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Hospitals and Nursing Homes in Southern Illinois

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This is Student and Area Services bulletin no. 5 in the series "Human and Community Resources of Southern Illinois," published in the early 1960s. This report was published in 1966 by Southern Illinois University's Division of Student and Area Services and authored by Dr. Ray E. Wakeley, Dr. C. E. Lively, and Bert J. Kellerman. The series was published as a means to assist the economic, social, and cultural development of southern Illinois. This report is an analysis of hospitals and nursing homes in the southernmost 31 counties in Illinois. It indicates the number and kinds of hospitals, their distribution in relation to the population, the facilities and services which they offer, and the extent to which they met 1960s-era standards in hospital and nursing home treatment.

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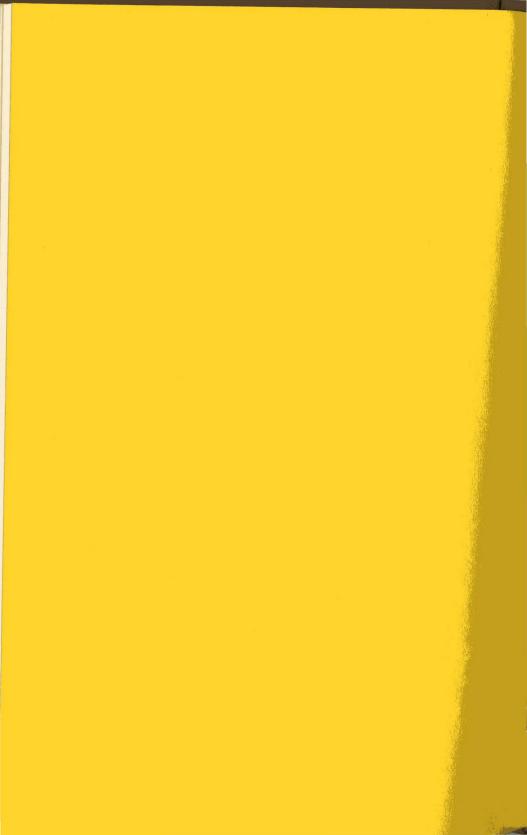
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Hospitals and Nursing Homes in Southern Illinois

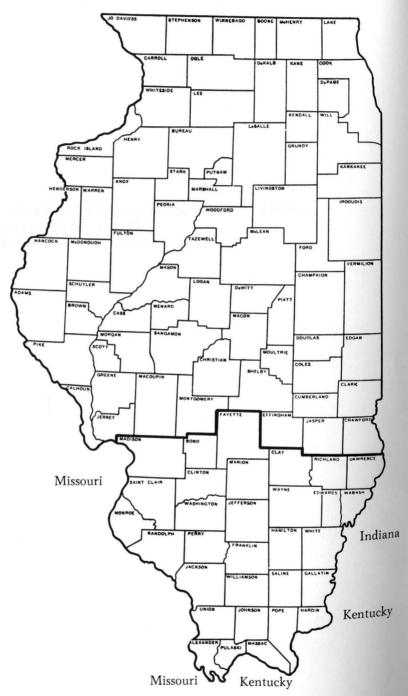
Ray E. Wakeley

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Bert J. Kellerman



STUDENT AND AREA SERVICES BULLETIN NO. 5 IN THE SERIES
Human and Community
Resources in Southern Illinois



Southern Illinois, the Area Studied

Hospitals and Nursing Homes in Southern Illinois

Ray E. Wakeley

C. E. Lively

Bert J. Kellerman

Previous Bulletins in This Series

- 1. Population Changes and Prospects in Southern Illinois
- 2. Growth and Decline of Towns and Cities in Southern Illinois
- 3. Types of Rural and Urban Community Centers in Southern Illinois
- 4. Number, Distribution and Age of Physicians in Southern Illinois

Southern Illinois University Carbondale, Illinois March, 1966

Preface

This bulletin is the fifth in the series originated by the Division of Area Services, Southern Illinois University. As a result of a regrouping of University units, this aspect of the University operation has been broadened to include the entire complex of student and area services. Beginning with this fifth bulletin, the series will henceforth appear under the title Student and Area Services Bulletin Series: Human and Community Resources in Southern Illinois. This bulletin was prepared under the auspices of the State and National Public Services Division and published by the Communications Media Services Division, a component of Student and Area Services.

The bulletin series is designed to provide basic information for use in the economic, social, and cultural development of Southern Illinois. The analysis of hospital and nursing home facilities is the second unit of a study of community health services with emphasis on the thirty-one counties of Southern Illinois. Specifically this unit is designed to indicate the number and kinds of hospitals, their distribution in relation to the population, the facilities and services which they offer, and the extent to which they meet current standards for hospital and nursing home treatment and care in Southern Illinois.

This study was planned by Dr. C. E. Lively, Visiting Professor in 1962–63. Bert J. Kellerman completed the analysis and wrote a preliminary report under a grant provided by the Office of Research and Projects. Ray E. Wakeley, Visiting Professor of Sociology, planned the analysis and wrote the final report.



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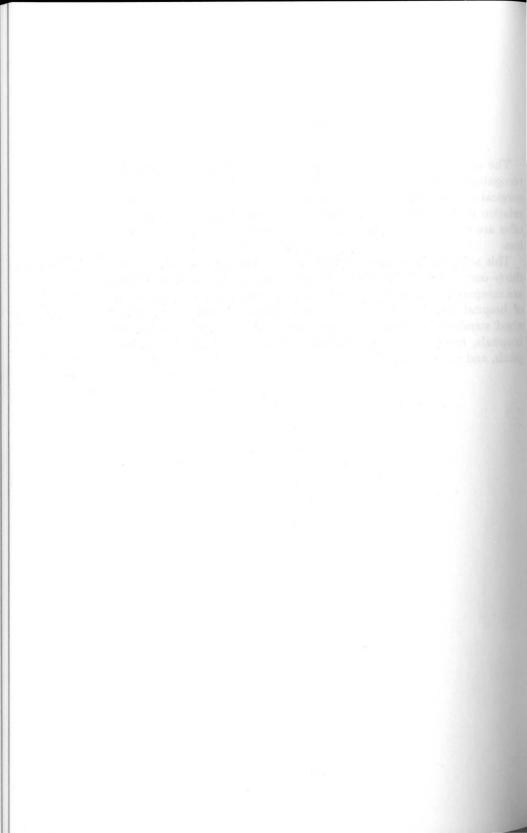
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Introduction

The modern hospital, properly equipped and well staffed, is generally recognized as the organization which is the key facility for specialized surgical and medical care. The number and distribution of hospitals in relation to the population, their bed capacity, and the services which they offer are measures of the adequacy of specialized community health services.

This study is designed to analyze hospital facilities and needs in the thirty-one counties of Southern Illinois. Hospitals in Southern Illinois are compared with those in the remainder of the state and the adequacy of hospital facilities and services is judged by comparison with recognized standards for hospital services. The analysis is limited to general hospitals, mental hospitals, tuberculosis hospitals, chronic disease hospitals, and nursing homes.



General Hospitals

Local general hospitals are a basic part of a system of community health services. Ready access to a general hospital is essential for surgical treatment and specialized medical care. The availability of local general hospital services offers special problems in Southern Illinois, an area which is underdeveloped economically and within which the numbers, distribution, and characteristics of the population vary widely among the counties.¹

The general hospital is usually the local next stop for services which cannot be rendered in the offices of the attending physician. More specifically a general hospital has been defined as a hospital which is "organized to render in-patient medical or surgical care of acute illness or injury and for obstetrics, of which not more than 50 per cent of the total patient days during the year are assignable to a special category, such as: chronic, convalescent, and rest; drug and alcoholic, epileptic, mentally deficient, mental, nervous and mental, and tuberculosis." ² In most of Southern Illinois the general hospitals serve small urban service centers and the village and open country populations tributary to them.

The State of Illinois has a total of 267 institutions presently classified as general hospitals. Of these, 48 are located in the southern thirty-one counties and 219 are located in the northern seventy-one counties (Table 1). The 267 general hospitals contain a total of 44,773 beds, of which, 39,103 are classified as suitable beds and 5,670 are classified as unsuitable.³

¹See Ray E. Wakeley, Population Changes and Prospects in Southern Illinois (Carbondale, Illinois: Southern Illinois University, Area Services Bulletin No. 1, 1962).

² Illinois Department of Public Health, *Illinois State Survey and Plan for the Construction of Hospitals and Medical Facilities*, 15th Edition, Revised, 1963. A hospital is defined as ". . . any place devoted primarily to the maintenance and operation of facilities for the diagnosis, treatment, and care of persons admitted for overnight stay or longer in order to obtain medical, including obstetric and nursing, care of illness, disease, injury, infirmity, of deformity."

³ *Ibid.*, p. 7. The classification of hospital beds as suitable or unsuitable refers only to structural condition, and is not meant to imply any evaluation of the staff or patient care of any hospital. In general, unsuitable beds are those in facilities of non-fire-resistant construction, in facilities built over 40 years ago or others found to be in poor physical condition, and in facilities constructed for purposes other than a hospital.

The 48 general hospitals in the thirty-one southern counties contain a total of 4,518 hospital beds; of these, 4,028 or 89 per cent are classified as suitable (Table 1). The 219 general hospitals in the northern seventy-one counties contain a total of 40,260 beds; of these, 35,075 or 87 per cent are classified as suitable. In comparing the number of total beds per 1,000 population for the two areas, we find that Northern Illinois has slightly more suitable beds per 1,000 population (Table 1). The availability of general hospital facilities in terms of beds per 1,000 population is approximately the same for both areas of the state.

Although the availability of general hospital beds is approximately

TABLE 1. GENERAL HOSPITALS AND HOSPITAL BEDS IN ILLINOIS AND SOUTHERN ILLINOIS, 1963.*

	The second second second second		
ITEM	State	Northern 71 Counties	Southern 31 Counties
General hospitals	267	219	48
Total beds	44,773	40,260	4,513
Suitable beds	39,103	35,075	4,028
Unsuitable beds	5,670	5,185	485
Population (est.)*	10,400,000	9,343,700	1,056,300
Beds per 1,000 population	4.31	4.31	4.27
Suitable beds per 1,000 population	3.76	3.75	3.81
Additional suitable beds needed	7,697	6,972	725

^{*} Population estimates are from vital Statistics, State of Illinois, Department of Public Health. Hospital data are from Illinois State Survey and Plan for the Construction of Hospitals and Medical Facilities, 1963. The number of hospitals and hospital beds includes those hospitals and hospital wings under construction during 1963.

the same for Northern and Southern Illinois, both areas fall below the standard of 4.5 beds per 1,000 population used in the Hill-Burton construction program for general hospitals. Using the estimated populations for July 1, 1963, Illinois needs 2,027 general hospital beds to meet the standard. But this analysis of total bed capacity seriously underestimates the need for additional suitable beds. The state needs a total of 7,697 additional suitable beds to meet the standard (Table 1). Of these, 6,972 are needed in Northern Illinois and 725 in Southern Illinois. The number of suitable general hospital beds needed in Southern Illinois is three times as large as the number indicated by the analysis of total beds.

Southern Illinois has a large number of general hospitals in relation to the size of its population. General hospitals in Southern Illinois are small. The average number of total beds per hospital is 94 in Southern Illinois and 184 in the northern seventy-one counties. Small hospitals are a reflection of the relatively small community centers which pre-

⁴ Ibid., p. 225.

dominate the area. More and smaller hospitals make hospital service more available to the dispersed, essentially rural population, but the facilities and services of small hospitals are less complete and less highly specialized.

LOCATION OF GENERAL HOSPITALS

General hospitals are widely distributed in Southern Illinois (Fig. 1). However, an analysis by counties and by size of centers in which the hospitals are located, indicates wide variations in the degree to which localities are meeting the standard for suitable general hospital beds.

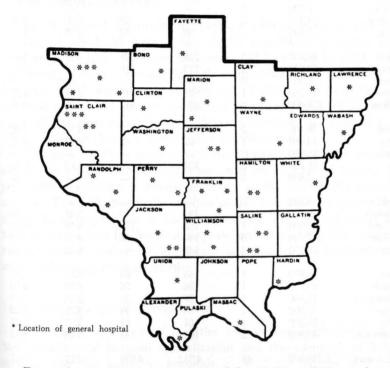


Figure 1. Approximate Location of the 48 General Hospitals in Southern Illinois

Six counties in Southern Illinois exceed the standard of 4.5 suitable general hospital beds per 1,000 population (Table 2). These counties are Richland, Perry, Hardin, Randolph, Wayne, and Fayette. Richland County ranks highest with 9.56 suitable beds per 1,000 population. The other twenty-five counties fail to meet the standard. Six counties do not have a general hospital. The two metropolitan counties, Madison and

TABLE 2. GENERAL HOSPITALS AND HOSPITAL BEDS IN SOUTHERN ILLINOIS, BY COUNTY, 1963.

County	ESTIMATED POPULATION	Number of Hospitals	Total Beds	Suitable Beds		DS PER
	(7–1–63)	HOSPITALS	BEDS	BEDS	TOTAL	SUITABLE
Alexander	14,700	1	120	50	8.16	3.40
Bond	13,900	1	38	38	2.73	2.73
Clay	15,100	1	52	52	3.44	3.44
Clinton	24,400	1	41		1.68	TSV:TV
Edwards	7,400	0	- 	- why)	-	dons-
Fayette	20,700	1	103	103	4.98	4.98
Franklin	35,600	3	199	125	5.59	3.51
Gallatin	6,900	0	-	_	-	_
Hamilton	9,200	2	46	32	5.00	3.48
Hardin	5,400	1	30	30	5.55	5.55
Jackson	44,400	3	218	198	4.91	4.46
Jefferson	30,700	2	173	118	5.64	3.84
Iohnson	6,300	0			-	_
Lawrence	17,700	1	71	71	4.01	4.01
Madison	238,600	6	954	917	4.00	3.84
Marion	38,100	2	157	115	4.12	3.02
Massac	14,400	1	62	62	4.31	4.31
Monroe	15,900	0	_	_		1
Perry	18,100	2	124	124	6.85	6.85
Pope	3,600	0		_		-
Pulaski	9,400	0	_			conservation and the second
Randolph	29,100	3	159	159	5.46	5.46
Richland	15,900	1	152	152	9.56	9.56
St. Clair	272,700	5	1,194	1,164	4.38	4.27
Saline	23,500	4	142	66	6.04	2.81
Union	16,800	1	64	64	3.81	3.81
Wabash	13,700	1	56	56	4.09	4.09
Washington	13,100	1	36	36	2.75	2.75
Wayne	18,000	1	94	94	5.22	5.22
White	18,200	1	61	61	3.35	3.35
Williamson	44,800	2	167	141	3.73	3.15
31 Counties	1,056,300	48	4,513	4,028	4.27	3.81

St. Clair, are among those which do not meet the standard, although St. Clair is near standard, as are Jackson, Lawrence, Massac, and Wabash counties.

General hospitals are comparatively well distributed in relation to the population of the counties in Southern Illinois. In the southernmost seven counties, there are four hospitals to serve a population of 86,000 persons. Numerically, four hospitals are sufficient, but adequate general hospital care is in jeopardy when substandard bed capacity is accompanied by unusually long distances to travel over poor roads to reach a hospital.

SIZE OF HOSPITAL CENTERS

The 48 general hospitals in Southern Illinois were located in 38 centers, of which 35 were urban (2,500 population or more) and 3 were rural in 1960. Of these 38 centers, 30 have one hospital, 6 have two hospitals, and 2 centers have three hospitals each. No center with less than 1,500 population has a hospital (Table 3). Twenty-nine or 60 per cent of the 48 hospitals are located in urban places which had less than 10,000 population in 1960. Sixteen hospitals are located in the twelve cities which had populations of 10,000 or more.

All groups of urban centers have more suitable beds than the standard of 4.5 beds per 1,000 population, and the number of suitable beds per 1,000 population increases generally as the size of the center increases (Table 3). But half a million people live either in centers which do not have hospitals or in the open country. These people must travel to hospital centers for hospital services, and it is they who reduce the ratio of suitable beds per 1,000 population to below the standard recommended for adequate bed facilities.

FACILITIES AND SERVICES AVAILABLE

The number and kinds of facilities and services available are important measures of hospital specialization and the adequacy of hospital services. On this basis the hospitals in Southern Illinois vary widely (Table 4 and Table 5). Of the 44 general hospitals for which records were available, each has a clinical laboratory and diagnostic X-ray service. Ninety per cent or more also have electrocardiography, emergency room, operating room, and obstetrical delivery room. Three-fourths of the general hospitals have blood banks and an organized hospital auxiliary. These eight services are the ones generally available. At the more specialized end of the scale, less than 10 of the 44 general hospitals offer electroencephalography, premature nursery, out-patient department, psychiatric in-patient care unit, cobalt and radium therapy,

TABLE 3. GENERAL HOSPITALS AND HOSPITAL BEDS IN SOUTHERN ILLINOIS BY SIZE OF PLACE

Population of	Centers		Number of		Beds per	SUITABLE	Beds per 1,000 Population	
Center—1960	Number	Population	Population Hospitals Beds Hospitals	HOSPITALS	Beds	Total	Suitable	
Less than 1,500	197	94,566	3 3 4 1 8			_		_
1,500-2,499	28	53,919	3	145	48	104	2.7	1.9
2,500-4,999	25	87,337	12	609	51	510	7.0	5.8
5,000-9,999	21	155,494	17	1,263	74	1,060	8.1	6.8
10,000-24,999	8	109,923	7	602	86	527	5.5	4.8
25,000 and over	4	202,096	9	1,894	210	1,827	9.4	9.0
Total	283	707,335	48	4,513	94	4,028	6.4	5.7
Open Country		347,661	_	-		_	3	_
Total Area	283	1,054,996	48	4,513	94	4,028	4.3	3.8

or rehabilitation unit. Occupational therapy department, intensive care unit, home care program, medical social service department, contract dietary or housekeeping service was not listed for any of the hospitals.

Strengths and weaknesses of the facilities and services of general hospitals in Southern Illinois can be seen by comparing them with others in the United States (Table 6). Comparative strength is indicated by the higher proportion reporting blood bank, chest X-ray on admission, organized hospital auxiliary, pathology laboratory, pharmacy, chapel or prayer room, therapeutic X-ray, and dental facilities. Significant weakness was indicated by the smaller number of general hospitals in Southern Illinois which reported premature nursery, outpatient department, electroencephalography, medical social service department, intensive care unit, physical therapy department, and psychiatric care unit. Three of these seven services were not reported for any general hospital in Southern Illinois.

The number of general hospital facilities and services is related to both the number of beds in the hospital and the population of the center in which the hospital is located. The larger the population of the center and the larger the number of beds, the larger is the number of facilities and services offered by the hospital (Fig. 2). But the number of facilities and services increases more slowly with size of the center than it does with the size of the hospital. Occasionally there is a smaller center which offers an above average number of facilities, and occasionally a poorly equipped hospital may be located in a large center. These situations increase the average number of facilities and services for hospitals in small centers and decrease the average for hospitals located in large centers. The number of facilities and services increases more rapidly and more regularly by size of hospital than by size of center in which the hospital is located. The number of services increases from 9.3 for hospitals with fewer than 50 beds to 17.3 for hospitals with more than 200 beds. This is more than twice the range of difference between hospitals located in rural centers and those located in cities of 25,000 to 100,000 population. Data for general hospitals in Southern Illinois indicate a tendency for a smaller rate of increase in facilities and services for hospitals which have 200 or more beds.

PROBLEMS REPORTED BY HOSPITAL EXECUTIVES

While general hospital beds are as available in Southern Illinois as they are in the rest of the state, the physicians needed to effectively man the hospitals often are not. Answers to a questionnaire sent to general hospital executives in 1963 indicate that more than half (55 per cent) find it difficult to obtain enough competent physicians to complete their staff. This is not surprising and there is little doubt that the shortage

TABLE 4. FACILITIES AND SERVICES AVAILABLE IN 44 NON-FEDERAL GENERAL HOSPITALS BY SIZE OF PLACE AND NUMBER OF SERVICES, SOUTHERN ILLINOIS, 1962.*

FACILITIES AND SERVICES	1,500– 2,499	2,500– 4,999	5,000– 9,999	10,000– 24,999	25,000 and Over	Total Services
Blood bank	2	3	14	5	9	33
Clinical laboratory	3	8	17	7	9	44
Pathology laboratory	2	2	8	5	8	25
Electrocardiography	2 3	8	16	6	9	42
Electroencephalography	0	0	1	0	1	2
Dental facilities	1	2	5	2	6	16
Pharmacy	2	2	7	5	9	25
Occupational therapy	0	0	0	0	0	0
Physical therapy department	2	1	4	2	8	17
Premature nursery	0	1	1	0	2	4
Intensive care unit	0	0	0	0	0	0
Outpatient department	0	2	2	2	1	7
Emergency room	3	8	17	7	8	43
Home care program	0	0	0	0	0	0
Operating room	3	8	16	7	8	42
Obstetrical delivery room	3	8	15	7	8	41
Post operative recovery room	2	3	12	4	7	28
Medical social service department	0	0	0	0	0	0
X-Ray, diagnostic	3	8	17	7	9	44
X-Ray, therapeutic	1	1	7	4	7	20
Chest X-ray on admission	1	4	8	5	4	22
Radioactive isotope facility	0	1	1	3	6	11
Organized hospital auxiliary	1	6	13	3	9	32
Chapel or prayer room	2	2	6	3	7	20
Psychiatric inpatient care unit	0	0	0	0	2	2
Cobalt and radium therapy	0	0	4	2	3	9
Rehabilitation unit	0	0	0	0	1	1
Contract laundry service	0	3	4	3	2	12
Contract dietary service	0	0	0	0	0	0
Contract housekeeping service	0	0	0	0	0	0
Total facilities	33	80	190	89	142	542
Hospitals in group	3	8 *	17	7	9	44
Facilities available per hospital	11.0	10.0	11.2	12.7	15.8	12.3

^{*} The facilities for two hospitals located in cities in the 2,500 to 4,999 population group were not given. They, therefore, are not included in this table. Also, there are two hospitals listed in the 1963 State Survey and Plan in cities of 2,500 to 4,999 which were not included in the 1963 Guide of Hospitals.

TABLE 5. FACILITIES AND SERVICES AVAILABLE IN 44 NON-FEDERAL GENERAL HOSPITALS, BY NUMBER OF BEDS, SOUTHERN ILLINOIS, 1962.*

		Num	BER OF BE	EDS		TOTAL
Facilities and Services	Under 50	50-99	100–149	150–199	200 & Over	Hospitals With Services
Blood bank	6	12	7	5	3	33
Clinical laboratory	13	15	8	5	3	44
Pathology laboratory	3	8	7	4	3	25
Electrocardiography	13	13	8	5	3	42
Electroencephalography	0	0	1	0	1	2
Dental facilities	2	4	4	4	2	16
Pharmacy	4	8	5	5	3	25
Occupational therapy dept.	Ô	0	0	0	0	0
Physician therapy dept.	1	5	3	5	3	17
Premature nursery	0	0	2	1	1	4
Intensive care unit	0	0	0	0	0	0
Outpatient department	4	1	1	1	0	7
Emergency room	13	15	7	5	3	43
Home care program	0	0	0	0	0	0
Operating room	12	15	7	5	3	42
Obstetrical delivery room	11	15	7	5	3	41
Post operative recovery room	4	11	6	4	3	28
Medical social service dept.	0	0	0	0	0	0
X-ray, diagnostic	13	15	8	5	3	44
X-ray, therapeutic	0	6	7	4	3	20
Chest X-ray, on admission	5	8	5	3	1	22
Radioactive isotope facility	0	1	4	4	2	11
Organized hospital auxiliary	8	10	6	5	3	32
Chapel or prayer room	2	6	6	3	3	20
Psychiatric inpatient care unit		0	0	1	1	2
Cobalt & radium therapy	0	3	3	2	1	9
Rehabilitation unit	0	0	0	0	1	1
Contract laundry service	7	2	1	2	0	12
Contract dietary service	Ö	0	0	0	0	0
Contract housekeeping service	0	0	0	0	0	0
Total facilities	121	173	113	83	52	542
Hospitals in group	13	15	8	5	3	44
Average no. of facilities available per hospital	9.3	11.5	14.1	16.6 1	7.3	12.3

 $^{^{*}}$ The other hospitals were not listed in the Guide Issue of Hospitals. These are also hospitals with less than 50 beds.

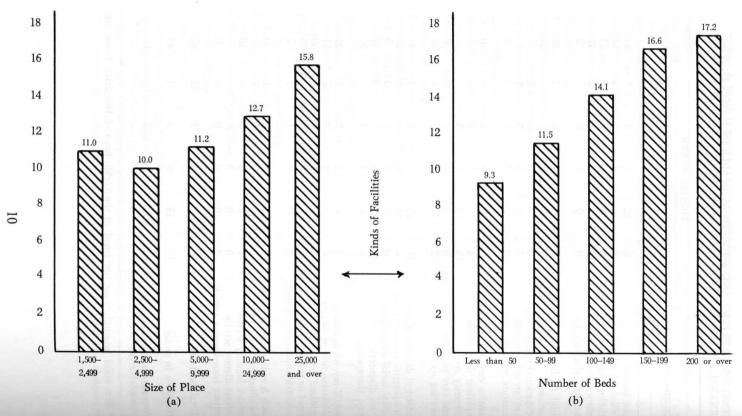


Figure 2. Facilities and Services Available Per Hospital by Size of Place and by Size of Hospital in Southern Illinois

TABLE 6. NON-FEDERAL, SHORT-TERM STAY, GENERAL AND OTHER SPECIAL HOSPITALS WITH SELECTED FACILITIES AND SERVICES, UNITED STATES AND SOUTHERN ILLINOIS, 1962.*

mico ni piositià istroro part	Perc	CENTAGE
FACILITIES	United States	Southern Illinois
Operating room	97.6	95.5
X-ray, diagnostic	97.6	100.0
Clinical laboratory	96.6	100.0
Electrocardiography	94.6	95.5
Emergency department	93.6	97.7
Delivery room	90.1	93.2
Organized hospital auxiliary	64.5	72.7
Post-operative recovery room	59.4	63.6
Premature nursery	57.9	9.1
Blood bank	56.1	75.0
Pathology laboratory	51.4	56.8
Pharmacy	51.2	56.8
Physical therapy department	44.3	38.6
Outpatient department	40.8	15.9
Chapel or prayer room	38.5	45.5
X-ray, therapeutic	36.2	45.5
X-ray, on admission (chest)	34.5	50.0
Dental facilities	28.9	36.4
Radioactive isotope	24.8	25.0
Cobalt and radium therapy	17.0	20.5
Electroencephalography	16.9	4.5
Medical social service department	15.1	0.0
Intensive care unit	15.1	0.0
Psychiatric care unit	10.8	4.5
Occupational therapy department	9.3	0.0
Rehabilitation unit	6.5	2.3
Home care program	3.8	0.0

^{*} The Southern Illinois figures include only the 44 non-federal, general short-term stay hospitals for which we have information on facilities and services.

of hospital personnel results in part from the general shortage of physicians in Southern Illinois.⁵

Executives report that adequate nursing personnel also is difficult to obtain. More than two thirds (71 per cent) reported difficulty in maintaining an adequate supply of nursing personnel.

Few hospitals in Southern Illinois report a cooperative relationship with any nursing home for extending supervision or for providing an intermediate stage of recovery on the patient's way home. Of the 44 hospitals returning questionnaires, only 5 (11.4 per cent) report a relationship with a nursing home for extending supervision and cooperation, and only 3 (6.8 per cent) have a relationship with a nursing home to provide an intermediate stage of recovery on the patient's way home. In general, there seems to be very little coordination of hospital and nursing home services. Neither do the hospitals tend to provide a visiting nurse for patient follow-up. Only one of the 44 hospitals returning questionnaires provides such a nursing service. One other hospital is planning to employ a visiting nurse and two others are considering such a plan.

Increase in the number of hospital patients over 65 years of age is reported by nearly two-thirds (64 per cent) of the hospital executives. This increase is to be expected as a result of the increasing number of older persons in the population of Southern Illinois and the state.⁶ More than four-fifths (82 per cent) of the hospital executives report that patients over 65 years of age stay longer than other adult patients.

Half of the hospital executives (52 per cent) report present hospital facilities and services adequate to meet present demands for hospital services in their county. However, nearly all (96 per cent) report that the demand for general hospital services is increasing. Current population changes, improvement in medical services, and increasing dependence on hospital services indicate the demand for general hospital services will continue to increase.

⁵Ray E. Wakeley, C. E. Lively, and Bert Kellerman, *Number, Distribution, and Age of Physicians in Southern Illinois* (Carbondale, Illinois, Southern Illinois University, Area Services Bulletin No. 4, 1964).

⁶ The proportion of persons over 65 years of age in Southern Illinois increased from 9.8 per cent in 1950 to 11.5 per cent in 1960. The increase for the state was from 8.7 per cent to 9.7 per cent during the same 10-year period.

Special Hospital Facilities

Needs for more highly specialized types of hospital care have recently received increased emphasis in Illinois. Treatment and care of patients with tuberculosis received concentrated attention earlier with the result that tuberculosis appears to be sufficiently under control to insure adequate treatment with present facilities. Facilities for treatment and care of the mentally ill and those with chronic illness have been increased but

TABLE 7. LONG-TERM MENTAL HOSPITAL BEDS IN SOUTHERN ILLINOIS, NORTHERN ILLINOIS, AND THE STATE, 1963.

Ітем	State	Northern 71 Counties	Southern 31 Counties
Estimated population (7–1–63)	10,400,000	9,343,700	1,056,300
Total beds at present	29,107	26,006	3,101
Suitable beds at present	22,218	19,502	2,716
Total beds per 1,000 population	2.80	2.78	2.94
Suitable beds per 1,000 population	2.14	2.09	2.57
Additional beds needed	24,582	22,545	2,037

are generally below recommended standards of adequacy. The current situation will be analyzed for Southern Illinois in relation to recommended standards and compared briefly with the rest of the state.

MENTAL HOSPITALS

Two types of hospitals are needed to care for the mentally ill. One of these is the State-owned, long-term-care hospital; the other is the locally-operated, short-term-care psychiatric hospital or psychiatric unit of a general hospital. Short-term psychiatric units, in close proximity to the patients' homes, are needed for the early diagnosis and treatment of mental illness. Long-term-care hospitals play the major role in the care and treatment of the mentally ill. Public Health Service standards indicate that the number of beds needed to provide adequate hospital facilities for mental patients is 5.0 per 1,000 population. The standard for short-term psychiatric beds is 0.5 per 1,000 population.

⁷ Ibid., p. 19.

TABLE 8. SHORT-TERM PSYCHIATRIC BEDS IN SOUTHERN ILLINOIS, NORTHERN ILLINOIS, AND THE STATE, 1963.

Ітем	State	Northern Illinois	Southern Illinois
Estimated population (7–1–63)	10,400,000	9,343,700	1,056,300
Total beds	1,073	1,073	0
Total beds per 1,000 population	0.10	0.11	0.00
Suitable beds	1,043	1,043	0
Suitable beds per 1,000 population	0.10	0.11	0.00
Additional beds needed	4,157	3,629	528

Long-Term Mental Care Hospital Beds. The State of Illinois has a total of 29,107 hospital beds for the treatment of mental illness located in the state-owned institutions. Of these 29,107 beds, 3,101 beds are located in the southern thirty-one counties and 26,006 beds in the northern seventy-one counties (Table 7). The number of suitable long-term mental care hospital beds needed is set at 4.5 per 1,000 population. Both Northern and Southern Illinois fall considerably below this level in both suitable and total beds available. The southern thirty-one counties are slightly better-off than the northern seventy-one counties

TABLE 9. CHRONIC DISEASE BEDS IN SOUTHERN ILLINOIS, NORTHERN ILLINOIS, AND THE STATE AS A WHOLE, 1963.

State	Northern 71 Counties	Southern 31 Counties
10,400,000	9,343,700	1,056,300
3,748	3,692	56
0.36	0.40	0.05
3,601	3,567	34
0.35	0.38	0.03
17,199	15,120	2,079
	10,400,000 3,748 0.36 3,601 0.35	10,400,000 9,343,700 3,748 3,692 0.36 0.40 3,601 3,567 0.35 0.38

when it comes to the number of beds available. Both areas, however, are in need of more long-term mental care beds. To raise the number of suitable beds to the standard of 4.5 beds per 1,000 population, 24,582 suitable beds are needed in the State. Of these, 22,545 are needed in the northern seventy-one counties and 2,037 in the southern thirty-one counties. The additional number of suitable beds needed in Southern Illinois is 75 per cent as large as the present number of suitable beds available.

New facilities now under way for the state include a total of 4,878 new beds of which 508 are replacements. Of these, 116 additional beds are at Alton State Hospital and 300 are at Anna State Hospital. A new 750-bed institution at Centralia will serve the mentally retarded with

both in-patient and out-patient services. A new 300-bed institution, located in Harrisburg will provide in-patient care and out-patient services for the mentally retarded. It is proposed that it will have a program in research and training developed in conjunction with Southern Illinois University.⁸ These new constructions and improvements will be helpful in increasing the number of long-term mental care hospital beds needed to meet the recommended standard for the state.

Short-Term Psychiatric Care Beds. Psychiatric units are needed in suitable general hospitals throughout the state to provide, in close prox-

TABLE 10. POPULATION 65 YEARS OF AGE OR OLDER, NORTHERN ILLINOIS, SOUTHERN ILLINOIS, AND STATE, 1950 AND 1960

ITEMS	State	Northern 71 Counties	Southern 31 Counties
1950 Population	8,712,176	7,702,391	1,009,785
Number 65 or older	754,301	655,414	98,887
Percentage 65 or older	8.7	8.5	9.8
1960 Population	10,081,158	9,026,162	1,054,996
Number 65 or older	974,923	854,113	120,810
Percentage 65 or older	9.7	9.5	11.5

imity to the patient's home, early diagnosis and treatment for mental illness. There are 1,073 short-term psychiatric beds in Illinois. None of these beds are located in Southern Illinois (Table 8). The standard for short-term psychiatric beds is 0.5 beds per 1,000 population. To meet this standard, 4,157 additional suitable beds are needed, of which 3,629 are needed in Northern Illinois and 528 in Southern Illinois.

TUBERCULOSIS HOSPITALS

Presently, 24 institutions in Illinois are classified as tuberculosis hospitals. The reported total number of beds for patients with tuberculosis is 3,553. The number of suitable beds is 2,957, of which 340 are in Southern Illinois. This approximates the recommended standard which is 0.3 suitable beds per 1,000 population.

The percentage of occupancy for tuberculosis beds was reported as 66.7 per cent of bed capacity in 1962. In view of the low occupancy in the existing tuberculosis hospitals, and in consideration of the decreasing need for hospital beds in the treatment of tuberculosis because of drug therapy, thoracic surgery, and other factors, and because it is known that several of the existing institutions have additional bed capacity which is not in use or is used for other purposes, no additional tuberculosis

⁸ Illinois Department of Public Health, Illinois State Survey and Plan for the Construction of Hospitals and Medical Facilities, 15th edition, revised, 1963.

hospital facilities appear to be needed in the state of Illinois in the immediate future.9

CHRONIC DISEASE HOSPITALS

Chronic disease hospitals are a comparatively new development in the hospital field and their functions are not so well understood. A chronic disease hospital is one for the treatment of chronic illness, including the degenerative diseases, in which treatment and care are administered by, or under the direction of, persons licensed to practice medicine or surgery in the State. The term does not include hospitals primarily for the care of the mentally ill or tuberculosis patients, nursing homes and institutions, the primary purpose of which is domiciliary care. Chronic disease hospitals may be for the diagnosis, treatment, and care of a single chronic illness or of several chronic illnesses. The facility may be a separate hospital or it may be a specialized unit and service of an adequate general hospital.¹⁰

Chronic disease beds are in short supply in Illinois. The state has a total of 3,748 chronic disease beds of which 56 are in Southern Illinois; and only 34 of the 56 are suitable (Table 9). The standard for chronic disease beds is 2.0 per 1,000 population. On this basis, 17,199 additional beds are needed in the State, and 2,079 of them are needed in Southern Illinois. The severe shortage of beds for the care and treatment of chronic disease patients is further emphasized by the inability of the general hospitals to care for them and by the larger proportion of the population in Southern Illinois which is 65 years old or older (Table 10). This older segment of the population of Southern Illinois was approximately one and one-half times as large as the population of East St. Louis in 1960. From 1950 to 1960 the population over 65 years of age in Southern Illinois increased 22,000 persons which is larger than the total population of Carbondale. It is these older people who contribute most to the need for chronic hospital care and treatment.

⁹ Ibid.

¹⁰ Ibid., p. 31.

Nursing Homes

A nursing home is not a hospital, but is a highly valued adjunct to adequate hospital service. A nursing home is a facility which is operated in conjunction with a hospital, or in which nursing care and medical

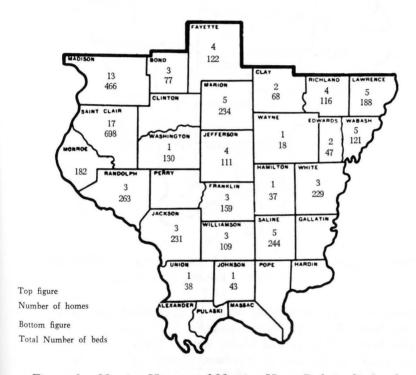


Figure 3. Nursing Homes and Nursing Home Beds in the Southern 31 Counties of Illinois, 1963

services are prescribed by or performed under the general direction of persons licensed to practice medicine or surgery in the State. It is for the accommodation of convalescents or other persons who are not acutely ill and not in need of hospital care, but who do require skilled nursing care and related medical services. The term "nursing home" shall be

restricted to those facilities, the purpose of which is to provide skilled nursing care and related medical services for a period of not less than 24 hours per day.¹¹ Included in the total number of nursing homes are nursing homes licensed by the Illinois Department of Public Health and infirmaries in institutions licensed as homes for the aged by the Illinois

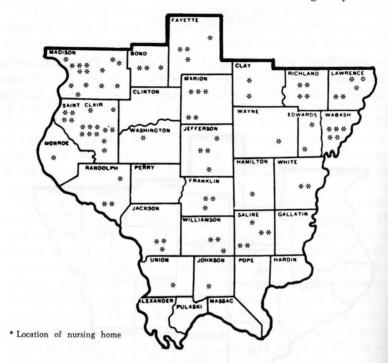


Figure 4. Approximate Location of Nursing Homes in the Southern 31 Counties of Illinois, 1963.

Department of Public Health. Many facilities which are operating as nursing homes do not qualify under the definition given.

The State of Illinois had 32,501 nursing home beds in 1963.¹² Of these, 28,570 are located in Northern Illinois and 3,931 in Southern Illinois (Table 11). This is a sufficient total number to meet the standard of 3.00 nursing home beds per 1,000 population. But only 13,594 of the nursing home beds were classed as suitable: 11,958 in Northern, and 1,636 in Southern Illinois. This classification indicates that many of the nursing homes are old, poorly constructed, and in need of physical improvements. Much improvement is needed in the nursing homes

¹¹ Ibid., p. 45.

¹² Listed by the 1963 Illinois State Survey and Plan for the Construction of Hospital and Medical Facilities.

TABLE 11. NURSING HOME BEDS IN SOUTHERN ILLINOIS, NORTHERN ILLINOIS, AND THE STATE, 1963.

ITEMS	STATE	Northern 71 Counties	Southern 31 Counties
Estimated population (7–1–63)	10,400,000	9,343,700	1,056,300
Total number of beds	32,501	28,570	3,931
Total beds Per 1,000 population	3.13	3.06	3.72
Number of suitable beds	13,594	11,958	1,636
Suitable beds Per 1,000 population	1.31	1.28	1.55
Additional beds needed	17,606	16,073	1,533

of the State. To meet the recommended standard, 17,606 additional suitable nursing home beds are needed: 16,073 in Northern Illinois, and 1,533 in Southern Illinois. The stated need in Southern Illinois is conservative because the proportion of persons over 65 years of age is larger and is increasing more rapidly in the Southern thirty-one counties (Table 10).

The 90 nursing homes in Southern Illinois are located in twenty-three counties (Fig. 4). Eight counties, with a total population of 101,631 in



Figure 5. Approximate Location of Nursing Homes with Suitable Beds in the Southern 31 Counties of Illinois, 1963

TABLE 12. NURSING HOME BEDS PER THOUSAND POPULATION FOR THE SOUTHERN 31 COUNTIES OF ILLINOIS, 1963.

County	TOTAL BEDS	SUITABLE BEDS	
Alexander	_	_	
Bond	5.54		
Clay	4.50	_	
Clinton		_	
Edwards	6.35	- 1	
Fayette	5.89	1.64	
Franklin	4.47	2.78	
Gallatin	_	_	
Hamilton	4.02		
Hardin	_	- 4	
Jackson	5.20	2.93	
Jefferson	3.62		
Johnson	6.83	6.83	
Lawrence	10.62	6.67	
Madison	1.95	.54	
Marion	6.14	2.57	
Massac	_		
Monroe	11.45	11.45	
Perry	_	_	
Pope	_	-	
Pulaski		_	
Randolph	9.04	6.87	
Richland	7.30		
St. Clair	2.56	1.25	
Saline	.10.38	7.49	
Union	2.26	_	
Wabash	9.24	_	
Washington	9.92	_	
Wayne	1.00	4.67	
White	12.58	4.67	
Williamson	2.43	-	
Total 31 Counties	3.72	1.55	

1960, do not have a nursing home. The standard number of suitable nursing home beds would be 305 for a population of that size. Of the 90 nursing homes, 73 homes have no beds classified as suitable. The 17 nursing homes with suitable beds are located in twelve of the thirty-one counties (Fig. 5). Only six of the twelve counties which have one or more nursing homes with suitable beds meet or exceed the standard of 3 suitable nursing home beds per 1,000 population (Table 12). The total number of suitable nursing home beds in Southern Illinois is slightly more than half the number necessary to attain the standard recommended.

Summary

Illinois needs 71,404 suitable new hospital and nursing home beds to serve the present population of the state. This conclusion is inescapable when hospital, nursing home, and population reports for 1963 are analyzed and the available number of suitable hospital and nursing home beds is compared to the standards recommended by the State Department of Health. Illinois has a total of 82,234 hospital beds available to meet the standard of 122,720 suitable beds; but of the 82,234 available beds, only 68,922 are classified as suitable. This indicates than an additional 53,798 suitable new hospital beds are needed to serve the present population of the state (Table 13). Nursing home beds are in relatively greater supply, a total of 32,501 being reported in 1963. But only 13,594 of the total are classified as suitable. As a result 17,606 suitable nursing home beds need to be provided.

Hospital and nursing home beds are generally as available in the southern thirty-one counties as they are in the rest of the state. Hospitals in Southern Illinois reported 8,057 total available beds, of which 7,118 were classified as suitable. Consequently, 5,392 additional suitable beds are needed to meet the standard of 12,464 suitable beds. The nursing home situation is more favorable in Southern Illinois where 3,931 total beds are available, 1,636 are classified as suitable, with 1,533 additional suitable beds needed to meet the standard of 3,169 for the area (Table 13).

The number of suitable new hospital beds recommended for the different major types of hospitals varies greatly. The largest numbers recommended are for general hospitals and for long-term mental hospitals which together include 76 per cent of the total recommended number of hospital beds. But the present supply of suitable hospital beds also varies greatly, and the general hospitals come nearest to meeting the standard (Table 13). The greatest additional numbers of suitable beds needed to meet the recommended standard are for long-term mental and for chronic disease hospitals which together constitute 78 per cent of the total need for suitable new beds in the state. The present supply of suitable hospital beds for the different types of hospitals in Southern Illinois is similar to the supply for the state with two notable excep-

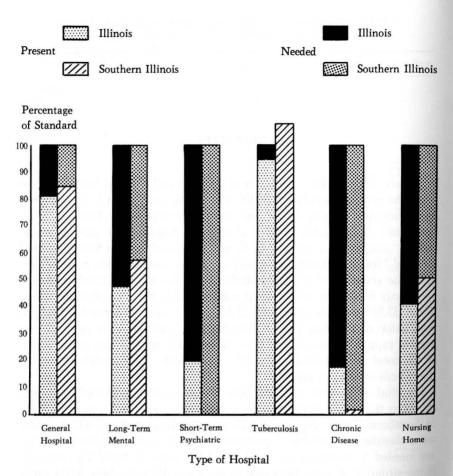


Figure 6. Present Suitable Hospital Beds as a Proportion of the Number Recommended for Illinois and Southern Illinois

PRESENT SUITABLE HOSPITAL BEDS AS A PROPORTION OF THE NUMBER RECOMMENDED FOR ILLINOIS AND SOUTHERN ILLINOIS.

Type of Hospital	Proportion of Recommended Which is Present		
	Illinois	Southern Illinois	
General hospital	83.6	84.7	
Long-term mental	47.5	57.1	
Short-term psychiatric	20.1	0.0	
Tuberculosis	94.8	107.3	
Chronic disease	17.3	1.6	
Nursing home	43.6	51.6	

TABLE 13. HOSPITAL AND NURSING HOME BEDS IN ILLINOIS AND SOUTHERN ILLINOIS, BY TYPE OF FACILITY, 1963.

State of Illinois				
Kind of Hospital or Facility	Total Beds		SUITABLE BEDS	
	Present	Recommended	Present	Needed
General hospital	44,773	46,800	39,103	7,697
Long-term mental	29,107	46,800	22,218	24,582
Short-term psychiatric	1,073	5,200	1,043	4,157
Tuberculosis	3,533	3,120	2,957	163
Chronic disease	3,748	20,800	3,601	17,199
Total hospital	82,234	122,720	68,922	53,798
Nursing home	32,501	31,200	13,594	17,606
Total	114,735	153,920	82,516	71,404
bro. shoopsel six	Southern Il	linois (31 counties)	el denoma 3	0.000.000
General hospital	4,513	4,753	4,028	725
Long-term mental	3,101	4,753	2,716	2,037
Short-term psychiatric	- i -	528		528
Tuberculosis	387	317	340	23*
Chronic disease	56	2,113	34	2,079
Total hospital	8,057	12,464	7,118	5,392
Nursing home	3,931	3,169	1,636	1,533
Total	11,988	15,633	8,754	6,925

^{*} Excess above standard

tions. Southern Illinois has no suitable short-term psychiatric hospital beds and only 34 suitable chronic disease hospital beds (Fig. 6).

Special services offered by general hospitals in Southern Illinois show elements both of strength and weakness. Services which are more generally available are accompanied by services which are less generally available or absent (Table 4 and Table 5). Six services which are judged to be important were not offered by any of the 44 hospitals which reported. Deficiencies are noted both on the basis of Illinois standards and by comparison with facilities and services offered by general hospitals in the United States (Table 6). Seven services which were above the national average were balanced out by seven services which were comparatively weak.

Conclusions and Discussion

Hospitals and hospital services cannot be considered satisfactory in Southern Illinois when judged by current professional standards. Serious deficiencies in bed capacity, facilities, and services are shown in some detail. New developments under way are a step, but only a step, toward meeting current needs. It appears that Southern Illinois has a sufficient number of general hospitals, too many tuberculosis hospitals, and too many nursing homes. But too many of these do not meet professional standards and the need is to greatly improve such facilities as are now available or replace them with new ones. The greatest need for long-term mental hospitals, short-term psychiatric hospitals, and chronic disease hospitals is for more new facilities which are needed to overcome present deficiencies. Essential as they are, adequate provision of hospital facilities is not enough. Hospitals may have adequate facilities but hospital service in Southern Illinois cannot be considered adequate until the needs for medical, surgical, and nursing services are more fully met.

Southern Illinois needs an area hospital to serve the need for more specialized hospital services of the more densely populated central counties. No one of these counties has a population large enough to justify an area hospital, but 4 to 6 contiguous counties together have between 150,000 and 200,000 population and no specialized area hospital service. These counties are coming to act together for special purposes and could easily support a local area hospital which would meet the

needs for highly specialized services in the central area.

The nursing home situation in Southern Illinois is not good in spite of the relatively large total number of beds available. Nursing homes are a residual category in the health field which is increasingly called upon to give care for which many of them are not equipped and for which they are generally poorly paid. Under present conditions the services given and the costs are considered unsatisfactory by a large number of potential users. Pressures on nursing homes are felt both for boarding home care and for chronic disease care and for care of older persons, many of whom need hospital care of a type not presently available. Pressure to cheapen nursing home services is exerted by public care agencies which tend to limit payments to a minimum standard for boarding home care. The net result of such pressures is to make it im-

possible for a nursing home to serve the entire range of indicated needs. A reasonable solution will depend upon a sharper distinction between boarding homes and nursing homes and upon more adequate recognition and enforcement of nursing home standards in line with the professional definition of a nursing home. It should be remembered that the number of suitable nursing home beds needed is predicated upon professional nursing home standards and does not include boarding homes.

Special conditions are present in Southern Illinois, some of which indicate increased needs for hospital facilities and services while other conditions make it more difficult to meet the needs. Southern Illinois has more than an average proportion of needy persons over 65 years of age and it also needs increased hospital and medical services to serve its rapidly developing tourist and vacation trade. Serving the area is a relatively large number of small hospitals which offer a smaller than average number of services with limited facilities. Furthermore, counties in Southern Illinois are small and some of them hesitate to assume the responsibility for hospital construction and maintenance. These conditions need neither prevent nor seriously handicap the development of adequate hospital and medical facilities. Facilities which are present and those which are needed are described in great detail in the *Illinois State* Survey and Plan for the Construction of Hospital and Medical Facilities, published by the State Department of Health. Priorities have been set so that facilities most needed are indicated and communities which need them most can have priority in attaining them. Generous financial assistance in building and improving hospital facilities is available from present government programs. State and national governments cannot make the first move, they can only assist. The initiative to develop new hospital facilities and services is with the locality concerned. When a responsible organization or agency, either public or private, can meet the necessary conditions, further financial assistance can be obtained to develop the facilities necessary for adequate hospital care and treatment.

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