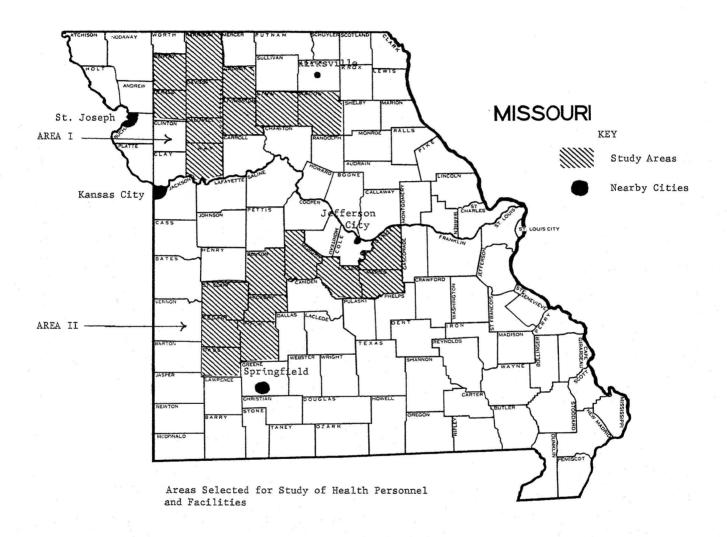
What's happening to RURAL **DOCTORS AND HEALTH FACILITIES** SB 781 **JUNE 1965** UNIVERSITY OF MISSOURI AGRICULTURAL EXPERIMENT STATION **RURAL HEALTH SERIES NO 21**

AREAS WHERE THE STUDY WAS CONDUCTED



This bulletin is a report on Department of Rural Sociology research project 201, "Rural Health"

What's happening to RURAL DOCTORS AND HEALTH FACILITIES

For a number of years, the Department of Rural Sociology has kept track of the health personnel and facilities in a 20 county area of rural Missouri. This provides information on the situation at certain points in time and allows observation of changes that have taken place.

The material presented in this report was gathered in January and February, 1965. Similar information had been collected in 1958 and comparisons are made for these two years. Also, changes that took place between 1958 and 1965 can be compared with those that took place between 1954 and 1958, which were reported in Missouri Agricultural Experiment Station Bulletin 735, July, 1959.

The Study Area

The geographical area which is examined in this report consists of 20 counties. Ten of them are in the northern section of the state (Area I), and ten are south of the Missouri River (Area II). The total population of the area was 216,922 in 1960—about 57 percent in Area I and 43 percent in Area II. The largest town in the area was under 10,000 population; there were ten urban places (2,500 or over)—seven in Area I and three in Area II.

The population of the area had declined about 10 percent from 1950 to 1960. The rates of population loss were about equal for Areas I and II. Only two of the 20 counties showed a population increase.

Characteristic of rural areas, there was a relatively high concentration of older people—18 percent were 65 years old or older, about double the national average.

The population of Area I was somewhat older than that of Area II, but the difference was not great.

Agriculture is the most important industry in both areas, although the importance of recreation is increasing in Area II. The economic level of Area I was higher than that of Area II.

Changes in Personnel

Medical Doctors

In 1958, there were 85 medical doctors in private practice in the area. By 1965 the number had been reduced to 74. Two of the counties were without the services of a medical doctor. The net loss of 11 resulted from the separation of 24 physicians and the addition of 13. Most of the losses occurred from death or retirement of the physician (18) rather than movement from the area (6).

85
24
24 6
13
5
13
74

The pattern of losses and gains for the period 1958-1965 was similar to that for the period 1954-1958, although the rate of net loss diminished somewhat. As in 1958, most of the medical doctors were reported in full-time practice. Age and health were the most important reasons for limiting practice, but two physicians were counted as part-time who devoted part of their time to practicing in the area and the remainder in a place outside the 20 counties.

2 V	1954	1958	1965
Full-time practice	81	76	66
Part-time practice	19	9	8

The age pattern changed somewhat from 1958 in that more of the physicians were in the broad middle category of 36-65 years and fewer were in the age categories under 35 and over 65. While it was noted in the earlier report that several older doctors had taken up practice in the area between 1954 and 1958, this was not the case between 1958 and 1965 when only one such case was observed.

Age of medical doctor	1954	1958	1965
35 or under	16%	16%	11%
36-65	48	58	70
over 65	35	26	19
age not available	1		

Doctors of Osteopathy

In 1958, the number of osteopathic physicians practicing in the area was 82.* The total in 1965 was almost the same and osteopathic doctors outnumbered medical doctors by nine. None of the 20 counties was without an osteopathic doctor.

It might be supposed that osteopathic doctors would be concentrated in the northern counties since this area is close to the important osteopathic training center of Kirksville. This was not the case; in both areas osteopathic doctors outnumbered medical doctors slightly. In the northern area, there were 51 osteopathic doctors and 47 medical doctors; in the southern area, there were 32 osteopathic doctors and 27 medical doctors.

Nineteen osteopathic physicians were lost during the period but 20 were added to maintain the supply. More losses resulted from movement out of the area for osteopaths than was true for medical doctors and fewer losses resulted from death or retirement. This was also the pattern for the previous period.

In Practice, 1958	82	
Separations, 1958-1965	19	
Moved		11
Deceased		6
Retired		2
Additions, 1958-1965	20	
In Practice, 1965	83	

A few more osteopathic physicians were part-time practitioners in the area in 1965 than in 1958. Two of them were part-time in the area because they divided their practice between a place in the area and one outside.

	1958	1965
Full-time practice	79	75
Part-time practice	4	8

Over the decade from 1954 to 1965, the proportion of osteopathic doctors over 65 years of age has increased at the expense of the two younger age categories. In 1954 only 5 percent were over 65; in 1965 16 percent were. In 1965, the age distributions of medical doctors and osteopathic doctors were quite similar. Because of the age structure of osteopaths in the area, it would be expected that in the future more losses would result from death and retirement.

Age of osteopathic docto	r 1954	1958	1965
35 or under	16%	13%	11%
36-65	79	80	73
over 65	5	7	16

Dentists

The number of dentists had declined substantially from 1958 to 1965. Twenty-three separations were counted and 11 additions. Dentists appeared to be the least mobile of the practitioners observed in that only four of the losses resulted from movement out of the area while 19 resulted from death or retirement.

April 1		
In Practice, 1958	77	
Separations, 1958-1965	23	
Moved		4
Deceased		11
Retired		8
Additions, 1958-1965	11	
In Practice, 1965	65	

^{*}There is a discrepancy of 1 in the number of osteopathic doctors recorded for 1958 in the previous report and this one. It results from an error in counting a physician as being present in the area when actually he was outside of it. The error was discovered in 1961 when personal interviews were conducted with the physicians

Fewer dentists were in part-time practice in 1965 than in 1958, but the proportion over 65 years of age remained high. Therefore, we can expect continued losses in dental personnel in the area through death and retirement.

1958	1965
64	58
13	7
1958	1965
13%	15%
65	57
22	28
	64 13 1958 13% 65

Chiropractors

In 1965, thirty-nine chiropractors were reported in practice in the area compared with 36 in 1958.* Only three of the 20 counties did not have a practicing chiropractor. During the period there had been 12 separations and 15 additions. The losses were most common through movement out of the area followed by losses from death and retirement.

In Practice, 1958	36	,
Separations, 1958-1965	12	
Moved		7
Deceased		3
Retired		2
Additions, 1958-1965	15	
In Practice, 1965	39	-

Two of the chiropractors were reported as having parttime practices in 1965 contrasted with six in 1958. A larger proportion were under 35 years of age and a smaller proportion over 65 years of age than was true of the other practitioners considered.

Age of chiropractor	1965	
35 or under	28%	
36-65	69	
over 65	3	

Location Within Area

Size of Place of Practice

Service patterns in rural areas are undergoing changes. One of the most apparent is the concentration of services in fewer centers. At one time almost every town had the services of a physician. Today health practitioners tend to be located in the larger places. This is shown in the tabulation below. Osteopathic doctors were more likely than any of the other practitioners to be found in smaller places. Forty percent of the osteopaths in the 20-county area were in places under 1,000 population compared with 15 percent of the medical doctors, 17 percent of the dentists, and 13 percent of the chiropractors. Many of the osteopaths in the smaller places were younger men in the process of establishing a practice. Medical doctors in the smaller places were more likely to be older men who had practiced in the place for many years.

Location in the Largest Place in the County

Another way of describing the location of practitioners is to determine if they are in the *largest center*

Percentages of Each Type of Practitioner by Size of Place

		Type of Practitioner		
Size of Place	Medical Doctor (N=74)	Osteopathic* Doctor (N=81)	Dentist (N=65)	Chiropractor (№39)
Under 500	5.4	19.8	1.5	7.7
500 - 999	9.5	19.8	15.4	5.1
1,000 - 2,499	29.7	19.8	32.3	25.6
2,500 and over	55.4	40.7	50.8	61.6
* Population of place	e not available from the	census for 2 osteopathic de	octors.	

		Type of P	ractitioners	
Year	Medical Doctors	Osteopathic Doctors	Dentists	Chiropractors
1950	53	42	*	*
1954	63	44	*	*
1958	75	52	71	7 3
1965	77	55	78	7 2
* Information not availab	ole.			

of their county. The tabulation shows the percentages of practitioners of each type that were located in the largest centers in their county. The tabulation also shows the trend in location from 1950 to the present.

Medical Doctors

Medical doctors tend to be concentrated within relatively few centers in the area. In 1950, just over one-half of the medical doctors were located in the largest center in each of the counties; in 1965, more than three-quarters of the medical doctors were in these 20 places. The change was not great from 1958 to 1965. Over the years there does not appear to have been a movement of medical doctors from smaller to larger places within the area, but physicians coming into the area were more likely to locate in larger places and losses in smaller centers were not replaced.

Osteopathic Doctors

Osteopathic doctors were not as likely as medical doctors to be located in the largest places in the counties. There had not been much change in the proportions since 1958 and the change from 1950 to the present was considerably slower for osteopathic doctors than for medical doctors.

Dentists

Dentists were highly concentrated in the 20 largest centers of the respective counties. There was a slightly larger proportion in these centers in 1965 than there had been in 1958.

Chiropractors

Chiropractors were also likely to be in the largest center of the county. The proportions were about equal in 1958 and 1965.

Health Facilities

Public Health

Three of the 20 counties had county public health departments; this was one more than in the 1958 survey.

One of these counties was in Area I; two were in Area II. Additional public health services were available through the district and state offices of the Missouri Division of Health.

Hospitals

Hospitals play an increasingly important part in the maintenance of health. Today much of the advanced technology of medicine is centered in the hospital. There were hospital facilities of 10 or more beds in 12 of the 20 counties (7 in Area I, 5 in Area II). They were generally small, ranging from 14 to 60 beds and averaging 33 beds.

There was one less hospital in 1965 than in 1958. This was not simply a loss of one but resulted from the consolidation of four hospitals into two (in both cases completely new facilities were built), and the construction of a hospital in a county where none had existed before. The loss of a hospital then resulted from consolidation of services and under these circumstances should not be regretted. In addition, another hospital existing in 1958 had a completely new plant in 1965 and there had been major additions and renovations in four more hospitals in the area. The number of beds available in the area continued to increase and was 496 in 1965.

Hospital Beds in the 20 County Area

1965	496	
1958	441	
1954	353	
1950	268	

Of the 15 hospitals, seven were staffed by both medical doctors and osteopathic doctors; six had only medical doctors; and two had only osteopathic doctors.

Nursing Homes

As was pointed out, the counties in the study area, and especially those in the northern part, represented a relatively old population. This is reflected by the substantial increase in nursing home beds. In 1965, there were 1,155 beds in 36 nursing homes. Over 70 percent of these beds were in Area I.

1954	789	
1958	886	
1965	1,155	
	1954 1958 1965	1954 789 1958 886

County Examples

County A (Area I)

County A had a population of less than 9,000 in 1960; it had declined about 20 percent during the period 1950-1960. There were three places of over 1,000 population and none more than 1,700; all the centers had shown some population loss.

The 31 bed hospital located in the county seat was staffed by both medical doctors and osteopathic doctors. It had not changed in size since the 1958 survey.

Four medical doctors were practicing in the county in 1965; in 1958 there had been six. Of those in practice in 1958, two had died and two had moved from the county. There had been two additions. The two medical doctors who came into the county were in their early forties and they set up practice in the county seat town.

A decrease of two in the number of osteopathic doctors resulted from three losses and one addition. Six osteopathic doctors practiced in the county in 1958; of these, three remained in practice in 1965. Of the three losses, one had retired and moved to southern Missouri; another had died; and the third had moved from the county, but was still in practice. A young osteopathic physician had moved to the county seat town from out of state.

Four dentists were reported practicing in the county; the same number as in 1958. Two of the dentists were elderly and had limited practices. One of the dentists in practice in 1958 had died and one had come into the county during the period.

There was one chiropractor in the county in 1958. The same man was there in 1965 and there had been no additions.

In 1965 there were two nursing homes with a total of 53 beds. There had been three nursing homes in 1958 with somewhat fewer total beds.

County B (Area I)

County B had a population of between 9,000 and 10,000 in 1960. It had a population loss of about 15 per-

cent from 1950 to 1960. The largest town, the county seat, was about 1,600; it had shown almost no population change from 1950 to 1960. Another place in the county between 700 and 800 population had lost substantially as had the third largest place which had a population between 600 and 700.

The two medical doctors who were practicing in the county in 1958 were still in practice in 1965. One was in the county seat; the other in a place of between 200 and 300 population. There had been one addition. A young physician who had grown up in the county returned there to practice. He chose to practice in the second largest place in the county. Part of the inducement was a clinic that had been built by the community.

Four doctors of osteopathy were in practice in the county in 1958. Three of the four were still in the county in 1965; the fourth had moved from the county. There had been no additions, resulting in a net loss of one.

The same two dentists reported in 1958 were practicing in 1965; one was elderly, however, and had a limited practice. There had been one addition, a young man who had just graduated from dental college.

There were no chiropractors in the county in 1958 nor in 1965.

No hospital facilities were available in the county. Two licensed nursing homes had 36 beds.

County C (Area II)

In 1960, this county had fewer than 5000 population; it had decreased about 16 percent from 1950 to 1960. There were five incorporated places in the county, none with as many as 400 population. The three largest places were of about equal size.

Few health services were located within the borders of this county. There was no medical doctor; there had been none in practice in 1958. The same two osteopathic physicians that were practicing in 1958 were still in practice in 1965; there had been no additions. One of the two dentists in the county in 1958 had moved to another location in the state; the other was in part-time practice. No chiropractor was reported practicing in either 1958 or 1965.

Neither hospital beds nor nursing home beds were available in the county. There was no county public health facility. It is apparent that many of the health needs of people in this county are met by services outside the county.

County D (Area II)

County D is one of two counties in the study area that did not lose in population from 1950 to 1960. It remained virtually unchanged at about 14,000. A probable explanation for this difference from other counties is the county's increased importance as a recreation area. The largest center was over 3,000 in population and had gained population from 1950 to 1960. The county seat was a small place of less than 300 population.

Three medical doctors were in practice in 1958; at that time one of them was semi-retired because of age. By 1965, the doctor who was semi-retired had died. The other two physicians were still in practice, but there had been no additions.

Where there had been six osteopathic physicians in the county in 1958 there were eight in 1965. This came about by the movement of one out of the area and the addition of three. Both the physician who moved out and those who came in were young men.

While both of the medical doctors practiced in the largest center in the county, only three of the eight osteopathic doctors practiced in the largest center.

One less dentist was in practice in 1965 than in 1958. One of those in practice at the earlier date had died and there had been no additions.

There were two chiropractors in the county in 1965 as there had been in 1958. This resulted from the movement of one from the county and the movement of one into the county.

A small osteopathic hospital was located in the county seat town and there was a nursing home of 20 beds, also in the county seat. The county had a public health department. These facilities had been present in 1958.

OTHER BULLETINS IN RURAL HEALTH SERIES

- The Rural Health Facilities of Lewis County. Res. Bul. 365, 1943. Almack, Ronald B.
- 2. Family Health Practices in Dallas County. Res. Bul. 369, 1943. Meier, Iola, and C. E. Lively.
- 3. Illness in Rural Missouri. Res. Bul. 391, 1945. Kaufman, Harold and Warren W. Morse.
- 4. Use of Medical Services in Rural Missouri. Res. Bul. 400, 1946. Kaufman, Harold F.
- The Health of Low-Income Farm Families in Southeast Missouri. Res. Bul. 410, 1947. Gregory, C. L., Zetta E. Bankert, Aleta McDowell and C. E. Lively.
- 6. Illness in the Farm Population of Two Homogeneous Areas of Missouri. Res. Bul. 504, 1952. McNamara, Robert L.
- 7. Supply of Physicians in Rural Missouri. Sta. Bul. 651, 1955. McNamara, Robert L., Edward W. Hassinger, John B. Mitchell.
- 8. Extent of Illness and Use of Health Services in a South Missouri County. Res. Bul. 647, 1958. McNamara, Robert L. and Edward W. Hassinger.
- Relationships of the Public to Physicians in a Rural Setting. Res. Bul. 653, 1958. Hassinger, Edward W. and Robert L. McNamara.
- Charges for Health Services Among Open-Country People in a South Missouri County. Res. Bul. 668, 1958. Hassinger, Edward W. and Robert L. McNamara.
- What's Happening to Rural Doctors and Health Facilities Sta. Bul. 735, 1959. Hassinger, Edward W., Robert L. McNamara.

- 12. Family Health Practices Among Open-Country People in a South Missouri County. Res. Bul. 699, 1959. Hassinger, Edward W. and Robert L. McNamara.
- 13. Extent of Illness and Use of Health Services in a Northwest Missouri County. Res. Bul. 720, 1960. McNamara, Robert L. and Edward W. Hassinger.
- Charges for Health Services in a Northwest Missouri County. Res. Bul. 721, 1960. Hassinger, Edward W. and McNamara, Robert L.
- The Families—Their Physicians—Their Health Behavior in a Northwest Missouri County. Res. Bul. 754, 1960. Hassinger, Edward W. and Robert L. McNamara.
- Health in Two Missouri Counties, A Comparison and Summary. Res. Bul. 779, 1961. Hassinger, Edward W. and Robert L. McNamara.
- 17. Selected Environmental Factors Associated With Farm and Home Accidents in Missouri. Res. Bul. 790, 1962. Gadalla, Saad M.
- 18. Health Insurance in a Small Missouri Town. Sta. Bul. 780, 1962. Hassinger, Edward W.
- 19. Background and Community Orientation of Rural Physicians Compared with Metropolitan Physicians in Missouri. Res. Bul. 822, 1963. Hassinger, Edward W.
- Information and Beliefs About Heart Disease Held by the Public in Five Areas of Missouri. Res. Bul. 874, 1964. Hassinger, Edward W. and Thomas M. Anderson.