## Survey of General Hospitals Accepting Mental Patients

By BERNARD H. KROLL, B.A., and HYMAN GOLDSTEIN, Ph.D.

DURING the period from December 1951 to May 1953, the National Institute of Mental Health of the Public Health Service conducted a survey of the general hospitals in the United States. The original purpose of the survey was to ascertain which general hospitals accepted as inpatients persons with a primary diagnosis of suspected or actual mental illness in order to bring up to date the number of general hospitals to be included in the census of mental patients. As a result of the survey, the number of hospitals included in the census of mental patients rose to 546 compared with 157 prior to the survey.

Data were also collected on type of patient accepted, hospital size, and the types of therapy available for each hospital offering therapy. It is believed that presentation of data on the types of therapy available at the time of the survey would be useful since such data would serve as a baseline for future studies of the types of therapies available in general hospitals. This is particularly so in the light of the more recent developments in drug therapy, such as the use of reserpine, chlorpromazine, and other tranquilizing drugs, the growth of

Mr. Kroll is an analytical statistician, Hospital Reports and Records Unit, and Dr. Goldstein is chief, Current Reports Section of the Biometrics Branch, National Institute of Mental Health, National Institutes of Health, Public Health Service.

general hospital facilities for the mentally ill, and the increasing development of nonhospital treatment for the mentally ill.

Some background on the distribution in the States of the hospitals reporting and those indicating acceptance of mental patients is presented in table 1. Additional tabulations showing in greater detail the distribution of these hospitals are available (see documentation note). Of the 4,716 hospitals surveyed, 4,702, or 99.7 percent, of the hospitals queried reported. Reporting was 100 percent complete for 40 States and the District of Columbia. About 40 percent of the reporting hospitals had average daily resident populations of 50 or more. About 21 percent of the hospitals with average daily resident patient populations of 50 or more accepted mental patients as contrasted to about 6 percent of the hospitals with average daily resident patient populations under 50. It is clear that there is a significant difference in the acceptance of mental patients between hospitals with average censuses of 50 or more and those under 50.

The types of patients accepted by the 546 hospitals reporting the acceptance of mentally ill patients and the type of service offered are shown in table 2. Of these 546 general hospitals, 176, or 32.2 percent, routinely offer only diagnostic workup for patients admitted. This does not imply that occasional treatment may not be given for a selected patient, but it does mean that the hospital acts as a diagnostic and screening center, and patients who are in need

Table 1. Replies received in the survey of general hospitals, by average daily resident patient populations: United States and each State, 1952

		Hospitals with average daily resident patient populations								
United States and each State	All hos-		50 and over		Under 50					
	pitals	Total	Accepting mentally ill	Not accepting mentally ill	Total	Accepting mentally ill	Not accepting mentally ill			
United States	1 4, 702	1, 858	386	1, 472	2, 844	160	2, 684			
Alabama         Arizona         Arkansas         California         Colorado         Connecticut         Delaware	89 40 64 254 68 38 10	25 12 13 118 19 30 9	25 4 4	19 9 13 93 15 26 8	64 28 51 136 49 8	3 2 4 1 1	61 26 51 132 48 7			
District of Columbia Florida Georgia Idaho Illinois Indiana Iowa	13 101 102 47 219 104 112	10 32 23 7 127 47	4 6 5 2 21 16 11	6 26 18 5 106 31 30	3 69 79 40 92 57	1 3 6 3 7 6 3	2 66 73 37 85 51 68			
Kansas_ Kentucky Louisiana Maine Maryland Massachusetts Michigan	115 82 103 43 41 128 176	31 27 26 10 27 76 75	10 8 6 2 1 17 13	21 19 20 8 26 59 62	84 55 77 33 14 52 101	1 1 1 5	80 53 77 32 13 51			
Minnesota Mississippi Missouri Montana Nebraska Nevada New Hampshire	163 85 107 46 94 14	47 11 48 10 20 2 14	14 1 15 3 7 1	33 10 33 7 13 1	116 74 59 36 74 12 18	11 6 5 3 4	105 68 54 33 70 12 17			
New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma	90 30 301 129 39 158 95	60 4 197 49 14 101	11 29 5 5 14 3	49 4 168 44 9 87 12	30 26 104 80 25 57 80	1 1 6 3 2 2 2 4	29 25 98 77 23 55 76			
Oregon Pennsylvania South Carolina South Dakota Tennessee Texas	61 222 12 58 44 91 435	16 161 8 21 9 19	2 31 2 6 4 4 19	14 130 6 15 5 15 41	45 61 4 37 35 72 375	3 3 1 1 3 23	42 58 4 36 34 69 352			
Utah	25 22 76 96 65 136 27	8 8 37 36 35 58	5 5 5 10 4 11 2	3 32 26 31 47 3	17 14 39 60 30 78 22	6 3 2 12	17 14 33 57 28 66 22			

<sup>&</sup>lt;sup>1</sup> The 14 hospitals not reporting were in the following States: 1 each in Arkansas, Massachusetts, New York, Tennessee, and Washington; 2 hospitals each in Florida and Georgia; and 5 hospitals in California.

Table 2. Number of hospitals accepting mental patients, by type of patient accepted and services offered: United States and each State, 1952

,	All hospitals			Hospitals accepting							
United States and each State				Psycho	tics and ot	thers	Nonpsychotics only				
	Total	Diag- nostic workup only	Diag- nosis and treat- ment	Total	Diag- nostic workup only	Diag- nosis and treat- ment	Total	Diag- nostic workup only	Diag- nosis and treat- ment		
United States	546	174	372	445	136	309	101	38	63		
Alabama Arizona Arkansas	9 5	3 2	$\frac{6}{3}$	7 4	2 2	5 2	2 1	1	1 1		
California Colorado Connecticut Delaware	29 5 5 1	17 1	12 4 5	27 5 5	16 1	11 4 5	2 1	1	1		
District of Columbia Florida Georgia Idaho Illinois Indiana Iowa	5 9 11 5 28 22 14	1 2 3 3 5 8 6	4 7 8 2 23 14 8	4 8 9 3 21 21 11	1 2 2 2 2 3 8 4	3 6 7 1 18 13 7	1 1 2 2 7 1 3	1 1 2 2	1 1 1 1 5 1		
Kansas Kentucky Lovisiana Maine Maryland Massachusetts Michigan	14 10 6 3 2 18 18	2 4 3 4 8	$ \begin{array}{c} 12 \\ 6 \\ 6 \\2 \\ 14 \\ 10 \end{array} $	13 7 5 2 1 11 16	2 2 2 7	11 5 5 5 1 9	1 3 1 1 7 2	<u>2</u> <u>1</u> <u>2</u> 1	1 1 1 1 5 1		
Minnesota Mississippi Missouri Montana Nebraska Nevada New Hampshire	$egin{array}{c} 25 \\ 7 \\ 20 \\ 6 \\ 11 \\ 1 \\ 4 \\ \end{array}$	8 5 4 4 2	17 2 16 2 9 1	23 6 16 6 9 1	8 4 2 4 1 11	15 2 14 2 8 1	2 1 4 2	1 2 1	2 <u>2</u> <u>1</u> <u>2</u>		
New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma	$egin{array}{c} 12 \\ 1 \\ 35 \\ 8 \\ 7 \\ 16 \\ 7 \\ \end{array}$	5 12 4 5 1 2	7 1 23 4 2 15	11 1 27 7 6 15 4	5 10 4 4 1 1	6 1 17 3 2 14 3	1 8 1 1 1 3	2 i	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		
Oregon Pennsylvania Nhode Island South Carolina South Dakota Tennessee Texas	5 34 2 7 5 7 42	3 4 1 4 10	2 30 2 6 1 7 32	4 25 2 6 4 7 33	$ \begin{array}{c} 2 \\ 3 \\ \hline                                $	2 22 5 1 7 26	1 9 1 1 9	1 1 1 3			
Utah	5 5 11 13 6 23 2	2 4 6 3 10	5 3 7 7 3 13 2	5 5 9 11 1 18 2	2 3 4 1 7	5 3 6 7	2 2 5 5	1 2 2 3	1 3 2		

Table 3. Number of hospitals accepting mental patients and offering treatment, by type of treatment offered: United States and each State, 1952

United States and each State	All hospi- tals <sup>1</sup>	Psycho- therapy	Insu- lin	Electro- therapy	Metra- zol or other shock	Psycho- surgery	Drug	Fever	Occupa- tional	Physio- therapy	All other
United States	372	305	237	274	68	124	264	130	143	203	47
AlabamaArizona	6 3	6 2	5 1	4	2	2	$\frac{5}{2}$	2	2	4	
ArkansasCaliforniaColoradoConnecticutDelaware	12 4 5	12 3 5	8 4 4	7 4 4	1 1	5 2 2	9 4 5	5 2 1	5 2 1	8 3 2	3
District of Columbia_FloridaGeorgia	4 7 8 2	3 6 7 1	1 6 6	3 6 7	1 1 3	1 3 1	2 4 4 1	2 4 3	2 4 1	3 4 2	1 1 1
Idaho Illinois Indiana Iowa	23 14 8	18 9 8	14 7 5	19 10 7	4 1 3	8 4 3	16 9 4	10 8 3	11 6 3	14 8 2	3
Kansas Kentucky Louisiana Maine	12 6 6	10 4 5	11 4 5	6 5 6	4 1 2	4 4 2	10 5 5	5 2 4	6 3 2	7 2 2	2 2 1
Maryland Massachusetts Michigan	2	12 9	4 8	9	2	1 3 3	6 8	1 4	5 4	9 6	3
Minnesota Mississippi Missouri		14 2 14	12 1 11	11 2 14	14	8 1 8	15 2 13	9 1 8	11	13 11	3
Montana Nebraska Nevada New Hampshire	2	6 1 1	1 3 1	1 4 1	1 1 1	1 2 1	1 5 1 1	1 1 1	5	3 1 1	2 1
New Jersey New Mexico New York North Carolina	$\begin{bmatrix} 1\\23\\4 \end{bmatrix}$	5 1 20 3	5 	$\begin{array}{ c c } \hline & 4 \\ \hline & 19 \\ \hline & 3 \\ \hline \end{array}$	$\begin{bmatrix} 2 \\ \hline 2 \\ 2 \end{bmatrix}$	3 8 1	6 	3 5	1 13 1	2 1 6 2	5
North Dakota Ohio Oklahoma	15 5	14 3	11 3	14 3	2 2	5 1	$\begin{array}{c c} 2\\12\\2\end{array}$	6 2	6	10	3
OregonPennsylvaniaRhode IslandSouth CarolinaSouth DakotaTennesseeTexas	6 1	1 28 1 4 1 5 25	1 17 1 5 1 4 26	2 25 2 5 1 6 23	6 2 9	1 12 3 1 7	$ \begin{array}{c c} 1 \\ 23 \\ \hline 5 \\ 1 \\ 4 \\ 26 \end{array} $	1 15 1 2 1 1 10	1 14 1 1 2 9	1 21 1 2 1 3 19	1 4   1
Utah Vermont Virginia Washington West Virginia Wisconsin Wyoming	$\begin{array}{c c} 3 \\ 7 \\ 7 \\ 3 \\ 13 \end{array}$	5 3 6 4 1 11 2	4 3 5 4 1 8	5 3 4 6	2 1 2	5 1 3 1	4 1 6 3 1 7 2	2 1 1 2 2	2 2 1 1 6	5 2 6 3 1 9	3

<sup>&</sup>lt;sup>1</sup> Individual data will not add to the "All hospitals" totals since hospitals offer more than one type of therapy.

866 Public Health Reports

of treatment are usually referred to other hospitals after diagnosis. The remaining 67.8 percent of the hospitals indicate that treatment as well as diagnostic services are offered. Again this does not imply that every patient admitted would be offered treatment, but treatment would be available if it were deemed advisable. total of 445 hospitals, or 81.5 percent of all hospitals accepting mental patients, accept psychotic patients as well as other types. Of those, 69.5 percent offer treatment and the remaining 30.6 percent offer diagnosis only. The remaining 101 hospitals do not accept psychotic patients but will accept other types; 62.4 percent of these hospitals offer treatment, and 37.6 percent do not.

However, hospitals offer varied treatment programs. Of the nine major therapy groups on which data were collected, very few hospitals offered all types. Even if all types were available, the use of these therapies would be selective and would vary depending upon the patient and the alternative therapies available.

Psychotherapy is the most widely used type of therapy (table 3); 305 or 82.0 percent of the 372 hospitals reporting treatment facilities offered psychotherapy, individual or group (57 hospitals offered group psychotherapy but 301 hospitals offered individual psychotherapy).

The next two highest groups are electrotherapy and drug therapy with 73.7 and 71.0 percent of all hospitals offering these therapies among others. The remaining therapies in decreasing order of availability percentagewise were as follows: insulin 63.7; physiotherapy 54.6; occupational therapy 38.4; fever therapy 34.9; psychosurgery 33.3; metrazol and other shock therapy 18.3; all other therapies 12.6.

## Summary

A survey was made of the 4,716 general hospitals known to be in operation in the United States during the period of 1952–1953. More

than 99 percent of the hospitals queried replied. Forty percent of these hospitals had average daily resident patient populations of 50 or more. A significantly greater proportion of hospitals with average daily resident patient populations of 50 or more accept mental patients than those with populations under 50.

Of the 4,702 hospitals, 546, or 11.6 percent, accept patients with a suspected or actual primary diagnosis of mental illness. Of these hospitals, 67.8 percent offer treatment as well as diagnosis; the remaining 32.2 percent offer diagnosis only.

Psychotherapy is reported the most widely used therapy, with electrotherapy and drug therapy following closely.

## DOCUMENTATION NOTE

Additional tabulations of data from this survey have been deposited as document No. 4960, American Documentation Institute, Auxiliary Publications Project, Photoduplication Service, Library of Congress, Washington 25, D. C. A photoprint copy may be obtained by remitting \$2.50; a 35 mm. microfilm copy, by remitting \$1.75. Advance payment is required. Write checks or money orders payable to Chief, Photoduplication Service, Library of Congress.

The tabulations cover the following subjects:

- 1. Distribution of hospitals reporting acceptance of mentally ill patients by average daily number of all patients resident in hospital during year and average daily number of mental patients in residence during the year: United States, 1952.
- 2. General hospitals accepting mental patients and offering diagnostic workup only by type of service and average daily resident patient population of hospital: United States and each State, 1952.
- 3. General hospitals accepting mental patients and offering treatment by type of service and average daily resident patient population of hospital: United States, 1952
- 4. Number of hospitals offering treatment for certain detailed therapies: United States and each State, 1952.
- 5. Percent of hospitals offering a given therapy of all hospitals offering treatment: United States and each State, 1952.