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THE MEDICAL ECONOMIC PROBLEM IN NEBRASKA

By

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UNIVERSITY OF NEBRASKA  
COLLEGE OF MEDICINE  
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## INTRODUCTION

The medical-economic problem during the last few decades has come to loom larger and larger in the eyes of not only the medical profession but the general public as well. It is a distressing puzzle and one which has been made more complex in its many ramifications by the present economic depression. To the thinking member of the profession the situation is fraught with grave possibilities and he can well look forward with troubled misgiving to the future. To quote Dr. Arthur E. Cook, president of the Nebraska State Medical Association several years ago:

"It is my firm belief that we are face to face with a situation that is very likely to revolutionize the practice of medicine as it has been practiced during the past generation and I cannot help but wonder if it will not detract from the usefulness of the general practitioner."

In 1932 the Committee on the Costs of Medical Care (8) published their final report following a five year program of study in which certain recommendations were adopted as a possible solution of the problem. The effect of this report was somewhat in the nature of an exploding bombshell. Vehement arguments pro and con were hurled back and forth by interested parties; the medical profession was condemned on one side and praised on the other; editorials appeared by the hundreds; sentiment waxed hot on both sides and today, two years later, the battle still rages. Nearly all agree, however, that the situation is a serious one and that some sort of a solution, whether it be for good or evil, will be forthcoming in the not far distant

future.

The subject is so broad in its many aspects and the recent literature which has accumulated is so vast that an adequate consideration of the problem in its totality is far beyond the scope of this paper. Hence only a brief survey of the general situation will be attempted and the bulk of the paper will be devoted to the problem as it exists today in Nebraska. This in itself is no mean task. It involves a study of the industries, resources and finances of the state as well as existing medical facilities and opportunities. Unfortunately data is lacking upon many vital points and this renders the discussion incomplete and unsatisfactory from many standpoints. A social survey of some 1,200 admissions to the University Hospital was carried out in the hope that it would give some insight into economic conditions in Nebraska. All in all the subject is most complicated but nevertheless one which is worthy of the careful consideration of every member of the profession.

## THE GENERAL MEDICAL-ECONOMIC SITUATION

Medical science has made marvelous advances during the last fifty years. Many of the contagious diseases have been brought under control. Yellow fever and bubonic plague have practically been eliminated, at least from the United States. Typhoid fever and small pox have been greatly curtailed. The death rate has been cut down tremendously. Yet there is still much unnecessary sickness and death. Many people suffer acutely from conditions which could be remedied were they economically able to seek the necessary medical care. In some instances medical service is not available; in many cases it is financially beyond reach. Yet the remuneration of physicians is not excessive and in many cases entirely inadequate.

It was in view of this unsatisfactory situation that the Committee on the Costs of Medical Care (8) was created in 1927. This Committee consisted of fifty members, representing the fields of private practice, public health, medical institutions, social sciences and the lay public. A five year program of study was adopted and carried to completion in 1932 when the final report was made. (8)

The facts discovered by the Committee (8) are interesting and give a fairly good picture of the general situation today. It was found that some 1,100,000 persons in the United States spend all or a large part of their time in providing medical service. About one-half of these are private practitioners and the other half are connected with institutions or derive their livelihood from the sale of medical commodities. In 1930 there were some

7,000 hospitals with a total capacity of 1,000,000 beds. There are 8,000 clinics and out-patient departments of hospitals. Every state and large city is provided with a public health department. But it was discovered that these facilities were not distributed according to need but rather according to ability to pay. For instance in 1929 there was one physician to every 1,431 persons in South Carolina as contrasted with one to every 621 in New York state. Wisconsin had one hospital bed for community use to each 154 persons while South Carolina had one to each 749 persons.

It was discovered that about the same incidence of illness occurs in the families in the various broad income groups. However families with incomes under \$2,000 receive far less medical care than those with incomes of \$5,000 and over. In general the low income groups receive only about 50 per cent as much medical service as those with incomes of \$5,000 and over. This fact becomes well nigh unbelievable when it is considered that even the high income groups receive only 85 per cent of the reasonable standard amounts of medical care set by the Committee. (8)

The people of the United States in 1929 spent 3,656 million dollars for all forms of medical service including those purchased indirectly through taxation. This amounts to about \$30 per capita per annum and represents about 4 per cent of the money income of the country. This as a whole is not excessive. Yet 125 million of this is spent for the services of osteopaths, chiropractors, faith healers and allied groups and 360 million for patent medicines. In the opinion of the Committee the total

amount spent is not excessive.

A study of the total costs, however, does not give a true picture of the situation faced by many individual families. A study of income recipients in 1928 revealed that 90 per cent of all families had incomes of less than \$2,000 and 95 per cent less than \$3,000. In addition this income is unevenly distributed in the various geographical regions of the country. For instance although the annual per-capita income in 1926 was \$735, in the Middle Atlantic States it was \$1,039 and in the East South Central States only \$369. (8) Hence very many families cannot bear even less than average medical costs.

Further, the costs of medical care are very unevenly distributed. There is a great disparity between average and actual costs. For instance 4 per cent of the families incurred collectively as much as 80 per cent. In other words the costs of medical care fall very unevenly upon different families in the same income and population groups. Although the average cost is not excessive for the family with the average income, the unpredictable nature of sickness and the wide range of professional charges, renders it impossible to set aside a certain portion of the family income for medical service. No family ever knows just how much money will be needed for medical care.

Despite these facts, the income of the medical profession as a whole is not excessive. It was discovered by the Committee (8) that the average professional net income in 1929 was \$5,300. This income, however, is distributed very unevenly. For instance for every physician (usually a specialist) with an income over

\$10,000 there are two general practitioners with an income of less than \$2,500. The 30,000 complete specialists in the United States receive more as a group than the 70,000 general practitioners. The average gross income in 1929 was \$9,000. About 40 per cent of this goes for overhead. This adds to the cost of care to the patient without financial return to the practitioner. Further the total average net income decreased 17 per cent from 1929 to 1930 and much greater declines have been suffered since then. Richardson (43) in a survey conducted by Medical Economics finds that the total average net income decreased from \$5,059 in 1930 to \$3,969 in 1934. Even this fails to give the true picture because the median or middle net income was \$3,000, a considerably lower figure than the arithmetical average.

Basing their figures upon various plans now in existence, the Committee on the Costs of Medical Care (8) estimate that complete medical service including hospitalization, X-ray and other laboratory fees could be provided at an annual cost of \$20 to \$40 per-capita per annum. Even this could not be met easily by families with incomes under \$1,500 but the population as a whole could meet this cost without undue hardship. In the opinion of the Committee some plan must be devised which will distribute the costs of medical service evenly over the combined national income.

The question as to the reliability of these figures should be considered. In deriving these results the Committee (8) made several extensive surveys in one of which the cooperation of 9,000 white families was secured. Records of the family income



and the amount of money spent for medical service were kept over a period of two years. The final averages were computed from these figures. Other surveys were just as extensive as this one. In general it would appear that the findings of the Committee are as accurate as those derived from any statistical study. A Committee of the New Haven Medical Association (9) in reporting upon the findings of the Committee on the Costs of Medical Care states that it is only necessary to observe the names of some of the prominent members of the latter Committee to satisfy all doubt in regard to the question of reliability of the findings. "It would be hard to believe that these men would willfully misrepresent the facts. As a whole the findings of the Committee give a true picture of the situation in the United States today." This seems to be the opinion of most individuals who have studied the problem.

The medical-economic situation in Europe is interesting and deserves some attention. As far as the socialization of medicine is concerned, most countries in Europe are way ahead of the United States. Germany was the first country to take steps along this line. Compulsory health insurance was adopted in 1883 and old age pensions, widows and orphan's pensions and unemployment doles since then. (38) At first compulsory health insurance applied only to certain industries but now has been extended to include almost two thirds of the general population. (8) Austria adopted compulsory health insurance in 1888, Hungary in 1891. (38)

England adopted a scheme of health insurance in 1911. (8)

The British system requires all employed persons earning less than 250 pounds annually to insure and furnishes cash benefits together with the services of general medical practitioners. (8) The physician is called a Panel physician working under the Panel system, makes about \$2,000 yearly and cares for about 1,500 patients. (14)

Leland (27) believes that the English system came about as the result of political expediency. The Liberal party, headed by Lloyd George adopted the plan in order to strengthen its assets and detract from the growing power of the Labor party. This author further believes that the system has failed on the preventative side and has been defective in providing for the indigent sick. On the other hand medical service has been extended and the amount and quality increased. Illness is coming under observation earlier under this regime and there is better cooperation among practitioners. Dean Lewis (31) points out that during the period of 1921 to 1927, sickness benefit claims increased from 41 to 159 per cent while in 1929 alone 410,903 cases were referred for malingering, indicating a far from satisfactory situation.

France adopted compulsory health insurance in 1930. (8) Denmark and Sweden have a system of voluntary insurance which nevertheless offers many indirect incentives to insure and as a result have brought most of their population under the scheme. (8) Russia, under the Soviet regime, is the only nation in Europe which has undertaken state medicine with all medical facilities and services provided and administered by the govern-

ment. (37) Barker (2) states that despite the bad patterns established at first in Europe, no country that has resorted to the principle of insurance has given it up and he believes that the more recent patterns established in Denmark and Sweden are free of some of the evils of the older methods.

In the United States a myriad of plans and experiments are underway. The Bureau of Medical Economics of the American Medical Association (6) has estimated that over 430 organizations are furnishing contract practice in the United States today. This particular type of practice is being carried on in 37 states and 123 communities. Over 250 hospitals are engaged in furnishing hospital care under some form of contract. 44 states have adopted workman's compensation laws which furnish medical service to injured employees. 29 county medical societies have organized their own collection agencies and credit bureaus. These more or less isolated facts point to the economic upheaval which is underway in the realm of medicine today.

Since 1930 the number of free clinics and out-patient departments has grown so large as to threaten good medical practice. (15) (40) As a result medical societies everywhere sought for some method which would alleviate this situation. Various plans have come into existence sponsored by these societies most of which aim to limit free medical care to those who are able to pay nothing at all. For instance the Alameda County, California plan (15) distinguishes between actual and semi-indigents and in one year referred 1,317 applicants to private physicians who otherwise would have been treated without charge. The San-

Diego plan is based along similar lines. Christie (7) in referring to these plans believes that they are practical because they attempt only immediate possible changes and do not attempt to revolutionize the practice of medicine overnight. Further they preserve that essential personal relationship between the physician and his patient.

The Wayne County Medical Society of Michigan has sponsored a plan (16) which has had considerable publicity in the last year or two. Briefly, the plan provides for terms in the liquidation of the medical bill, the county medical society becoming a central, coordinating agency. The cooperation of various industrial concerns has been secured and the plan is apparently being received with enthusiasm by the wage earners it is intended to aid. The physician-patient relationship is maintained, the patient being free at all times to select his own doctor. The chief feature of the plan is the organization of the physicians into a central agency with provision of an easy-payment plan which the middle class wage earner can meet without undue difficulty.

There are other types of plans in existence too numerous to mention. Several life insurance companies are offering health insurance to their policy holders and providing physicians to furnish the necessary medical care. Several of these have been proven to be out and out frauds. All of them would appear to be contrary to the principles of sound medical practice. The increasing number of free clinics and out-patient departments, the increasing number of private group clinics, the recent agitation along social insurance lines and the innumerable plans

and experiments now under way are further indications of the social and economic upheaval in medical practice today.

Having completed their five-year program of study, the Committee on the Costs of Medical Care published their final report in 1932 (8) in which certain recommendations were adopted as a possible solution. Briefly the majority report recommends that all forms of medical service be provided by organized health centers established around existing hospitals. The medical care provided would include everything except care of the tuberculous and insane who would continue to be taken care of by the government. These medical centers would be highly organized and would provide the services of both general practitioners and specialists. The funds for this medical service would be provided by some form of insurance, taxation or both. All forms of basic public health service would be extended so as to be available to the entire population according to need.

The principle minority report (8) signed by a majority of the private practitioners on the Committee would limit governmental participation to the care of veterans suffering from service-connected disabilities and diseases, to the care of the indigent, to the promotion of public health and to the care of those diseases, chiefly tuberculosis and nervous and mental disease, which can only be cared for in governmental institutions. It further recommends emphatically that the corporate practice of medicine be vigorously and persistently opposed as being economically wasteful and inimical to a high quality of medical care. It recommends that those methods be given careful trial which

can be fitted into our present institutions and agencies and advocates the development of plans by state and county medical societies.

The appearance of the final report of the Committee with these recommendations aroused a storm of controversy throughout the country. As early as 1916, the American Medical Association had condemned state participation in medicine, (10) and in 1920 adopted a resolution condemning all forms of health insurance. Shortly after the appearance of the final report, the House of Delegates of the American Medical Association (10) approved in principle the chief minority report of the Committee. This uncompromising stand aroused a storm of protest and agitation which made itself felt in the public press throughout the country. For instance the Nation (17) in a recent editorial condemns the opposition of the American Medical Association to health insurance in no uncertain terms. The Nation believes that health insurance is the most immediately practical and financially possible form of security legislation. It would spread the costs of existing medical and hospital facilities thinly and evenly over the bulk of the population instead of placing the burden on the weakened shoulders of those who are ill at a time when they are least able to afford it. Other lay periodicals adopt a similar attitude in supporting the majority report of the Committee.

Within the profession, opinion is divided although most medical men, especially private practitioners, support the stand taken by the American Medical Association. Rowe (46) believes

that most private practitioners will accept the chief minority report. He points out that of the 16 private practitioners on the Committee, 9 or a majority not only fail to sign the majority report but submit with a good deal of emphasis to a minority report. Freehof (24) who is not a member of the profession, states that the majority report is one of the most radical social suggestions ever made by a responsible commission. He agrees with the American Medical Association in the stand it has taken.

Bowen (5) believes that state medicine is inevitable if the recommendations of the majority report are adopted. Fay (23) and Lewis (31) feel that the appearance of the final report of the Committee has led to a loss of confidence in the medical profession. Lewis further declares that he realizes that there are defects in medicine as practiced today in this country just as there are defects in many of our other social systems but he believes that the way to remedy them is not by revolution but by evolution.

Barker (2) in analyzing the investigations of the Committee on the Costs of Medical Care, concludes that the chief differences of opinion among members of the Committee were due to 1) whether medical practice be kept in the hands of single individuals or given over to groups and 2) the question of group payment by insurance, taxation or both. He thinks that some form of compulsory insurance will sooner or later be given a trial in the United States and that it will be wise for medical men to direct these along the least objectionable routes. Nelson (35) affirms emphatically that the large group of low income

citizens cannot from their individual incomes pay what it costs to receive proper hospital and medical service. He firmly believes that some plan of social medicine, probably health insurance is inevitable. Heddon (26), Rorem (45) and MacLean (33) hold similar views. It is interesting to note that a great many members of the profession connected with hospitals or other institutions favor some plan of health insurance while the majority of private practitioners are violently opposed to such a system.

This agitation along social insurance lines has made itself felt in the national legislature as well as the law-making bodies of many states. President Roosevelt (18) in his message to the Senate and House of Representatives delivered January 4, indicated the nature of his program for economic security. He believes that security should be made possible against the major hazards of life by national legislation. His recommendations cover the broad subjects of unemployment and old age insurance, benefits for children and mothers, maternity care and other aspects of dependency and illness where a beginning can be made.

An economic security committee (19) appointed by the president has outlined certain insurance principles which should be embodied in any national scheme of insurance. Briefly, the goals of health insurance are (a) the provision of adequate medical service to the insured population (b) the development of a system wherein the people may budget the cost of medical service (c) the provision of adequate incomes to professional men and (d) the development and safeguarding of the quality of medical service.



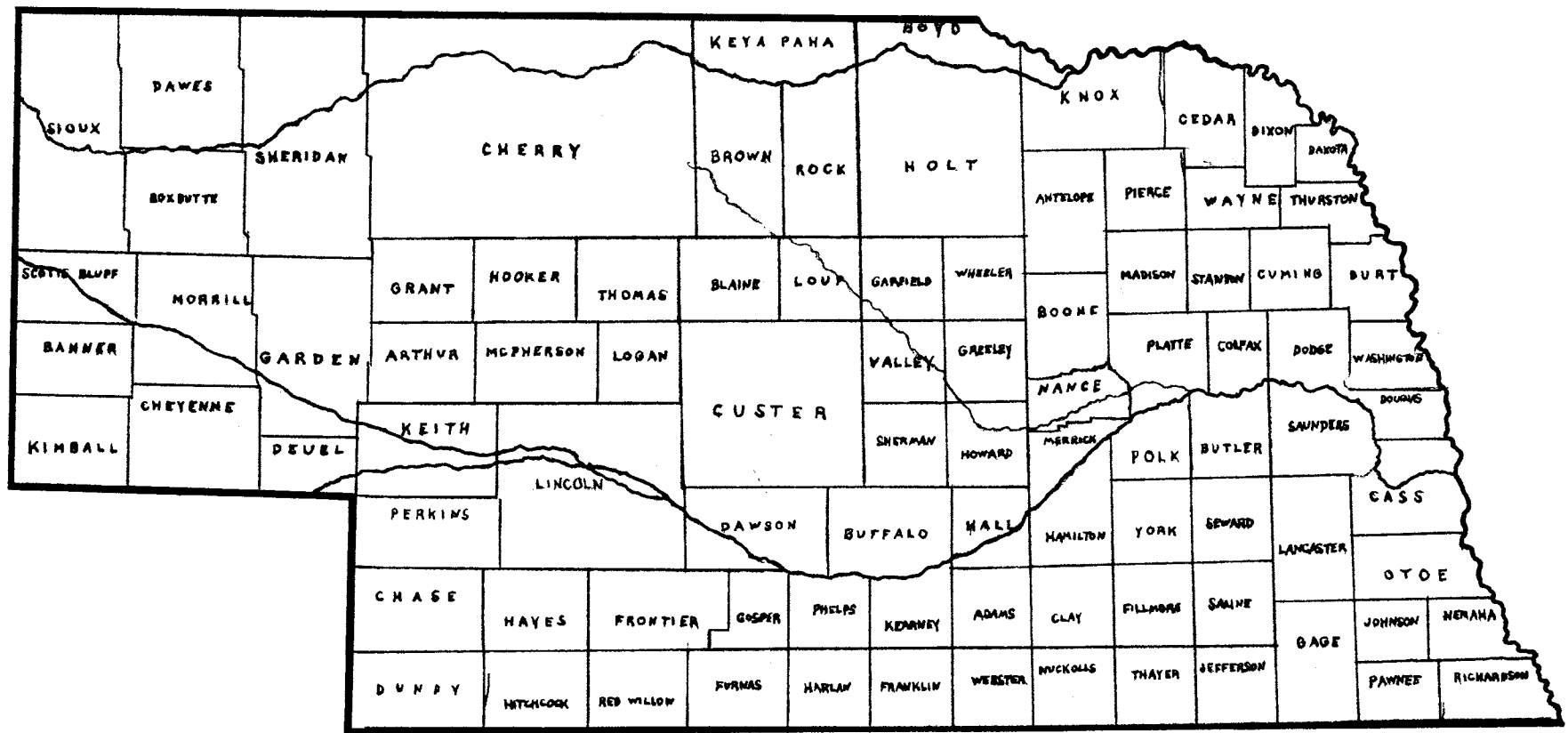
The medical profession is to control the professional personnel. Commercial and other intermediary agencies are to be excluded and the benefits are to be cash payments for wage loss and medical service as needed. The costs of such a system are estimated to be not more than 1 to  $1\frac{1}{2}$  per cent of the national payroll. The organization is to be on a state wide basis under a permissive federal law. The indigent are to be taken care of under a similar system, the costs of which are to be met by contributions from existing charitable agencies and the government.

The Wagner Social Insurance Bill (20) provides funds for old age assistance, dependent children, maternity and child welfare and increases public health appropriations. The funds are derived from earnings and employment taxes and by annuity certificates to be issued as necessary by a social insurance board appointed by the President.

Abraham Epstein (20), secretary of the American Association for Social Security, has drawn up a bill for sickness insurance to be introduced in as many state legislatures as possible. This act proposes to establish a closely interlocked system of compulsory and voluntary sickness insurance. Persons employed at other than manual labor receiving \$60 a week or more, farm hands, persons employed by an employer having three or less employees are exempt from the compulsory provisions of the bill. The funds are to be provided by a sliding scale of employee's and employer's wages plus state taxation. The administration of the proposed system is to be carried out by an insurance commission, the members of which may be laymen. Many other

similar bills have been and are being introduced into various state legislatures. An example is the Schroeder Bill recently introduced into the Nebraska State Legislature, providing for a type of compulsory health insurance. As far as I know, none of these proposed measures have become laws.

The above discussion is of necessity extremely limited as already pointed out. It does not attempt to present adequately every aspect of this broad controversial problem. It does attempt to cover the present situation briefly in order that conditions in Nebraska may be more readily understood.



## TOPOGRAPHY AND INDUSTRIES OF NEBRASKA

Nebraska is located on the western tier of the so-called North Central States. According to Condra (11) the state may be divided into three great topographic and soil regions. The Loess region occupies the southern and eastern parts of the state, including about 40,000 square miles. In general it is the most productive part of the state, the loess soil being highly fertile and easily tilled. Adequate rainfall is the rule. To the north and west this region merges into the sandhills, a broad, irregular province, poorly defined, occupying the central and west central portions of the state. The surface of this area is covered with a fine, wind-blown sand which renders farming impossible except in certain of the valleys. It does produce considerable good pasture, however, which makes it a fine grazing land. The High-plains region is found in the extreme western part of the state and includes some 17,000 square miles. The soil varies in nature but is fairly productive although the lack of rainfall acts as a drawback to agriculture.

The basic industry of the state is agriculture. Anderson (1) considers Nebraska to be the most purely agricultural state in the Union. In the sandhills, which makes up about 27 per cent of the area of the state, cattle raising is the chief industry. Eastern and central Nebraska grow the corn and hay to finish the cattle produced in the sandhills. In fact Nebraska ranks third in corn production. It is the second largest sheep feeding state in the Union. 70 per cent of the state's manufactured products are derived from raw farm products, 43 per cent of this

from the slaughtering and meat packing industries. Other industries are negligible when compared to agriculture. The whole welfare of the state depends upon it.

The people of Nebraska are, for the most part, descendants of that hardy pioneer stock which came into the state when the middle west was being opened up. A considerable proportion of these were foreign born, the Scandinavian races predominating. Today there are not as many foreign born citizens in Nebraska as in some of the manufacturing states although in the larger cities, especially Omaha, there are many Italians and other of the southern races are well represented. The people, in general, are frugal, honest, hard working and thrifty and derive their livelihood directly or indirectly from the soil.

## MEDICAL FACILITIES IN NEBRASKA

The determination of the medical-economic status of a state or section of country is accomplished with the greatest difficulty. It involves considerable outlay of time and money and even when completed cannot be considered to be entirely true. For instance the Committee on the Costs of Medical Care (8) in carrying out their fact-finding studies, used the following methods. One or more counties were selected (39) as being representative of a state or section of country and these counties were studied intensively. The physicians in the county were interviewed and the final conclusions drawn from data derived from these studies, amplified and considered representative of the state or section.

Likewise in determining the amount of money spent for sickness in families of the various income groups, the cooperation of some 9,000 white families was secured and records kept for a period of one or two years. As can be seen, this involves a tremendous amount of work. It requires the cooperation of visiting nurse associations, a corps of trained assistants and above all the outlay of a large amount of money. Similarly in computing the incomes of physicians, the same difficulty is met with. Obviously such a study requires both time and money. A consideration, then, of the medical economic situation in Nebraska must be in the nature of a compilation of existing and available data which, unfortunately, is rather meager in amount.

### Number and Distribution of Physicians.

According to the 1934 American Medical Directory (32) there are

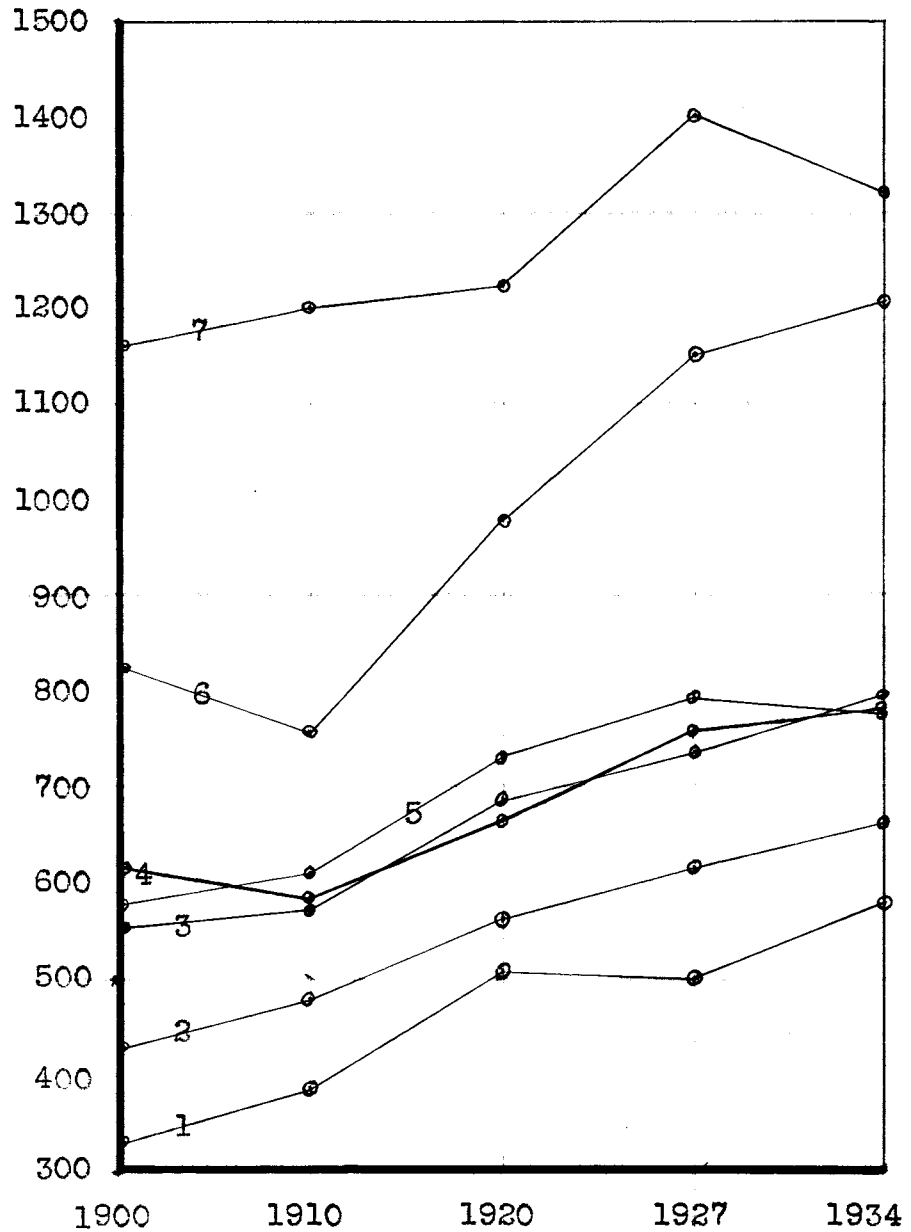
some 1,772 physicians in the state of Nebraska. This means that there is 1 doctor per 785 population, basing the figure upon the estimated population of 1,392,000 for 1933. If only the practicing physicians are considered, the figure is in the neighborhood of 1 per 800.

A comparison with other states is interesting. In Fig. I, (39) the supply of physicians (1 per population) is plotted against periods of time from 1900 to date. These ratio curves are worked out for a number of states. For instance in 1900 California had 1 physician per 330 population; South Dakota 1 per 825. At the present time (1934) these two figures are 1 per 575 and 1 per 1,200 respectively.

In analyzing this study, the first thing that strikes the eye is the general, gradual uptrends of the curves from 1910 to date indicating that the population in the states considered is growing faster than the supply of physicians. This is not true of South Carolina, whose curve declined from 1927 to 1934. From 1927 to 1934 the curves in general leveled off somewhat indicating that the supply of physicians is catching up with the population.

As an interesting sidelight, Bierring (33) warns against an oversupply of physicians in the United States. He points out that England with one physician per 1,490 is not considered to be over-populated with doctors and yet there seems to be an adequate number to take care of the needs of the people. The United States with 1 physician per 780 has just about twice as many doctors in proportion to the population. France has 1

Comparison of Ratio Curves of Various States Over a period of years (Supply of Physicians to Population)

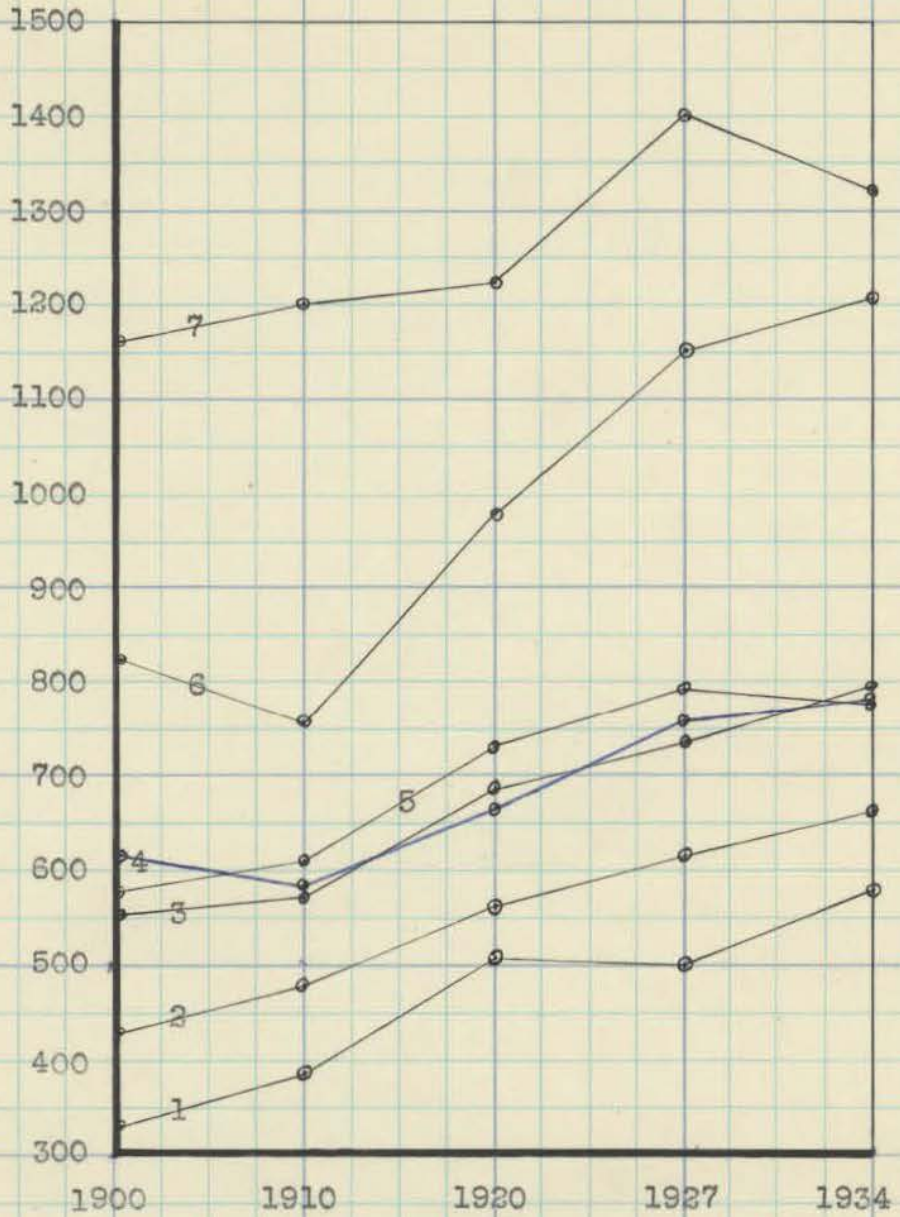


- 1 California
- 2 Missouri
- 3 Iowa
- 4 Nebraska
- 5 United States
- 6 South Dakota
- 7 South Carolina

Fig. I



Comparison of Ratio Curves of Various States Over a period of years (Supply of Physicians to Population)



- 1 California
- 2 Missouri
- 3 Iowa
- 4 Nebraska
- 5 United States
- 6 South Dakota
- 7 South Carolina

Fig. I

physician per 1,690 and Sweden 1 per 2,890. It would appear from this that the supply of doctors in the United States is entirely adequate if not excessive.

Referring again to Fig. I, at the extremes are California with 1 physician per 575 and South Carolina with 1 per 1,320. The other states fall in between although in general the southern states have the poorest supply of medical men. Very interesting to me was the manner in which the curve for Nebraska (Fig. I) approximated that for the United States as a whole. They are almost identical. Iowa is likewise just about the same while Missouri has a greater number of physicians and South Dakota not nearly as many. As far as total number of physicians is concerned Nebraska is just about average.

In Fig. II, the data for which is taken from the 1934 Medical Directory (32), the distribution of physicians throughout the state is shown. The stippling represents the actual number of doctors except in the case of Douglas and Lancaster counties in which they were too numerous to be shown. (Douglas, 494 and Lancaster, 209) The three counties in black, Arthur, Banner and Loup, have no physician. As can be seen, there are seven counties with only one doctor and a good many with only two or three. These counties are for the most part located in the northern and western parts of the state.

As already noted, Nebraska can be divided into three topographic and soil regions. (11) For my purpose I considered the sandhill region to include the following counties: Garden, Grant Arthur, Hooker, McPherson, Cherry, Rock, Garfield, Loup, Blaine,

Distribution of Physicians in Nebraska

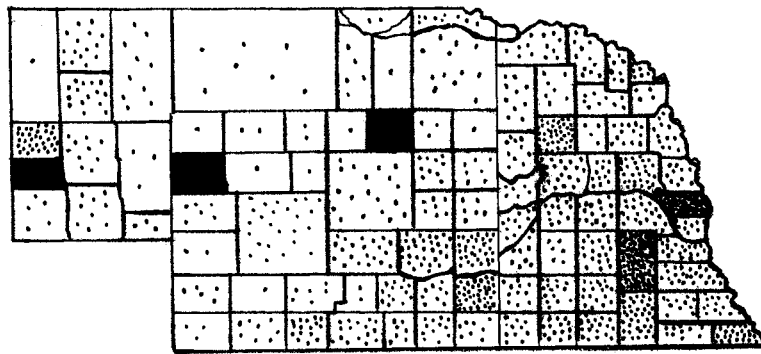


Fig. II

The stippling represents the actual number of physicians except in the counties of Lancaster and Douglas. The counties in black, Arthur, Banner and Loup, have no physician.

	Popula- tion	Square Miles	Popul- ation per sq. mile	Physicians per population
Loess Region	1,201,709	43,330	27.7	1 per 760
Sandhill Region	71,158	19,955	3.6	1 per 1293
Highplains Region	105,096	13,518	7.8	1 per 1010

Fig. III

Logan, Thomas, Boyd, Keya Paha, Brown, 1/2 of Lincoln and 1/2 of Sheridan. In referring to Fig. III, it is noticed that these counties make up an area of 19,955 square miles and have a population of 71,158. (41) This represents approximately 3.6 people per square mile. Some 55 physicians (32) practice medicine in this region, 1 per 1,293 people. So despite the fact that this region is thinly populated it nevertheless has a much poorer supply of doctors in proportion than the rest of the state.

In a similar manner I considered the Highplains region to include Keith, Duel, Cheyenne, Kimball, Banner, Morrill, Scottsbluff, Sioux, Dawes, Box Butte, Perkins and 1/2 of Sheridan counties. This area makes up some 13,518 square miles and has a population of 105,096 representing 7.8 persons per square mile. This section supports 104 physicians, 1 per 1,010 people, so that it has a slightly better supply of physicians than the region just considered. (Fig. III)

The rest of the state, the so-called Loess region, includes 43,330 square miles and is populated with 27.7 people per square mile. It is likewise much better supplied with physicians, there being 1 doctor per 760 people. In considering these figures it should be noted that the data for number of physicians was derived from the 1934 Medical Directory (32) while the calculations were based upon the population as given in the 1930 census reports. At the present time there are probably more people residing in Nebraska and hence the results arrived at are not entirely true. The difference would be so slight, however, that for all practical

Distribution of Physicians in Nebraska

Size of place	Population	% of total	Physicians	% of total	Physicians per Population
Under 5,000	947,795	68.8	787	44.4	1 per 1204
5000 to 75,000	150,229	10.1	282	15.9	1 per 533
Over 75,000	289,939	21.1	703	39.7	1 per 412
Whole State	1,377,963		1,772		1 per 785

Fig. IV

Specialism in Nebraska

Type of Practice	Number	Percentage
Complete Specialists	267	15.3
Partial Specialists	242	13.6
General Practitioners	1263	71.1
Total Number	1772	

Fig. V

purposes this source of error may be disregarded.

Fig. IV reveals some interesting facts. 68.8 per cent of the state population live on farms and in towns under 5,000. This portion of the population supports 44.4 per cent of the physicians of the state. 10.1 per cent of the people reside in cities between 5,000 and 75,000 and support 15.9 per cent of Nebraska's practitioners while 21.1 per cent of the people dwell in cities of over 75,000 (Lincoln and Omaha) and are cared for by 39.7 per cent of the total number of physicians. Lincoln and Omaha have 1 physician per 412 people; cities between 5,000 and 75,000, 1 per 533 and the rest of the state 1 per 1,204 people.

At the present time there are 267 physicians who limit their practice to a specialty (32), 242 who have a preference for some branch of medicine but do all kinds of work and 1,263 general practitioners. (Fig. V) In other words about 70 per cent of the medical men of the state are in general practice while about 30 per cent limit themselves, partially or completely, to a specialty. The latter are for the most part congregated in cities of 5,000 population or over.

Of the complete specialists, 66 are in the field of otorhinolaryngology which is the best represented branch of medicine in Nebraska. 62 limit themselves to the practice of general surgery while internal medicine is next with 49. Way down the list is neuro-psychiatry and pediatrics with 15 each. There are 14 obstetricians, 12 radiologists, 10 urologists, 8 dermatologists, 6 ophthalmologists and 7 orthopedic surgeons. Among those who partially limit their practices, the specialties are represented

in about the same proportion.

What conclusions are to be drawn from these studies? First of all it can be said that Nebraska as a whole has an adequate supply of physicians. When it comes to the problem of distribution the situation is considerably different. In the sandhill and western areas of the state, there does not seem to be a sufficient number of doctors while in the larger towns, and especially in Lincoln and Omaha, there are too many. Of course, wealth is the big factor affecting distribution but as far as need for medical care is concerned, there is just as much sickness and disease among the poorer classes and these people should have equal opportunity to seek medical attention. It has been shown that there is a greater and greater tendency on the part of physicians to concentrate in cities leaving rural areas relatively under-supplied. Nebraska is no exception to this general trend.

In 1928 there were 19,277 complete specialists in the United States among a total number of 152,503 physicians. (39) This represents 12.6 per cent of the total number. In 1934 in Nebraska 15.3 per cent of all physicians had limited themselves completely to a specialty. In brief Nebraska is average as far as number of specialists is concerned. Likewise, as is true of the country as a whole, the field of otorhinolaryngology is best represented with surgery a close second and internal medicine third. Urology and neuropsychiatry come next in the national figures while in Nebraska pediatrics, obstetrics and roentgenology are ahead of urology as far as actual number is concerned. In general as far as number, distribution and type of practice is concerned,

Nebraska is surprisingly close to the figures for the nation as a whole.

Number and Distribution of Hospitals in Nebraska.

At the present time there are 104 hospitals of all kinds in Nebraska with a total bed capacity of 10,261. (32) This represents 1 bed to each 135 persons using the estimated population of 1,392,000 for 1933 in deriving this figure. (41) Bean (3), in a survey of Nebraska hospitals, compares the number of institutions in 1920 to the number in 1930. This data is shown in Fig. VII with the additional figures which I have included for 1934. As will be seen, the number of hospitals increased from 92 in 1920 with 7,321 beds to 111 in 1930 with 9,711 beds. From 1930 to 1934 I find that a decline was suffered in the total number of hospitals but the number of beds increased from 9,711 to 10,261. Whether or not these are comparable figures is uncertain but I believe they are. According to this there is an increase of some 400 beds with a decline of 7 in the total number of institutions. The new Douglas County Hospital would account for around 200 beds of this increase.

Nebraska compares favorably with other states as far as total number of hospitals is concerned. (3) Wisconsin with 1 bed per 111 people is best supplied while our old friend South Carolina with 1 per 749 has the poorest hospital facilities. Nebraska has 1 bed per 152 people, Iowa 1 per 143, Kansas 1 per 170 and South Dakota 1 per 148. These figures are based upon data for 1930 but the proportions today have probably not changed much. (Nebraska in 1934 had 1 bed per 135 people)



Number and Distribution of Hospitals in Nebraska

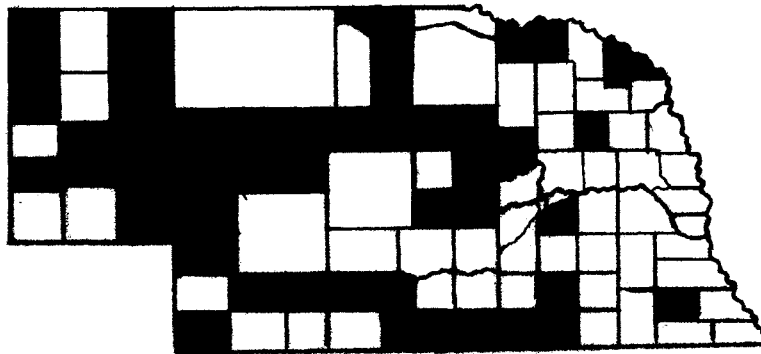


Fig. VI

	1920	1930	1934	Increase
Population	1,296,372	1,378,900	1,392,000	Yes
Hospitals	92	111	104	No
Beds	7,321	9,711	10,261	Yes
Physicians	1,965	1,800	1,772	No

Fig. VII

The counties in black have no hospital facilities of any kind.

Referring to Fig. VI, it may be seen that some 41 counties have no hospital facilities of any kind. (Those in black) This represents 44.5 per cent of the total of 92 counties in the state. Fig. X depicts the counties which have no hospitals for community use. (Stippled) These number 44 and make up 47.8 per cent of the total. To summarize these figures it may be said that 55 per cent of the counties in Nebraska have some type of hospital within their boundaries while 53 per cent have hospital facilities for community use. Further it may be noticed from these studies that the counties without hospitals are for the most part located in the western, west-central and central parts of the state while the more thickly populated eastern area is well supplied with hospitals.

Of the 10,261 hospital beds in Nebraska, however, only 4,328 are available for general community use. This is only 42 per cent of the total number in the state. The great majority of the rest are employed in caring for the feeble minded and insane while the orthopedic and tuberculous institutions, various homes for the aged and federal hospitals for the care of service connected disabilities and illness's account for the remainder of these. Fig. IX (39) depicts the population per hospital bed for community use in certain representative states. As can be seen, Nebraska is better supplied with hospitals than South Dakota, Kansas and South Carolina but does not fare as well as Iowa and Missouri.

Fig. VIII reveals in addition to the number and distribution of hospitals, the type of control under which they operate. As

Hospital Distribution in Nebraska

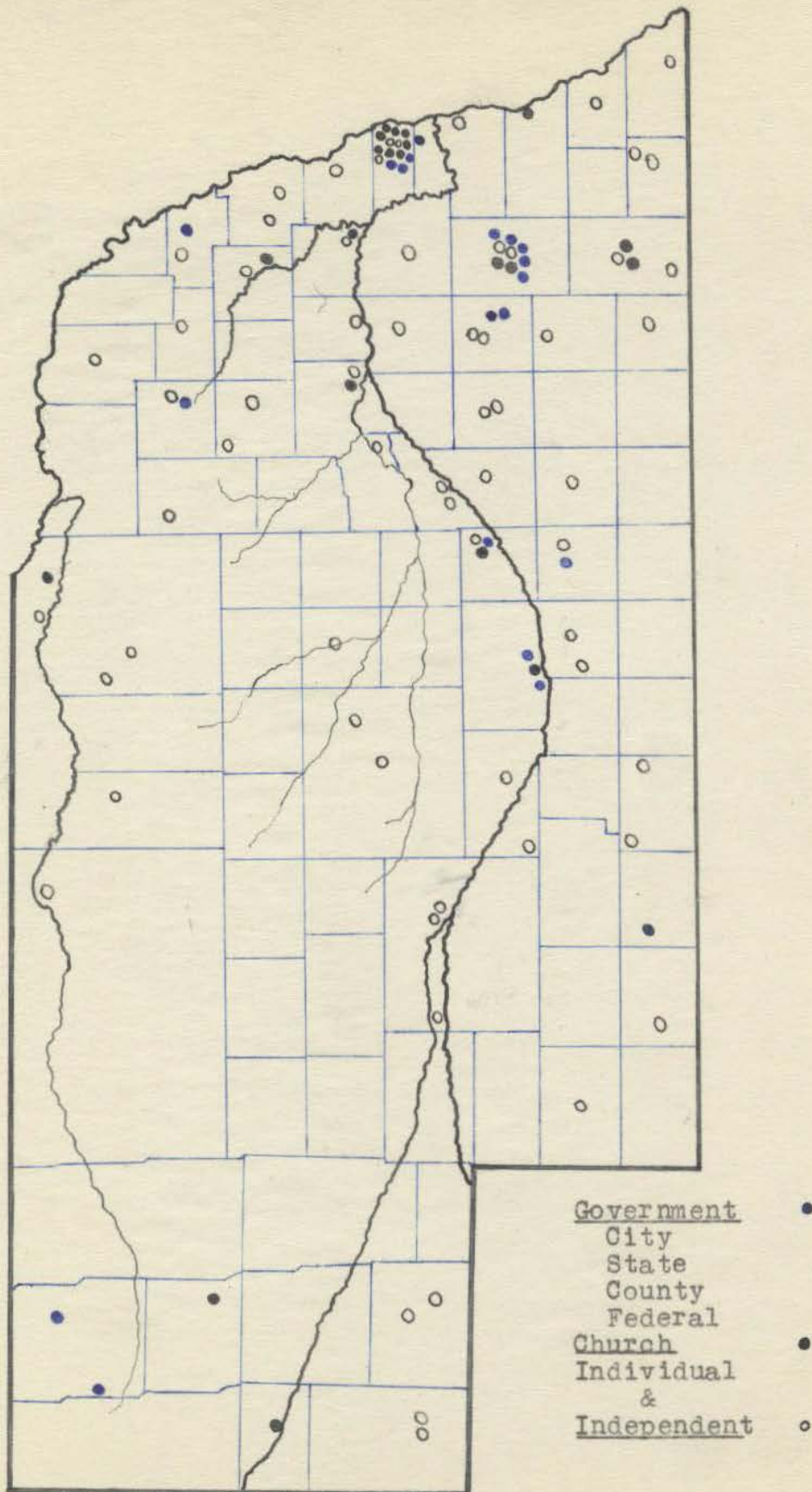


Fig. VIII

shown in this map there are 20 under government control, 21 church and 63 controlled by individuals or independent associations. Welch (48) in reporting on the findings of the Committee on Medical Education and Hospitals gives the control of Nebraska hospitals as follows:

Individual	53
Independent	9
Church	20
Federal	8
State	12
County	2
Fraternal	1

Bean (3), using data for 1930 points out that 5,857 hospital beds in Nebraska are under government control while 3,854 are controlled by other agencies. I find that 4,345 at the present time are non-governmental while 5,916 are controlled by the government. Welch (48) further reports 87 general hospitals with about 4,000 beds, 5 mental with 4,800 beds, 2 isolation, 1 orthopedic, 1 skin and cancer, 9 institutional and 2 maternity.

Fig. XI shows the distribution per hospital bed for community use in the three areas of the state. The same divisions were used that were employed in computing the number of people per physician. As noted in that section, the populations used were taken from the 1930 census reports and the number of hospitals from the 1934 Medical Directory. In the sandhill region (Area II) there were only 94 beds for community use or 1 bed per 757 people. In the western area (Area III) there were 238 hospital beds for general use representing 1 bed per 441 people while the rest of the state (Area I) had 3,996 beds for community use, 1 per 328 people. This would tend to show that these parts of the

Population per Hospital bed in various states.

	Population per Bed		
	1920	1925	1928
Nebraska	369	304	328
South Dakota	321	420	401
Missouri	431	269	234
Iowa	377	332	310
Kansas	465	410	402
South Carolina	881	797	749

Fig. IX

The stippled counties are without hospitals for community use.

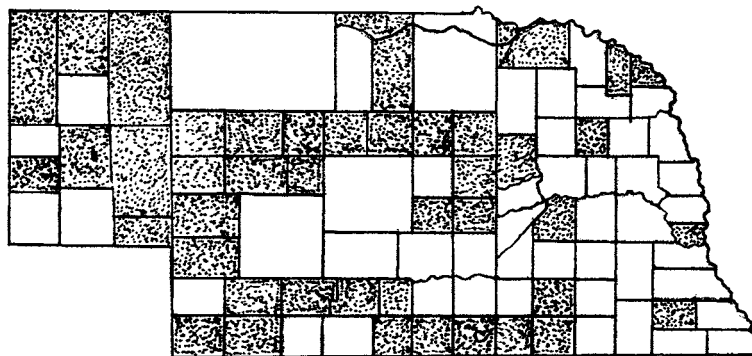


Fig. X

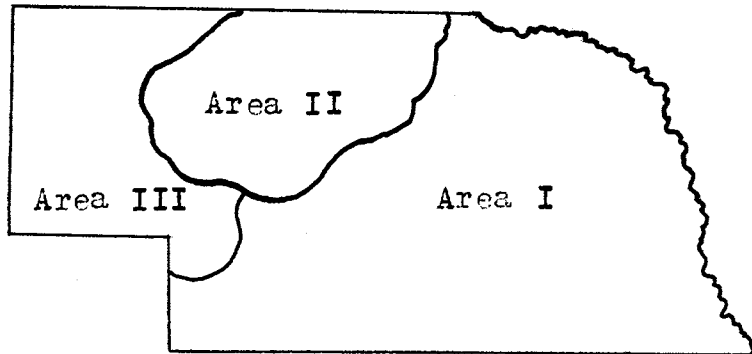
state are under-supplied with hospitals. Such a condition would be expected, however, from the very nature of these areas. It would be economically impossible to establish adequately equipped hospitals in this thinly settled region of the state.

Bean (3) believes that Nebraska's hospitals are fairly evenly distributed. He thinks, however, that the tuberculous situation is bad. There is only one institution for this purpose and the patient must wait weeks or months before he can be admitted. The contagious situation is even worse and Nebraska's facilities for venereal control exist only in the over-burdened clinics of Lincoln and Omaha.

Nebraska is well supplied with state institutions for the insane at least in comparison with other states. There are three such institutions at Lincoln, Norfolk and Hastings and one institution for the feeble minded at Beatrice. (34) In 1932 these four institutions cared for an average of 4,686 patients at a per-capita cost of around \$182. Up to 1891, the cost of caring for these patients was borne by the families or relatives but since then the state has assumed entire responsibility.

There are 16 out-patient departments of hospitals (48) but only 5 of these are of any considerable size. In addition there are a number of independent clinics. As Plumbley (40) points out, the growth of clinics and out-patient departments in the middle west has not been as great as in other parts of the country, chiefly because the clinic is predominately an urban development and is not well adapted to an agricultural community. Nevertheless in the North West Central States including Iowa, Kansas,

Population per hospital bed for community use in  
three areas of the state.



Area I (The loess region) 1 bed per 328 people

Area II (The sandhills) 1 bed per 757 people

Area III (Highplains region) 1 bed per 441 people

Fig. XI

North and South Dakota, Minnesota, Missouri and Nebraska, the number of clinics increased from 61 in 1921 to 137 in 1931. This is only about one third of the number found in the Middle Atlantic States, however. Independent clinics (not associated with hospitals) have likewise developed more rapidly in the industrial states of the east.

Other Medical Facilities in Nebraska.

In 1928 there were 71 dentists per 100,000 population in Nebraska (39) as compared with 58 for Kansas, 49 for South Dakota, 72 for Iowa and 70 for Missouri. These figures are based upon population estimates released from the Bureau of Census and Polk's Dental Register of 1925. I do not have figures for 1934 but think that it is safe to assume that the proportions have not changed very much.

There is a more than adequate supply of trained nurses in the state. Some 19 nursing schools (39) are located in Nebraska and these are graduating a greater number of nurses each year than the demand warrants. (At least at the present time) As a matter of fact there are more trained nurses in the country as a whole than there are physicians. (200,000 in 1932, estimated, as compared with 143,000 physicians) (39)

In 1928 Nebraska had 182 osteopaths (39) and probably as many chiropractors. Missouri, the fountain head of osteopathy had 596, Iowa 359, Kansas 267 and South Dakota only 48. From these figures it would appear that Nebraska is comparatively undersupplied with this type of practitioner(?). The majority of christian science practitioners and other cultists are concentrated in cities (39) and as a result there are not a great many



in Nebraska.

This survey of the medical facilities of Nebraska would tend to point to the following conclusions:

- (A) Nebraska is well supplied with physicians, slightly better than the average for the nation as a whole.
- (B) These physicians tend to be concentrated in towns and cities of 5,000 population and over, leaving the rural areas relatively under-supplied.
- (C) The percentage of physicians in the state who limit themselves to a specialty is average and the specialties are represented in about the same proportion as they are in the United States as a whole.
- (D) Nebraska has a better than average supply of hospitals but lacks facilities for the treatment of tuberculosis and contagious diseases.
- (E) Hospital distribution is fairly even but the western and northern areas are relatively under-supplied.
- (F) The number of clinics and out-patient departments is not as great as in the more industrial states. (This is true of the middle west in general)
- (G) Nebraska has a better than average supply of dentists and nurses.
- (H) In general adequate medical facilities are available in Nebraska.

## NEBRASKA INCOME

Data is not immediately available upon the annual, per-capita income of the people of Nebraska at the present time. For the purposes of this discussion, average figures must be resorted to. Certain facts are at hand, however, which at least indicate some phases of the true situation.

As already noted, the annual, average per-capita money income of the nation in 1926 was \$735. (8) This figure was extremely variable in different geographical regions of the United States, being highest in the Middle Atlantic States and lowest in certain states of the south. The middle west as a rule was fairly close to the average figure. From this it seems reasonably safe to conclude that Nebraska at that time had an average, annual per-capita income which was fairly close to the average figure for the United States as a whole.

At the present time this figure is undoubtedly much lower. This would be particularly true of the middle west where the unprecedented drop in the prices of farm commodities, created havoc in the farming communities throughout this broad, agricultural region. For instance from 1930 to 1931, the money value of Nebraska's corn and wheat crops decreased from \$159,692,000 to \$88,230,000 (34), a decline of just about onehalf. Similar declines have been suffered in the value of almost all other farm products. The effect upon the average money income and buying power of the state can readily be imagined.

The amount of money spent by Nebraska families for medical service is another question which cannot be answered. In 1929

it was discovered by the Committee on the Costs of Medical Care (8) that the people of the United States spend from \$20 to \$40 per capita per annum. for all types of medical service. This figure at the present time must be considerably lower.

The average income of physicians in Nebraska, likewise, cannot be determined. It has already been noted that according to one survey undertaken in 1934 (43) the average net professional income was \$3,969 with a median or middle income of \$3,000. This is 30 to 40 per cent less than the figures arrived at by the Committee on the Costs of Medical Care for physician income in 1929. It must be taken for granted that the income of medical men in Nebraska is somewhere in the neighborhood of this amount.

This must suffice as a rather unsatisfactory consideration of these interesting and important questions. Some further clues as to the present economic status of the citizens of the state may be gleaned from the succeeding sections which deal more specifically with the social status of patients admitted to the University Hospital and Dispensary during parts of 1933 and 1934.

Auctioneer	3	Lumberman	2
Baker	2	Mail carrier	3
Banker	1	Mason	11
Barber	7	Mechanic	23
Beauty Operater	3	Miller	4
Brakeman	2	Minister	3
Blacksmith	7	Musician	3
Bookkeeper	6	Nightwatchman	1
Bootlegger	1	Oil station	9
Bus driver	1	Packing house	28
Butcher	7	Painter	17
Cab driver	4	Plumber	2
Cafe manager	3	Porter	4
Carpenter	29	Practical nurse	2
Chemist	1	Printer	4
Cigar maker	1	River worker	3
Clerk	26	Roofer	1
Cook	7	Salesman	27
Cleaner	5	Schoolteacher	4
Contracter	1	Seamstress	2
Cream station	7	Section hand	7
Dairyman	3	Sheep herder	2
Deputy sherriff	1	Shoe repairer	2
Dishwasher	4	Showman	2
Domestic	68	Storekeeper	5
Drayman	9	Stenographer	2
Electrician	4	Student	3
Engineer	6	Tailer	4
Farmhand	72	Telephone operator	6
Fireman	2	Tinner	1
Furniture repairer	1	Truckdriver	30
Factory worker	8	Veternarian	1
Gardnerer	6	Waiter	2
Interior decorator	3	Waitress	11
Janitor	15	Well digger	1
Laborer	258	Window washer	1
Laborer CWA or FERA	169		
Laundress	7		

Total number 993

Fig. XII

ECONOMIC ANALYSIS OF 1,200 ADMISSIONS TO THE UNIVERSITY  
HOSPITAL (January 1, 1934 to July 1, 1934)

The total number of admission histories analyzed was 1,227. Of this number 234 (19%) were farmers. (Owning or renting farms) The occupations of the rest are shown in Fig. XII. As can be noticed about one half of these are common laborers and one half of this number were employed on federal relief projects at the time of admission. Of the rest there were 72 farm-hands, 68 domestic (maids, housekeepers, etc.), 29 carpenters, 26 clerks, 23 mechanics, 27 salsemen and 30 truckdrivers. Many other occupations were represented but not nearly as heavily. In the University Hospital, then, we are dealing with Nebraska's laboring class of people. With the exception of 1 minister and 1 veterhnarian, the professions were not represented.

A good idea of the economic status of these people may be gleaned from Fig. XII. Of the total non-farmer group, 62.8 per cent had an income while 25 per cent were receiving some form of relief. The average size of family of this group was 4.45 and the average income was \$10.31 per family per week, representing \$2.35 per person per week. This would amount to \$112 per capita per annum, not as low a figure as I had anticipated. However it represents only those with an income i.e. 62.8 per cent of the total number.

These people have no financial reserve. Only 169 (17%) owned their homes and in practically every case these were heavily mortgaged, the average indebtedness being \$1,106. In addition some 401 (40%) owed debts aside from indebtedness on their homes.

Non-farmers Admitted Jan.1,1934 to July 1, 1934

Total number	1227
Non-farmers	993 80.93%
Number with an income	624 62.8%
Number with no income	369 37.2%
Number with relief	249 25.0%
Number owning insurance	188 18.9%
Number owing debts	401 40.3%
Number owning homes	169 17.0%
Average size of family of income group	4.45
Average income per family per week*	\$10.31
Average income per person per week**	\$2.35
Average amount of insurance owned	\$1630
Average indebtedness on homes	\$1106.57

\*This includes only those families belonging to the income group.

\*\*Only those of the income group or 62.8%

Fig. XIII

Only 18 per cent owned any insurance, the average amount being \$1,630 and in almost every case this had been borrowed upon to the limit.

The farmer group are in just as bad financial straits. The average size of family was 5.15, a larger figure than in the previous group and the number receiving relief was much lower, only 4 per cent. This does not include government loans on land and crops however. 24 per cent owned their farms but all of these with one exception were heavily mortgaged. At the time of entrance to the hospital, 8 were losing their farms by foreclosure. (3.4%) The average amount of mortgage per farm was \$6,100 representing \$25.67 per acre and in addition 78 per cent owed debts aside from indebtedness on the land, the average amount being \$1,192. 21.8 per cent owned insurance, a somewhat larger percentage than in the non-farmer group but as was true of this previous group, this insurance had been heavily borrowed upon.

In any study such as this there are many possibilities for sources of error. The patient himself may deliberately misrepresent his economic status and give a spurious account of his financial condition in the hope of receiving free medical service. In most instances, however, the patient does not know the significance attached to his economic status and even if he did attempt to falsify his financial situation, the vigilance of the admitting office would allow very few inelible cases to get by. Further, the great majority of these people are fundamentally honest and very few would resort to such a procedure. The histories are taken quite conscientiously and although occasionally

Farmers admitted Jan.1, 1934 to July 1,1934

Total number	1227	
Farmers	234	19.07%
Average size of family	5.15	
Number receiving relief	10	4.30%
Number renting farms	167	71.3%
Owning farms with a mortgage	58	24.9%
Loosing farms by foreclosure	8	3.4%
Owning farms clear	1	.4%
Owning insurance	51	21.8%
Owing debts	188	78.2%
Average amount of mortgage per farms	\$6100.24	
Average indebtedness per acre	\$25.67	
Average acreage	237.56	
Average amount of insurance	\$2045.90	
Average amount of debts*	\$1192.80	

\*This figure includes indebtedness aside from mortgage on the land.

Fig. XIV



incomplete are, on the whole, fairly reliable. More representative results would no doubt have been obtained if a larger series of cases had been studied.

It appears to me that these patients fall naturally into certain broad social groups. A great many can be included in what I would term the honest laboring class. This type of individual is familiar to everyone who has had any contact with the small towns of the middle west. Non-progressive, untrained, improvident perhaps, he is nevertheless an honest, hard-working member of the community. In normal times he does quite well; he buys a small home with one or two lots on the edge of town; he feeds and clothes his children and sends them to school; he has a small reserve in the bank; he has a steady job in the canning factory during it's two months run; he joins a threshing crew in the summer and works from farm to farm during the harvest; he works with the local contractor building bridges and repairing roads; he makes 30 to 40 cents an hour and is well content; the thought of the future does not, <sup>partly</sup> worry him.

Even during good times a long, extended illness in his family eats up his small reserve and forces him to fall back upon charity care. During times of depression, his situation is sad indeed. Try as he will he is unable to find work. The canning factory closes down and the contractor gets no work. The farmers cannot afford to pay him enough to make it worth while to work. He goes on relief and any medical service which he needs is provided by relief agencies or charitable institutions. At the present time, a good many of these University Hospital patients may be included in this class.

The next class is always a problem, good times or bad. The small town "riff-raff" is as good a term as any. This type of individual lives "across the tracks". He is shiftless, lazy and improvident; he works periodically between drunks; his family lives in filth and squalor and his children are clothed in rags; he is utterly unable or unwilling to provide even the necessities of life. A continual county problem, he welcomes any relief or charity measures which may be directed his way. In times of depression he fares no worse than he did before and he may even get along better. Every community has a certain number of these people and a certain number are always being admitted to the University Hospital.

Another group is one which includes the small town shopkeepers and small business men, victims of the depression for the most part. Barbers, bakers, storekeepers, filling station operators, restaurant owners and others who in normal times are in fairly good financial circumstances, in times like these are left destitute and forced to depend partially or completely upon charity. Before the depression very few of these individuals would be eligible for care in the University Hospital; now a fairly large number of them are being admitted.

Finally there is the farmer group. It seems to me that the great majority of these individuals have been brought into financial stress by circumstances beyond their control. A farmer who was in good financial condition ten years ago may be forced to accept charity medical care today. The fact that 28 per cent of the farmer group owned, or did own their land, points to this conclusion.

ECONOMIC ANALYSIS OF 351 ADMISSIONS TO THE UNIVERSITY

DISPENSARY (December 22 to February 22, 1935)

In a similar manner, some 351 consecutive admissions to the University Dispensary were analyzed in an attempt to obtain some idea of prevailing economic conditions in Omaha and nearby communities. Referring to Fig. XV it is noticed that of the total number of 351, 146 (41%) have an income of some kind while the remainder must depend partially or completely upon friends and relatives or various relief agencies. This is a considerably lower figure than that derived from the previous survey. (41% as contrasted with 63%) Fig. XVI In other words this would seem to indicate that individuals in the smaller communities have a greater opportunity for finding employment.

On the other hand the average income per person per week of the income group was \$2.81 for the dispensary patients and \$2.35 for the hospital admissions, a somewhat higher figure. The difference is too slight, however, to draw a conclusion. Another striking difference in this comparison (Fig. XVI) is the fact that a greater number of dispensary patients are receiving relief. (35% as contrasted with 25% for the hospital group) Of this 35%, 33% are receiving federal relief and only 2%, county. It should also be remarked that in actuality, a greater number of these patients are on relief than this survey would indicate. These facts would point to the conclusion that either economic conditions are worse in Omaha than outstate or the facilities for obtaining relief are better. I would incline to this latter view. There are so many relief agencies in Douglas county that

New Dispensary Patients (December 22 to February 22, 1935)

Total Number	351	
Number with an Income*	146	41.5%
Number with no Income	205	58.5%
Number receiving relief**	123	35.0%
FERA	116	33.0%
County	7	2.0%
Average Income per Family per week		\$10.90
Average Income per Person per week		\$2.81

\*This does not include any money which is allowed for groceries for labor on the FERA projects.

\*\*I believe that this figure should be higher. In some cases at least, it is not noted upon the admission cards whether or not the family is on relief.

Fig. XV

a needy family here probably fares better than it would in a smaller community;

Concerning the occupational statistics, one or two facts are to be noted. 3.5 per cent of the total are farmers as compared with 19 per cent of the hospital admissions. As with the latter group, the great majority are laborers while the other occupations are likewise represented in about the same proportions. It is interesting to note that there are about twice as many truck-drivers in proportion among the dispensary patients while the situation is reversed with carpenters.

In considering the results of these surveys it should be clearly realized that the economic status of these University Hospital and Dispensary patients is not in any way representative of the laboring class of the state. The University Hospital was founded primarily for teaching purposes and secondarily to care for the indigent sick of the state of Nebraska. Hence its patients are only those who are unable to pay for medical service. This would be as true of patients admitted in 1928 as at the present time. The results do indicate at least some phases of the prevailing economic situation in the state.

Occupation

Auditor	2	Laborer	198
Barber	1	Laundryman	2
Beauty operator	2	Linotype op.	1
Bell boy	1	Mechanic	11
Blacksmith	1	Musician	1
Bookkeeper	2	Painter & paperhanger	4
Bus driver	1	Porter	2
Butcher	6	Printer	1
Cab driver	2	Salesman	6
Carpenter	4	Shoemaker	1
Cleaner	1	Soldier	1
Clergyman	1	Tailor	2
Clerk	2	Tinner	1
Cook	1	Tire repair man	3
Dairyman	1	Truck driver	13
Domestic	26	Truck gardner	2
Electrician	2	Typist	1
Elevator operator	1	Waiter	6
Engineer	1	Welder	2
Farmer	12		
Farm hand	2		
Filling station attend.	1		
Fireman	1		
Hog Buyer	1		
Janitor	4	Total	337

Fig. XVII

Number with an Income	
Dispensary	41.5%
Hospital	62.8%
Number receiving relief	
Dispensary	35.0%
Hospital	25.0%
Average size of Family	
Dispensary	3.88
Hospital	4.45
Average Income per Peron per week	
Dispensary	\$2.81
Hospital	\$2.35

Fig. XVI

## RELIEF FACILITIES IN NEBRASKA

In so-called "good times" there are from 2 to 4 million unemployed people in the United States. In the summer of 1932 there were 10 million unemployed, an amazing and distressing increase. (49) This tremendous increase in unemployment necessitated the extension of immediate relief by the government through various relief agencies, the most far reaching of which is the FERA. This was created in the belief that there existed a group of indigent persons not before existing and never before contemplated. (47) Always before the poor had been cared for by cities, counties or neighbors and medical care had been donated by physicians free of charge for the most part.

The medical service required by these people on federal relief was and is being provided by physicians at approximately 50 percent of the usual fee, this being arranged by the county medical society and the local relief administrator. In Nebraska 69 counties have provided funds to contribute to the cost of the relief, the requirement being that the county match the funds which the federal government provides. Nebraska physicians receive 50 per cent of the usual fee charged. Minor surgery may be provided at a maximum charge of \$10 and obstetric calls must not exceed \$15, presumably one half of the usual fee. 12½ cents a mile is allowed both ways. (46)

The fees charged vary in different states. In Colorado 70 per cent of the normal fee is charged, Wyoming 75 percent, Louisiana 33 per cent and Texas 50 per cent. Iowa refused federal funds to care for the indigent sick of the state. At the present time (1933)

29 of the 48 states have successfully organized their medical aid systems under the FERA. (46)

In this manner, then, is medical care provided to this new group of indigent people. Considerable "red tape" must be gone through by the physician before this payment is received. He must fill out a form which is provided by relief headquarters, indicating the amount and kind of work performed, the mileage and the fee charged the patient. These forms are then audited and passed through numerous supervisory channels before the money is finally received.

In most instances the medical profession has cooperated fully with the relief administrators in putting this new system into effect. Many physicians feel, however, that the fees they are allowed are inadequate and they dislike being told how much they are to charge. Many of them have been caring for the poor of their communities for years with no thought of financial return and it goes "against the grain" to conform with the standards of the FERA medical relief program. I believe that the plan is of some benefit to the physician as it brings him a source of revenue which ordinarily he would not have.

In addition to the FERA, additional medical relief facilities are present in most counties. These exist chiefly in the person of the county physician who is employed by the county to care for the indigent sick of the county. In many instances however, this set-up is far from satisfactory. In several counties, the physician hired is incompetent and incapable of discharging the duties of his office in an efficient manner, the burden falling back upon the



shoulders of his practicing colleagues. Other counties do not hire a county physician but allow the medical men of the community to present their bills at the end of the month, these being paid from the county funds. If these amounts are large they are often cut down before being allowed by the commissioners despite the large amount of work which may have been done by the physician. A few counties have visiting nurse associations, chiefly those which are thickly populated.

The medical relief facilities in Douglas County might be considered in more detail. Lumsden (28) in a survey undertaken in 1932, has covered the situation quite completely. He believes that in normal times, Douglas County is considerably above the average for comparable communities throughout the country. The city of Omaha is essentially an agricultural center and all of the industries have been very hard hit during the recent depression which has added to the problem of providing for the indigent sick of the county.

The death rate is still too high. The typhoid rate is low but the diphtheria and small pox rates are too high and maternal mortality is disproportionately high. The medical facilities for the care of the indigent are headed by the Public Health Department which is handicapped by lack of funds, the appropriation amounting to only 22 cents per capita per annum whereas it should be in the neighborhood of 50 cents to insure adequate medical care. In fact Nebraska stands lowest of all states in the Union in per-capita appropriation for public health service.

The Visiting Nurse Association operates upon funds derived from

interest on endowments, fees for service, the Omaha Orthopedic Association, the Nebraska Tuberculosis Association and the Community Chest plus an appropriation of \$71,000 by the city. (28) The Omaha Board of Education supervises a Department of Health Supervision with an annual appropriation of \$25,000 and a Department of Physical Culture with an appropriation of \$50,000 annually.

Douglas County hires one County Physician at \$3,000 and one assistant County Physician at \$2,400 yearly, both working upon a part time official basis.

Finally there are the Douglas County Hospital and Dispensary, the University of Nebraska Hospital and Dispensary and the Creighton Medical and Dental Dispensaries. These facilities should be adequate but at the present time they are not. Douglas County Hospital is crowded at all times and it is almost impossible to get a patient in upon short notice.

In addition to these facilities there are many others available. The Douglas County Relief Association, Family Welfare, various institutions, etc. among many others are in existence to aid the sick poor of the county.

The FERA as already noted is a child of the depression and does not effect the basic principles underlying the medical-economic controversy. This was in existance long before the present depression. These medical-economic problems have been made more acute, however, by the depression and it was for this reason that the preceeding survey was included.

## GENERAL DISCUSSION AND SUMMARY

Present Social Trends.-- Astonishing social changes have been taking place during this first third of the twentieth century. The world war with its consequent widespread social upheaval played a part which no one has been able to evaluate as yet. The inflation and deflation of agriculture and business, the increase in efficiency and productivity with the tragic spread of business distress, the experiment of prohibition, birth control, women's suffrage, the stoppage of immigration, government corruption, crime and racketeering, the rise and weakening of organized labor and the advance of medical science all indicate the great social changes which are taking place at the present time.

According to Buck (50), two great social organizations, the economic and the governmental are growing at a very rapid rate while the church and family have declined in social significance. Great changes are occurring in the economic field, chiefly evidenced by the increase in productivity and the mechanization of agriculture.

The Economic Depression.-- It is hard to determine the actual causes of the depression. Delaisi (51) affirms that the war and resulting industrial development made the United States the richest nation in the world. Expansion continued under unlimited credit so that by 1928 we were faced with huge stocks of wheat, coffee, sugar, gasoline, copper, steel, textiles, etc. Then in 1929 came the crisis. Bankers instead of cutting off credit organized huge pools and this caused everybody to continue in an over-producing frenzy. Then the rapid fall of the prices of foods

and raw materials destroyed the purchasing power of farming countries and this in turn brought about the collapse of other industries.

The fault, according to this authority lies in the government and the bankers. Protectionist policies have maintained weak industries in operation or have created sheltered and uneconomic industries and thus prevented the healthy operation of the process of natural selection. In addition to this the bankers lavished unlimited credit. The fault does not lie in the engineer and the scientist. The two causes of the depression, then, are two mistakes, a political one and a financial one. The crises involves all of the white races who make up some 500,000,000 people in a world population of 1,800,000,000.

In the past history of the United States there have been some 30 depressions and each of them has been followed by a period of prosperity. (50) None of them, however, have been as long continued, as widespread or as severe as the present one. Despite this those who are acquainted with past experience believe that the present depression will terminate in one or two years and will be followed by a period of prosperity which will be terminated in turn by a fresh recession.

It is my firm belief that a period of prosperity is looming directly ahead of us. It will be slow but it will surely come. With it much of the agitation along social insurance lines will disappear. Medical economics will not constitute such a problem. Nevertheless, the basic underlying principles in our social and economic systems will continue to change and the defects in med-

ical practice will be remedied sooner or later in one way or another.

Proposed Solution.-- The theory of health insurance is excellent. When we know that 90 per cent of all our families have incomes of \$3,000 a year or less and when we consider the cost of an extended illness, it becomes obvious that, from its income, the family is utterly unable to pay for this illness. When we further consider, however, that the total average per-capita cost of all forms of medical care is \$20 to \$40 per annum, a fairly reasonable figure, it becomes clear that health insurance is the theoretical reasonable solution. By means of insurance, the cost of medical care is distributed evenly over the population as a whole. The big practical disadvantage of such a scheme, at least from the standpoint of the medical profession, is the difficulty in its administration. It would involve the participation of the government and perhaps lay companies and organizations. Many physicians feel that if this came about, it would act as an entering wedge to more extensive government regulation of medicine with the specter of state medicine looming in the foreground.

I do not hold this belief. State medicine with all that the name implies will never become established in the United States. It is distinctly un-American and will never be tolerated by the American people. Russia, with its 163 million inhabitants, 50 to 75 per cent of whom are illiterate, is the only nation, according to my way of thinking, in which such a system could survive. Despite the optimistic attitude that Sir Arthur Newsholme adopts in his book "Red Medicine" (52), it is my impression that conditions

are far from satisfactory in the United States of Soviet Russia. The whole country is highly organized with medical service provided and administered by the government through large central hospitals, supplying certain districts. There are sanatoria for the care of the tuberculous and nervous and mental disease, large convalescent homes, day nurseries and innumerable clinics. A patient seeking medical care repairs to a certain office and is given a card to a certain clinic under whose jurisdiction he lives. He has no choice in the matter and must do as he is told and accept such care as he is provided.

Granting that state medicine is a success in Soviet Russia, there is no reason to believe that it would likewise succeed in other countries. It is a far cry from the illiterate peasant of Russia to the wide-awake, freedom loving, educated American and those people who fear state medicine in the United States are simply borrowing trouble for themselves.

A scheme of health insurance, then, provided and administered by the government with the medical profession being given a voice in it's administration, would have my support. It would accomplish a number of things. First of all the cost of medical service would be borne by the group rather than by the individual. It would assure the physician of a regular steady income. It would not necessarily destroy private practice or the personal physician-patient relationship in any sense of the word. The costs of administration of such a system would not necessarily be prohibitive provided corrupt politics be kept out. And think what a boon it would be to those hospitals which are on the verge

of financial insolvency at the present time.

Another and glaring defect in the present system is the treatment of patients in free clinics and outpatient departments who are not entirely destitute. A family of four or five with an income of \$20 to \$25 per week, should not receive free medical service. They should be able to pay something, even though it be a small amount. Collectively, a large sum could be realized in this manner which would go far in remunerating practitioners who are now donating their services with no thought of financial return. The successful county medical society plans now in existence prove this point beyond all possibility of doubt.

If the organized medical profession would take steps along these lines, the necessity for health insurance would disappear. As the situation appears now, a system of health insurance will inevitably appear in the near future. Although this may have certain disadvantages, as already pointed out, in the long run it will probably be fairly satisfactory and will eliminate certain of the evils from the present system. In any event, it will behoove the medical profession to consider these problems very carefully since it seems certain that some changes are going to take place.

BIBLIOGRAPHY

- (1) Anderson, A. E.: The Progress of Nebraska Agriculture During the Depression and the Probable Effects Upon the Future of the Industry. Nebraska Blue Book, 1932, pp 402-406.
- (2) Barker, Lewellys, F.: Investigations and Conclusions of the Committee on the Costs of Medical Care. Journal of the American Medical Association 100:868-869.
- (3) Bean, Francis J.: Nebraska Hospitals and their Relation to the Practitioner. Nebraska State Medical Journal 17:243-249, June 1932.
- (4) Bierring, Walter L.: Social Dangers of an Over-supply of Physicians. Bulletin of the American Medical Association 29:18-19, Feb. 1934.
- (5) Bowen, W. W.: The Present Status of Medicine. Journal of the Iowa State Medical Society 24:144-147, March 1934.
- (6) Bureau of Medical Economics - a Report: Bulletin of the American Medical Association 28-63-65, April 1933.
- (7) Christie, A. C.: Medical Society Plans. Bulletin of the San Diego Medical Society 29:62-73, Nov. 7, 1933.
- (8) Committee on the Costs of Medical Care: Medical Care for the American People - Final Report. (University of Chicago Press, 1932)
- (9) Committee of the New Haven Medical Association: Final Report of the Committee on the Costs of Medical Care Journal of the American Medical Association 100:247-249, Feb. 11, 1933.
- (10) Committee of the House of Delegates - a Special Report: American Medical Association Bulletin 29:98-103, June 1934.
- (11) Condra, G. E.: Resources and Industries of Nebraska. (University of Nebraska Press, 1934)
- (12) Cook, Arthur E.: The Present Trends in Medicine. Nebraska State Medical Journal 17:221-224, June 1933.
- (13) Dannreuther, Walter T.: Cross Roads in Medicine. Medical Economics 11:19, Feb. 1934.
- (14) Editorial: What State Medicine is and the Arguments for and against it. Nebraska State Medical Journal 16:198-199, May 1931.
- (15) Editorial: Medical Society Plans. American Medical Association Bulletin 29:146-150, Nov. 1934.



- (16) Editorial: Detroit's Medical Service Plan. Bulletin of the American Medical Association 29:23-25, Feb. 1934.
- (17) Editorial: Health Insurance. The Nation 77:663-664.
- (18) Editorial: The President Plans for Economic Security. Journal of the American Medical Association 104:122, Jan.12, 1935.
- (19) Editorial: Eleven Insurance Principles Outlined by the Economic Security Committee Appointed by the President. Modern Hospital 44:112, Feb. 1935.
- (20) Editorial: The Wagner Social Insurance Bill, Abst. S 1130. American Medical Association Bulletin Jan. 1935.
- (21) Editorial: State Emergency Relief for Medical Service to the Indigent. Nebraska State Medical Journal 19:390-392, Oct. 1934.
- (22) Editorial: Medical Economics at the Annual Conference: Nebraska State Medical Journal 19:428-429.
- (23) Fay, Oliver J.: The Test of Organized Medicine. Journal of the Iowa State Medical Society 24:205-208, April 1934.
- (24) Freehof, Solomon B.: Medical Costs and the Future of Healing. Bulletin of the American Medical Association 22:26, Feb. 1933.
- (25) Hansen, Alvin N. et al: A Program for Unemployment Insurance and Relief in the United States. (University of Minnesota Press, Minneapolis, 1934)
- (26) Heddon, H.: General Health Insurance and the Patient of Moderate Means. Modern Hospital 37:81-82.
- (27) Leland, R. G.: Health Insurance in England and Medical Society Plans in the United States. Bulletin of the American Medical Association 29:126-136, Oct. 1934.
- (28) Lumsden, L. L.: Report on a Survey of Health Service and Medical and Surgical Care and Treatment of Indigents in Douglas County, Nebraska. Dec. 1932.
- (29) Levin, Maurice: The Incomes of Physicians - an Economic and Statistical Analysis. (University of Chicago Press, Chicago, Dec. 1932)
- (30) Lewis, Dean: The Restoration of the General Practitioner. Journal of the American Medical Association 102:977-979, March 31, 1934.

- (31) Lewis, Dean: The Place of the Clinic in Medical Practice. Journal of the American Medical Association 100:1905-1910, June 17, 1933.
- (32) American Medical Directory: (American Medical Association, 1934) pp 975-997.
- (33) McLean, B. C.: Clouds on the Horizon. Modern Hospital 44:59-61, Feb. 1935.
- (34) Nebraska Legislative Reference Bureau: The Nebraska Blue Book (1932 edition) pp 386, 394-399, 252-260.
- (35) Nelson, R. W.: Hospitals Must Change with the Times. Modern Hospital 44:72-73, Feb. 1935.
- (36) Newsholme, Sir Arthur: Public Health and Insurance. (John's Hopkins Press, Baltimore, 1920) pp 71-103, 115.
- (37) Newsholme, Sir Arthur: Medicine and the State. (Williams and Wilkins Company, Baltimore, 1932) pp 288-295.
- (38) Ochsner, E. H.: The Genesis of Social Insurance. Nebraska State Medical Journal 17:36-38, Jan. 1932.
- (39) Peebles, Allon: A Survey of Statistical Data on Medical Facilities in the United States. (University of Chicago Press, Chicago, 1929) Appendix 2, Table 3, pp 65, Appendix 3, Table 7, pp 69, Appendix 10, Table 21, pp 91, Appendix 8, Table 17, pp 83.
- (40) Plumley, Margaret L.: Growth of Clinics in the United States. (Julius Rosenwald Fund, 1932) pp 7-33.
- (41) Rand McNally Commercial Atlas of America. (1931 edition) pp 254-260.
- (42) Reed, James S.: The Ability to Pay for Medical Care - Abstract of a Report Published for the Committee on the Costs of Medical Care. (University of Chicago Press, Chicago, 1930)
- (44) Rorem, C. Rufus: Sickness Insurance in the United States - a Report. (Julius Rosenwald Fund, July 1932)
- (45) Rorem, C. Rufus: Middlemen Not Allowed. Medical Economics 11:14, March 1934.
- (43) Richardson, W. A.: Our Post-Depression Incomes. Medical Economics 11:12, April 1934.
- (46) Rowe, E. W.: An Evaluation of the Report of the Committee on the Costs of Medical Care. Nebraska State Medical Journal 18:70-72, Feb. 1933.

- (47) Taylor, Holman: Emergency Medical Relief. American Medical Association Bulletin 29:114-126, June 1933.
- (48) Welch, J. S.: Report of the Committee on Medical Education and Hospitals. Nebraska State Medical Journal 18:102-104, March, 1933.