so, "low community demand," that it would be "inappropriate" to do so, or that it was "opposed by voters."

None of the four third-party payors who responded was actively involved in promoting or funding medical social work services which were perceived as "inappropriate," of "low priority" or of "low demand." In contrast, six of the nine administrators of regulatory agencies were actively promoting these services. Four regulatory agencies were providing funds, although "limitations of funds and personnel" were identified as major obstacles to meeting service needs.

Physician Use of Social Work Services

Of the 531 physicians who were asked whether they used social work services, approximately 45 per cent said they currently use such services. Public health nurses were asked to give their perceptions of the reasons why some physicians don't use social work services. The reasons given by nurses are summarized in Table 9. Most frequently mentioned was the belief that physicians don't understand the nature of the service and have had no experience with it. Additional reasons included physician unawareness of the availability of services, and that they believe such services are only for indigent patients.

Table 9—Physician Failure to Use Social Work Services as Perceived by Public Health Nurses in New York State

	N	%
Don't understand nature of service and have not had experience with it	73	36.0
Unaware of available services	72	35.5
Believe only for indigent patients	68	33.5
Prefer to provide services themselves	32	15.8
Had prior "bad" experience	29	14.3
Use other community resources	27	13.3
Other reasons	7	3.4

Discussion

Implementation differences by size of institution, population, region, and hospital sponsorship illustrate community and organizational variables that have contributed to these differences. These data and the rates of implementation that have been experienced over the past decade provide guidelines for the planner, administrator, and educator interested in promoting future adoption of health related social work services and projecting respective manpower and budgetary requirements. Differential implementation levels, illustrated by more limited provision of psychological and social consultation for patient diagnosis and treatment, also provide possible priorities for future promotional and developmental activities.

The likelihood that the nature and objectives of social work services are not well-understood or supported is suggested by study findings. One such finding is the relatively low implementation level found in health departments and small hospitals. An additional finding is the frequent suggestion that the provision of social work serv-

ices by another agency explains the non-provision of this service. Limited understanding is further illustrated by respondents who did not know whether services were either provided at all or provided at a level necessary to meet community needs. It is especially noteworthy that this finding occurred in administrators of planning and third-party funding agencies. In addition, community health nurses tend to believe that physicians who do not use medical social work services are not aware of the nature of the services and have not had prior experience.

Study findings thus suggest that the social work profession may need to interpret social work activities more adequately to the larger health community. The latter includes a better understanding of social work needs, and the contributions of social work personnel to the management of the social component of all illnesses. There also appears to be a need for clarity concerning the desirability of direct services by social work personnel as opposed to supportive or consultive roles. Agency role questions include the feasibility of inter-agency sharing of social work services, inter-agency referral arrangements and information exchange practices.

Social workers can be pleased that "demand" and "encouragement by professional heath workers" were the most important factors contributing to adoption of social work services. However, lack of funds still constitutes a major barrier for those administrators interested in the implementation of services. The need and desirability of including social services as part of third-party funding benefits thus constitutes a major and interesting issue for further study and discussion. To the extent that organized consumer groups can influence the benefits provided by funding agencies, action strategies suggest that consumer groups be considered as a potential target for further educational and promotional efforts by social workers.

Bibliography

Carlson, R.O. Adoption of Educational Innovations. Eugene, Center for the Advanced Study of Educational Administration, University of Oregon, 1967.

Eliot, J.W. The development of family planning services by state and local health departments in the United States. AJPH 56:6, 1966.

Hage, J. Organizational Response to Innovation: A Case Study of Community Hospital. New York, Columbia University (Doctoral dissertation), 1963.

Hage, J. and Aiken, M. Program change and organizational properties: a comparative analysis. Amer. J. Soc. 72:503, 1967.

Lionberger, H.F. Adoption of New Ideas and Practices. Ames, Iowa University Press, 1960.

Meyers, B.A., et al. The medical care activities of local health units. Public Health Reports 83:757,1968.

Miles, M.B., Ed. Innovation in Education. New York, Bureau of Publication, Teachers' College, Columbia University, 1964.

Mytinger, R.E. Innovation in Local Helath Services. Washington, U.S. Government Printing Office, PHS Publication No. 1664-2, February, 1968.

Rogers, E.M. Diffusion and Innovation. Glencoe, The Free Press of Glencoe, 1962.

Dr. Gentry, Dr. Veney, Dr. Kaluzny, and Ms. Sprague are associated with the Department of Health Administration, University of North Carolina, Chapel Hill, North Carolina.

This research was supported by the Health Services Research Center of the University of North Carolina through Research Grant HS-00239 from the National Center for Health Services Research and Development, Department of Health, Education, and Welfare. This paper was presented before the Social Work Section of the American Public Health Association at the Ninety-Ninth Annual Meeting in Minneapolis, Minnesota on October 11, 1971.