

length care (average stay, 42 days), two are general hospitals for patients with acute diseases, and one is a pediatric hospital. Table 1 shows age data and diagnoses.

TABLE 1.—AGE AND DIAGNOSIS

Age group, years	Number of patients in hospitals					Total
	Chronic	Inter-mediate	Acute 1	Acute 2	Pediatric	
Less than 15.....	0	3	6	8	154	171
16 to 40.....	2	27	68	58	0	155
41 to 54.....	5	35	30	31	0	101
More than 55.....	71	84	46	54	0	255
Total.....	78	149	150	151	154	682
DIAGNOSIS						
Diabetes.....	18	21	12	8	1	60
Stroke.....	24	10	0	6	0	40
Rheumatic heart disease.....	3	5	2	1	2	13
Hypertensive cardiovascular disease.....	9	5	6	5	1	26
Myocardial infarction.....	5	4	5	3	0	17
Heart failure.....	4	4	3	5	2	18
Arteriosclerotic heart disease.....	12	15	6	9	0	42
Neoplasm leukemia.....	19	47	8	8	4	86
Upper respiratory tract infection.....	0	0	3	1	33	37
Chronic bronchitis emphysema.....	7	16	4	2	0	29
Pneumonia.....	2	3	4	1	8	18
Genitourinary tract infection.....	2	6	7	3	10	28
Meningitis.....	0	0	0	0	5	5
Abscess.....	1	1	1	3	2	8
Peptic ulcer.....	0	1	4	4	0	9
Headache.....	0	0	1	5	0	6
Seizure disorders.....	0	2	1	0	6	9
Pregnancy.....	0	0	0	24	0	24
Rheumatoid arthritis.....	2	7	0	1	0	10
Anemia.....	1	10	7	2	6	26
Skin diseases.....	1	6	8	3	2	20
Cirrhosis.....	0	11	1	2	0	14

A study card was used for recording the following data copied from the physician's order sheet, the nurse's notes, and the face sheet of the chart: (1) complete list of drugs ordered during the patient's last hospitalization; (2) dose, frequency, and route instructions for each drug ordered; (3) vital statistics; (4) admission and discharge dates; and (5) discharge diagnoses. Each drug was recorded only once. Neither orders to discontinue or restart nor changes in dosage or route were recorded. The data were transferred from the study cards to punch cards and were processed in a computer system. The output of this computer system was in the form of tabulations.

RESULTS

Table 2 shows the basic working data in each hospital. More than twice as many orders were written per patient in the two long-term hospitals as in the two acute hospitals and almost twice as many orders in the chronic hospital as in the intermediate hospital. In order to estimate the role which length of hospitalization played in the observed differences between long-term and acute hospitals, a separate analysis was carried out. Since the average duration of hospital stay in the acute hospitals was ten days, we compared drug usage for this period in the two types of hospitals. Thirty randomly chosen records from each long-term hospital were examined. There was no significant difference between the number of drugs ordered in long-term and acute hospitals during the first ten days after admission.

The frequency with which the various drug categories, ie, groups of drugs with similar pharmacological activity, were used is shown in Table 3. Only anticholinergic agents were used more frequently in the acute than in the long-term hospitals. All other drug categories were ordered more often in the two long-term hospitals. Order ratios of long-term to acute hospitals include the following: antibiotics, 3:1; vitamins, 4:1; tranquilizers, 2:1; diuretics, 4:1; cardiac stimulants, 2:1; antihistamines, 3:1; ointments, 6:1; expectorants, 3:1; corticosteroids, 2:1; antiseptics, 4:1; hematinics, 5:1; and vasopressors, 5:1.