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ABSTRACT

Prepared by the Division of Nursing, this source book on South Dakota's nursing needs and resources is a compilation of existing data supplemented by information from field visits. Information for guiding development of a long range nursing plan is included for these topics: (1) Profile of the State, (2) Population Characteristics, (3) Health, (4) Health Facilities and Services, (5) Health Expenditures, (6) Utilization of Health Facilities and Services, (7) Manpower for Health Services, (8) Nurse Manpower, (9) Nursing Education, and (10) Assessing Future Nurse Manpower Requirements. The text is augmented with figures and data tables, and several data tables are appended. (SB)

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Source Book for
Community Planning for Nursing in South Dakota

Prepared by
Division of Nursing

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The interest and enthusiasm evidenced by all who participated, directly and indirectly, in the preparation of this source book indicate that steady progress will continue to be made in planning for meeting nursing needs in South Dakota.

This survey was conducted and the source book prepared by Helen V. Foerst and Florence E. Gareau, Nurse Consultants in the Division of Nursing. They collected and analyzed the data, presenting selected data in tabular form, interpreting the material, identifying trends, and reporting implications.

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Foreword

The Division of Nursing, Bureau of Health Professions Education and Manpower Training, is primarily concerned with augmenting and improving nursing services and resources throughout the Nation. Accordingly, the Division welcomes the opportunity to assist States and local communities in studying their particular nursing needs and resources. This the Division has done for more than 20 years, assisting not only in initial studies but also in re-appraisals of the nurse manpower needs and resources of States and communities.

To provide the benefits made possible by the new Federal legislation affecting health manpower and by the changing patterns of health care, the studies of health manpower needs and resources must be oriented to the future. They must form a basis for developing long-range plans for meeting health manpower needs.

This source book for South Dakota is the first health manpower planning tool produced by this Division for a State. One other has been developed for a metropolitan area. The source book for South Dakota will enable the State to use a new approach in studying its nursing needs and resources. Compiled by a team of staff members of the Division of Nursing, this source book consists of basic data drawn largely from existing sources deemed important to nurse manpower planning. Statistics for the nursing situation are presented within the framework of socioeconomic data considered relevant to long-range planning.

It is hoped that this publication can serve as a useful model for the development of source books for other States and local areas as they undertake health manpower planning.



JESSIE M. SCOTT
Director
Division of Nursing

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Trade names are for identification only, and do not imply endorsement by the U.S. Department of Health, Education, and Welfare.

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Explanatory Notes

Trade Region, Trade Area, Planning Region

The terms "trade region," "trade area," and "planning region," as used in this source book, refer to regions into which the State of South Dakota has been divided for planning purposes by the South Dakota Planning Council for Nursing Resources. Counties are grouped in general on the basis of economic interdependence, the flow of the population to trading centers, and the use of existing health services and facilities. The six regions are those used for mental health planning and are believed to be homogeneous groupings. They comprise the following counties:

Region I: Butte, Custer, Fall River, Harding, Lawrence, Meade, Pennington, and Perkins.

Region II: Bennett, Brule, Buffalo, Campbell, Corson, Dewey, Gregory, Haakon, Hughes, Jackson, Jones, Lyman, Mellele, Potter, Shannon, Stanley, Sully, Todd, Tripp, Walworth, Washabaugh, and Ziebach.

Region III: Beadle, Brown, Day, Edmunds, Faulk, Hand, Hyde, Kingsbury, McPherson, Marshall, and Spink.

Region IV: Brookings, Clark, Codington, Deuel, Grant, Hamlin, Lake, Miner, Moody, Roberts, and Sanborn.

Region V: Aurora, Bon Homme, Charles Mix, Clay, Davison, Douglas, Hanson, Hutchinson, Jerauld, Lincoln, McCook, Turner, Union, and Yankton.

Region VI: Minnehaha.

Term "No Degree"

The term "no degree"—as used in the appendix tables of this source book and in the American Nurses' Association's reports and Inventory of Registered Nurses—includes the highest earned credential, as diploma in nursing, associate degree in nursing, as well as the designation "no degree" when basic preparation was not indicated.

Symbols

The symbols used in the tables of this source book are explained as follows:

- ... Data not available, not reported, or unknown.
- None or not applicable.

Introduction

The South Dakota Nurses' Association, the League for Nursing, and the State Board of Nursing initiated, in late 1966, a study of nursing needs and resources of the State as a means of developing a long-range plan for improving nursing services. Such a study is especially timely. South Dakota's population, which began to decline in the 1930's, has stabilized to allow for a gradual growth, particularly in the oldest and youngest age groups, which require the most health services. However, net migration shows continuous and increasing population losses. Significant numbers of young people continue to leave the State during their most productive years. Within the State, there is a population shift from farm to city. As health services have been expanded and widely extended, the need for nursing personnel has intensified. Moreover, new demands for health manpower will be made as Federal and State funds allocated for health become increasingly available. Consequently, the most careful and thorough manpower planning will be required to marshal all of the State's resources to meet present and future nursing needs.

A previous study of nursing needs and resources was conducted in South Dakota in 1950. At that time, such studies gave little consideration to the broader socio-economic framework within which nursing has to be assessed today. Moreover, they were not concerned with a State's relationship to and dependence upon other States, and did not particularize and plan for the needs of areas within a State.

Those who have taken part in planning for the collection of information necessary for the forthcoming study of nursing needs and resources believe that South Dakota is losing a large percentage of its potential manpower because of the State's slow industrial development. Although South Dakota is preparing growing numbers of its youth in increasingly diversified fields of endeavor, it lacks the competitive economic and social advantages and job opportunities of other States. Its graduates of high schools, vocational schools, colleges and universities, as well as nursing schools, are being lured out of State. Those health professionals who must be trained out of State for beginning or leadership positions often do not return.

A need for assessment and cooperative planning for health manpower development, utilization, and retention exists mutually among the many official and voluntary agencies, hospitals, schools, and professional societies within the State. Action programs specified in terms of 5-year plans should be devised for meeting future health manpower needs. Provisions should be made for continuous evaluation of progress and accomplishments, for reassessment of needs and resources, and for the setting of new goals as may be required.

Prepared by the Division of Nursing, this source book contains data currently available from various sources deemed pertinent to an appraisal of the current nursing situation. The Division published earlier a similar source book for a metropolitan area—the District of Columbia (1).¹ Included are data on the socioeconomic forces that influence nurse manpower. Such data on South Dakota were plentiful; national, State, and local agencies, societies, and institutions were excellent sources. Generally, the greatest problem in assembling available data for health manpower

¹ *Italic numbers in parentheses refer to References Cited, p. 91.*

planning is lack of a coordinated statistical effort for the collection of data with this focus. Therefore, in this study, usable data were selected and tabulated in a framework that seems appropriate for highlighting trends and forecasting needs and demands.

Some of the material in the text was obtained by a Division of Nursing staff member and a representative of South Dakota's Planning Council for Nursing Resources, through interviews with administrators of the State's official and voluntary agencies and associations concerned with labor, health, welfare, and education. These contacts were made in order to identify sources of data and to uncover some of the major factors influencing manpower needs and resources and their relationship to the delivery of health and nursing services. Such information would not be obvious from statistical tabulations alone.

It is hoped that this source book will be useful to planning groups conducting studies of nursing needs and resources of their States. A very wide collection of data has been presented herein, expressly to allow planning groups to identify sources of data that relate to the objectives, issues, and conditions around which their studies may be designed. It is suggested, however, that such groups select and present only the most pertinent statistical data. In other words, a successful planning effort does not require all of the materials contained or mentioned in this source book.

This text, which attempts to present the highlights of the statistical tables and the information gained from field visits, is not meant to be a thorough analysis of the nursing situation in South Dakota. Nor does this source book contain recommendations for action. It is intended rather to serve as a point of departure for developing a plan for nursing. The contents of this book may need to be supplemented by additional data, some of which will soon be published from national studies of nurse supply, utilization, and nursing education in areas pertinent to effective planning and where data are not yet available. Most important, all data will have to be interpreted and recommendations will have to be made by an advisory body consisting of interested and knowledgeable representatives of the State. Only those acquainted with the forces that have molded the current nursing situation in South Dakota can constructively translate data into the specific action required.

This source book, then, is a compilation of existing data supplemented by information gained in field visits and deemed pertinent to the development of a long-range plan for nursing. The uses of this source book are seen as threefold:

1. To provide a baseline for initiating a study and developing a long-range plan for nursing;
2. To shed light on additional data that would be required to develop this plan, including data from special studies; and
3. Where the data in this source book are deemed as being conclusive in their implications, to point the way to immediate action that can be undertaken to meet the problems of nursing needs and resources in the State of South Dakota.

Chapter 1

Profile of the State of South Dakota

Planning for present and future nursing needs can best begin with an examination of the characteristics of the State of South Dakota and its residents, who are consumers of health services.

General Characteristics

South Dakota is divided into prairie and plain by the Missouri River, yet is ruggedly mountainous in parts. It ranks 16th among the States in land area. South Dakota is predominantly an agricultural State. In 1960, nine out of every 10 acres of its land were in farms.

The State is politically divided into 64 organized counties and has three unorganized counties that have no local functions. Federal Indian reservations comprise 10 percent of the land area, covering all of two counties and part of six other counties. Reservation communities, with vastly different patterns of culture and degrees of acculturation have their own constitutional governments. Indian affairs are administered under the leadership of tribal councils and Federally sponsored development and health programs.

South Dakota's economic reservoir is its fertile soil and natural resources. Livestock and grain are the chief farm assets. Natural resources provide for industries such as lumbering, mining, food processing, and manufacturing of stone-clay-glass products. Meat packing is the largest industry. In addition, the tourist trade provides income; over 1½ million visitors a year are attracted to the Black Hills and the Badlands, and many come to South Dakota for game hunting. Farm and ranch products have a value four times that of factory and mine products combined, and the tourist trade equals that of mine products alone.

The strong influence of South Dakota's foreign stock is seen in the development of community life. Since the 1850's, Western and Central Europeans of a dozen major nationalities have settled throughout the State—some in compact communities and some in widely dispersed areas. Their heritage of independ-

ence, social solidarity, and high values of providing and caring for their own people is evidenced in the State's political, economic, educational, and health systems. However, the tides of social change, altering the traditional rural nature of the State, present serious difficulties in meeting the growing needs and demands for all types of public services as well as the requirements for adequate manpower to staff them.

Urban Growth and Rural Decline

In South Dakota, as in many other agricultural States of the Midwest, the rapid mechanization of farming, the "pull of the city," and other factors attending social change in modern life are phenomena of interstate and intrastate mobility. Rural-urban migration is influencing the rapid growth of eight urban communities which are the centers of six economic and trade areas. Four of these areas, lying east of the Missouri River, have the State's heaviest population concentrations; that is, the metropolis of Sioux Falls and five other trading cities servicing rural and semi-rural areas. The two other trade areas, lying west of the Missouri River, cover more than half of the State's land area. Each of these trade areas has one city. They service the tourist meccas, the vast ranch country, and other less populous areas.

Changing transportation and communication systems have been important factors in the growth of urban communities and the decline of rural trade centers. In the past 50 years, South Dakota's hamlets have declined by over 125. The use of trucks in marketing and merchandising, together with improvement in roads, forced the railroads to abandon depots in small towns and to generally curtail services, although seven railroad companies still service the cities. Today South Dakota has a well-integrated network of primary and secondary roads connecting all areas of the State. Of 86,000 miles of road, 11,000 miles are hard-surfaced. When the interstate highway system is completed, 675 miles of road will cross the State from east to west and from north to south in the

eastern part of the State, servicing the main population centers. With the growth of motor carrier service and the increased use of automobiles has come a corresponding development of air transportation. South Dakota has some 70 approved airports and 11 certified passenger air terminals.

Financial Resources

Despite generally favorable economic conditions with slow industrial development, the problem of providing adequate financing for public services is a vital concern in South Dakota's economy, which remains basically agricultural. Although ranking 46th among the States in revenue, South Dakota has no State debt. A 3 percent retail sales tax supports State government operations. Tax legislation and administration are geared to attract new industry. There is no State corporate or personal income tax. The general property tax is the chief source of financial support for public services, and the State's political jurisdictions assume indebtedness for bond issues. Local property taxes furnish about 60 percent of the revenue for public services, matched by 30 percent of Federal funds. In 1966, education took about 42 percent, highways 29 percent, and public welfare services 6.5 percent of these funds. The lowest expenditure, 2.5 percent, was for health and hospitals.

In 1960, about one-third of South Dakota's families had an income less than \$3,000. The average per capita personal income in South Dakota in 1960 was \$1,782, compared with the U.S. average of \$2,215. By 1965, South Dakota's average per capita personal income exceeded \$2,000. The average per capita income in South Dakota is lower than that of the six bordering States, and is, in fact, lower than that of all States of the Nation except eight in the South. Since no State funds are appropriated specifically for assistance of local health departments, the ability of the State and its citizens to provide locally expanded and supported services through the expenditure of increased public funds is limited. Current revenue is insufficient for planning for the expansion of existing services as mental health centers, maternal and child health services, and other services in geriatrics and care of the chronically ill.

Educational Resources and Attainment

South Dakota's citizens, from pioneer times, have emphasized the importance of education. Ten colleges were established in the State before 1900. The State's

residents have a high level of literacy. According to Selective Service figures on 18-year-olds tested for military service between June 1964 and December 1965, South Dakota had 50 percent fewer failures to meet intelligence qualifications than had the United States as a whole. High school dropouts in South Dakota in 1964-65 were 19 percent—6 percent below the U.S. average. Median school years completed by persons 25 years and older in 1960 closely approximated the U.S. average of 10.4 years. South Dakota's levels of educational attainment, although slightly behind the U.S. average, are keeping pace with the overall increases for the Nation as a whole, and increasing numbers of South Dakota youth are receiving college education.

School districts in South Dakota are independent governments. The State is determined to prepare today's youth for tomorrow's world. In 1962, South Dakota still had 1,812 one-teacher schools. It is expected that legislation will soon be enacted requiring all elementary and secondary schools to belong to a school district and all teachers to have a baccalaureate degree by a specified date. Today, there are 17 institutions of higher learning in the State, including nine church-sponsored and seven State colleges and universities. Higher education facilities are thought to be more than adequate, and are adapting and expanding their programs to include preparation in modern technologies. Workers of top quality can be recruited from South Dakota's schools.

Health Services and Health Care

Institutional health care for its people is also accepted by South Dakota's physically vigorous and mentally alert citizens as a community responsibility. With a traditional ingenuity for collecting funds through fairs, dinners, house-to-house canvassing, or family pledges, South Dakotans have independently financed the construction of numerous nursing homes and hospitals throughout the State. In their determination to provide services at the local level, however, deficiencies and limitations in care in small rural facilities are often overlooked. Local residents are depended upon to staff these facilities. In 1966, three rural hospitals had to close because of inability to recruit a physician. The long distances required to obtain health services—distances considered excessive in more congested regions of the country—are not a primary deterrent to South Dakota's mobile people. Yet the advantages of developing a satellite system of health care have had no popular support. Even today,

most patient referrals to the larger hospitals in urban communities are on a doctor-to-doctor basis.

Distance and sparsity of population are important factors in the providing of health services for outlying areas. Furthermore, the staffing of numerous small rural health service units presents serious problems. Areas served by physicians, hospitals, health departments, and other health institutions and agencies must be sufficiently large to include enough people to support, utilize, and provide adequate health services. Most rural areas, however, lack such resources, as well as the cultural and social advantages that attract health professionals. Nevertheless, medical and health services must be accessible to all. Planning is required to balance the needs of an area for health services against the availability, economy, efficiency, quality, and the avoidance of duplication of services, as well as the use and distribution of personnel.

Although the rural and urban areas are interdependent, it is difficult to achieve unified planning and cooperative effort among them. Yet harmony must be achieved, to bring about needed changes in facilities, organizational structure, methods, and services to meet present and future needs. Both the social and the economic relationships among all areas of the State are important considerations in planning if maximum benefits from the State's capacities and resources are to be realized.

Planning must also reckon with South Dakota's relationships and dependence upon other States. State boundaries are only artificial barriers in the population's quest for fulfilling its social needs. Urban centers of contiguous States satisfy the market demands for services and provide educational opportunities and better jobs in a similar environmental and ethnic background. South Dakota's residents are dependent also upon hospitals in adjacent States for highly specialized types of health care. Moreover, nursing schools place their students in health facilities in several other States for clinical experience. And almost without exception, every year each of the 49 other States attracts and keeps varying numbers of native South Dakota nurses and other health manpower. Ways must be found to compensate for these losses.

Indian Population

Interrelationships between the State's community life in general and that of the Federal Indian reservations have important implications for manpower planning. There is growing awareness of the potential pool existing in these reservations for the development of

nursing personnel and other health manpower for meeting State needs. Natural and human resources development programs are, in increasing measure, fitting the Indian to take his place in modern society, although in Indian life the minimum economic and social level is far below that of the rest of the State's residents.

The U.S. Department of the Interior, through its Bureau of Indian Affairs, supplies information on the concerns and resources of South Dakota's Indian population (1).

Most Dakota Sioux Indians—of which there are three major tribes and seven bands speaking three tribal dialects—reside on nine reservations. The best possible use of reservation land located in rural areas in the eastern, middle, and western parts of the State is for farming and ranching. Land that is owned in small scattered tracts and by various types of owners presents problems in instituting workable land units to create income. "Mixed ownership" includes the tribes' 35 percent of the land, individual Indians' 62 percent, and the Federal Government's 3 percent. However, some tribes have initiated consolidation land programs for more productive tracts.

Other reservation resources are sand and gravel deposits, oil, and coal, although exploitation of these resources has been relatively nominal. However, industrial development in the past 5 years has resulted in three plants for snelling fishhooks, two cheese plants, and several plants for the manufacture of kitchen cabinets and vanities, shotgun shells, and plastic molded products.

As well as utilizing moneys from claims judgment awards as compensation for land for development programs, tribal governments are accelerating their involvement in Federal programs, as those provided through the Office of Economic Opportunity, Farmers Home Administration, Public Housing Administration, and Economic Development Administration. Numerous projects for improving housing, education, and health complement agricultural and industrial development programs.

The Federal Government maintains Indian day schools and boarding schools on the reservations and two schools outside, one at Flandreau and one at Pierre. To raise the quality and level of Indian education, public schooling is being furthered wherever possible by cooperative agreements with public school districts for sharing the costs of schools operated jointly by the school district and the Federal Government.

South Dakotans are stressing Head Start programs for preschool children, Neighborhood Youth Corps "earn and learn" programs for high school students, and other programs to qualify students for higher education. Indian youth are learning to overcome the problems of adjusting to off-reservation culture. During 1965, over 200 grants were made to South Dakota Indians to pursue 4-year college courses. Basic education and work experience programs for unemployed, unskilled adults are also being increased.

The U.S. Public Health Service, through the Division of Indian Health, provides health care programs at all reservations. It operates hospitals, health centers, and preventive services. To attack and reduce the Indians' high incidence of infectious disease, a primary effort is being made to establish safe water supplies and sanitation facilities for individual households. Also field health teams provide assistance in

environmental health, health education, public health nursing, and preventive dental care.

The U.S. Public Health Service cooperates with health authorities within the State and health programs for contract services for hospital care and for school, environmental, and mental health services. In turn, Indian health facilities and services are used for students' clinical experience in the health disciplines. Through development projects, Indians themselves are now being trained as practical nurses, aides, and auxiliary mental and public health workers. A few have qualified to become health professionals. With careful planning, this potential can be further exploited.

South Dakota's special characteristics and differing patterns of culture, social development, and growth are important considerations in planning, in terms of assessing needs, setting goals, and finding approaches for developing resources and utilizing capabilities.

Chapter 2

Population Characteristics of South Dakota

The factors that have shaped the characteristics of the population in South Dakota and in the Nation are numerous and complex. A rapid increase in the number of births after World War II, improved life expectancy at each age level, technological revolution, expanding productivity, urbanization, and mobility are the social dynamics of our society. Also, the heightened aspirations and increased expectations of people and the growing emphasis on human resources are associated phenomena. A drive to attack and eradicate persistent and emerging social problems and to provide improved socioeconomic opportunity for all population groups has been created.

To acquire a thorough knowledge of human requirements, a search for basic information on the characteristics and circumstances of the population and the communities in which they live is essential. Such information provides an understanding of the factors and trends affecting social development, and serves as a basis for planning for the delivery of health services.

Population Trends

The most outstanding characteristics of the current and projected population of South Dakota parallel trends in the United States as well as South Dakota's bordering States, yet have their own distinctive patterns.

Population Growth

In 1965, South Dakota ranked 43d among the States in population, having 686,000 or 0.4 percent of the Nation's 193,795,000 people. Severe population declines of the depression and World War II years had almost been recovered. In fact, between the 1950 Census and the 1960 Census, South Dakota had a net population gain of 27,774 persons, or 4.3 percent. This rate was well below the average U.S. increase of 18.5 percent, but reflected the lower and varied rate of growth of States in the area, as shown in table 1.

Age Composition of Population

Dramatic changes have occurred over the last decade in the age composition of the American people, marked by significant increases in the younger and older age groups. Between 1950 and 1960, the number of persons under 20 years of age in the Nation increased by 18 million; those 65 years and older, by 5 million. In 1960, 38.5 percent of the population was under 20 years of age and 9.2 percent was 65 or older (table 2). The potential work force, persons in the age group 20 through 64, had a relatively small net increase of 6 million between 1950 and 1960, with an actual decrease of 2 million persons in the age group 20 through 29. This latter segment of the population was comprised of persons born during the depression years, when the birth rate was low.

Changes in the age composition of South Dakota's population between 1950 and 1960 reflected dominant U.S. trends. The number of persons in the age groups under 20 years and those 65 years and over increased appreciably. Together they accounted for slightly more than 45 percent of the State's population in 1950 and 50 percent in 1960. (See table 3.) In 1960, the percentage of residents in the younger and older

Table 1.—Percent change in population in the United States, in South Dakota, and in bordering States; 1950-60

State	Percent change 1950-60	Average annual percent increase
United States	18.5	1.7
South Dakota	4.3	0.4
Bordering States:		
North Dakota	2.1	0.2
Iowa	5.2	0.5
Minnesota	14.5	1.4
Montana	14.2	1.3
Nebraska	6.5	0.6
Wyoming	13.6	1.3

Source: Appendix table A-1.

Table 2.—Population, by age group, as percent of total population; United States and South Dakota; 1960

Age group	United States	South Dakota
Total	100.0	100.0
Under 20	38.5	41.2
20-64	52.3	48.3
65 and over	9.2	10.5

Source: Appendix table A-3.

age groups was higher for South Dakota than for the Nation as a whole, as shown in table 2.

The longer life span of South Dakota's people is evidenced by an increase since 1950 of almost 30 percent (16,000 persons) in the group 65 years of age and over. (See table 4.) This aging population requires more health care and for longer periods of time in hospitals, nursing homes, and at home. The younger population, those under 20, increased 12.5 percent (40,000 persons) from 1950 to 1960. The health needs of these young people demand, in addition to more care, a whole range of preventive, curative, and special services.

Table 3.—Percent of population, by age group; South Dakota; 1950 and 1960

Age group	1950	1960
Total	100.0	100.0
Under 20	37.0	41.2
20-64	54.5	48.3
65 and over	8.5	10.5

Source: Appendix tables A-2 and A-3.

For that segment of the population which supplies the manpower for health services—that is, the labor force 20 to 64 years of age—South Dakota paralleled U.S. trends. All groups within this age span (20-29, 30-39, etc.) declined in number between 1950 and 1960, and the largest decrease was in persons 20 to 29 years of age.

Whereas the U.S. population decreased in only one age group—those 20 to 29 years of age—South Dakota's population decreased in additional age groups—those 30 to 39 years and 50 to 59 years. This might be due to population exodus during the depression and war years in agricultural States, as well as net losses from interstate migration in South

Dakota and the declining number of foreign immigrants after the peak years 1901-10.

Between 1950 and 1960, South Dakota had a decrease of 27,436 persons in the 20-64 age group. (See table 4.) Ninety percent were younger adults between the ages of 20 to 39. The State actually had fewer persons in 1960 than in 1950 to draw into its labor force for health and other services, although its overall population increased.

Table 4.—Change in population, by age group; South Dakota; 1950 and 1960

Age group	1950	1960	Percent increase
Total	652,740	680,814	4.0
Under 5	76,713	83,427	8.4
5-14	113,662	145,355	27.8
15-19	51,179	52,065	1.7
20-64	355,890	328,454	-2.1
65 and over	55,296	71,513	29.3

Source: Appendix tables A-2 and A-3.

Nonwhite Population

In 1960, 11.4 percent of the U.S. population was nonwhite, mostly Negro. South Dakota's nonwhite population, however, was predominantly American Indian. In 1950, Indians accounted for 96.3 percent of the total nonwhite population of 24,236; in 1960, for 94.1 percent of the 27,416 nonwhite population. The nonwhite population in the State increased from 3.7 percent of total residents in 1950 to 4.0 percent in 1960.

South Dakota's nonwhite population was considerably younger than the white. More than half of the nonwhite residents were under 20 years of age, whereas comparatively few were 65 years of age or older. (See table 5.) Whereas the white population under 20 years of age increased 12 percent between 1950 and 1960, the nonwhite increased 64 percent. Among those groups 65 years and older, the white population increased 29.3 percent; the nonwhite, 3.5 percent.

Table 5.—Percent of white and nonwhite population, by age group; South Dakota; 1960

Age group	White	Nonwhite
Under 20	40.2	53.7
20-64	48.3	41.0
65 and over	10.5	5.3

Source: Appendix table A-3.

Sex Composition of Population

South Dakota was one of 25 states in 1950 and one of 11 States in 1960 that had an excess of males over females in its population. South Dakota had 7,628 more men than women in 1960, a ratio of 102.4 males to every 100 females. In 1950 and 1960, the Nation had more males than females under 20 years of age and fewer males than females for all other age groups, the latter related to the greater life expectancy for women. In 1950, in South Dakota there were more males than females in every age group. By 1960, females outnumbered males in the age groups 20 to 29 years of age and 75 years and older. The most marked loss of males during the 10-year span was among those 20 to 29 years of age. (See tables 6 and 7.)

Table 6.—Population changes in age group 20–64, by sex; South Dakota; 1950 and 1960

Age group 20–64	Changes		Population difference 1950–60
	1950	1960	
Total	355,890	328,454	27,436
Males	185,262	166,238	19,024
Females	170,628	162,216	8,412

Source: Appendix tables A-2 and A-3.

Table 7.—Decreases in population in age group 20–39, by sex; South Dakota; 1950–60

Age groups	Male	Female	Male losses in excess of female
Total, 20–39....	16,519	11,127	5,392
20–24	6,290	4,506	1,784
25–29	6,756	4,358	2,398
30–34	2,769	1,667	1,102
35–39	704	596	108

Source: Appendix tables A-2 and A-3.

It has been suggested that South Dakota's nursing shortage is due, in large measure, to the movement out of State of young males whose wives are nurses. How much of male population losses is due to migration and how much to other factors is not known. Available data would indicate that some of the deficit in male population does result from migration.

Foreign Stock Heritage

In 1960, about 20.8 percent of South Dakota's population was of foreign heritage. The countries of origin of those of foreign stock, either foreign born

or native of foreign or mixed parentage, were largely European. Almost three-fourths of the foreign stock total of 141,845 persons came from Northern Europe. The Scandinavian countries contributed most, 32.4 percent of the total; Germany was next, with 25.7 percent; the Union of Soviet Socialist Republics and Baltic States, third, with 14.7 percent.

An understanding of the contribution the foreign stock has made toward the development of the present health care system in the State and of their concepts of providing health care is important for planning. Some communities even today are predominantly populated by foreign stock groups. Effective planning should involve these groups in assessing local problems and needs, and should utilize their initiative and resourcefulness for coordinated action in improving South Dakota's health services.

Mobility of U.S. Population

One of the factors that greatly affect health planning is the mobility of the population. The movement of people within and among States results in a disproportionate distribution of health needs, services, and manpower, with diminishing needs in some areas and increasing needs in others. Changes in geographic distribution of the population are brought about chiefly by a shift from farm to city, growth of urban areas, and interstate migration.

The "net total migration," defined as the numerical net balance of the movement of people into and out of a given locale, has been averaged for the United States from 1950 to 1960, and the average annual total net migration for each State is shown in figure 1.

The shift from farm to city and to urban areas began in the United States around 1920. In 1910, there were 32 million people on farms—about 8 million more people living in rural than in urban areas—but by 1920 the urban¹ dwellers outnumbered rural people by 3 million. This trend continued, so that in 1960 two-thirds of the Nation lived in or near our vast metropolitan complexes. The number living in towns has almost tripled in the past 50 years, whereas farm population continues to decline.

As mentioned, in 1910 there were 32 million persons on farms. By 1960, the farm population had dropped to an all-time low of about 13.5 million persons, and by 1965, to about 12 million persons.

Both urban and rural nonfarm areas experienced population gains of more than 20 percent between

¹ In cities, incorporated and unincorporated areas or towns of 2,500 inhabitants or more, and their suburbs.

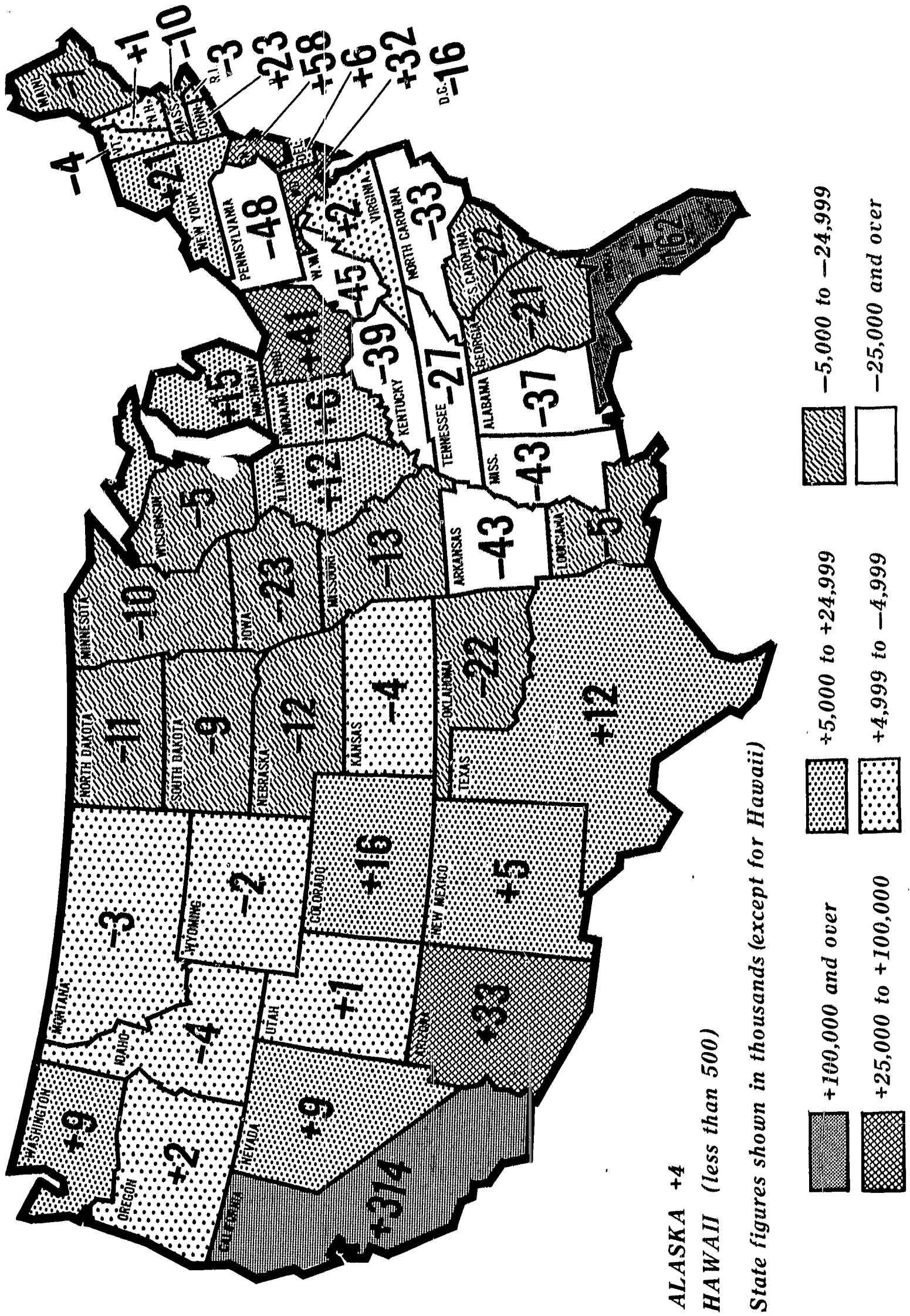


Figure 1.—Average annual net total migration for each State, United States, 1950 to 1960

1950 and 1960. Hence, nearly 28.5 million additional urbanites in 1960 raised the total to 125 million urban dwellers. Rural nonfarm areas increased their population from nearly 31.5 million persons to 40.5 million during this period.

Mobility of South Dakota's Population

This same pattern of population gains in urban and rural nonfarm areas and losses in rural farm areas occurred in South Dakota and in the bordering States. However, there were some striking differences in the rates of rural nonfarm gains and rural farm losses.

The percent of population loss from farms in South Dakota and the bordering States was four to seven times greater than the national average of 4.0 percent. The shift from farm to city and to semirural areas in South Dakota, however, has been less pronounced than that for most of her bordering States, as shown in table 8. The 48,000 fewer persons residing on farms in South Dakota in 1960 than in 1950 represented a population loss of 18.8 percent.

The number of additional persons in South Dakota who changed from rural to urban residence between 1950 and 1960 was 50,470, an 18.7 percent increase. Within urbanized areas, the great bulk of the population increase was in the central city, with very little growth in the urban fringe. About 99.0 percent of the population residing in the cities were members of the white race. Nonwhite persons who changed to urban residence during this period chose areas other than central cities and their urban fringe. Only 584 nonwhite moved to the cities, but 1,534 moved to urban areas of smaller towns.

Urban dwellers, as a percent of total population in South Dakota, increased 6.1 percent between 1950 and 1960. However, only 39.3 percent of South Dakota's total population was urban in 1960, com-

Table 8.—Loss in farm population, South Dakota and bordering States, 1950–60

State	Number	Percent
South Dakota	48,000	18.8
Bordering States:		
North Dakota	50,000	19.6
Iowa	121,000	15.4
Minnesota	152,000	20.5
Montana	30,000	28.3
Nebraska	82,000	20.9
Wyoming	14,000	25.0

Source: Appendix table A-5.

Table 9.—Percent urban population in 1960 and number and percent increase, South Dakota and bordering States, 1950–60

State	Urban population (in thousands)		Percent increase 1950 to 1960	Percent urban 1960
	1950	1960		
South Dakota	217	267	18.7	39.3
Bordering States:				
North Dakota	165	223	26.0	35.2
Iowa	1,251	1,463	14.5	53.1
Minnesota	1,625	2,121	23.4	62.1
Montana	258	338	23.7	50.2
Nebraska	622	766	18.8	54.3
Wyoming	145	188	22.9	56.8

Source: Appendix table A-5.

pared with the Nation's 70 percent. Over the years, the shift from farm to city in South Dakota has been slower than that in the Nation and in most of her bordering States. Except for North Dakota, all these States had considerably higher urban populations in 1960. (See table 9.)

Shifts in population resulted in a loss of 6.1 percent in the total rural population (farm and nonfarm) in South Dakota. But, whereas the number of persons residing on farms dropped 48,000, the number residing in rural nonfarm areas increased by 26,000 persons or 12.5 percent. (See table 10.) A small part of the gain was in the rural nonwhite population, which added 1,056 new members between 1950 and 1960.

All of the bordering States had increases in population living in rural nonfarm areas between 1950 and 1960. The rates of increase were well below the

Table 10.—Percent increase in rural nonfarm population, South Dakota and bordering States, 1950–60

State	Population (in thousands)		Percent increase
	1950	1960	
South Dakota	182	208	12.5
Bordering States:			
North Dakota	200	205	2.4
Iowa	587	632	7.1
Minnesota	618	705	12.3
Montana	197	231	14.7
Nebraska	312	337	7.4
Wyoming	89	99	10.1

Source: Appendix table A-5.

national average of 22.5 percent, and varied considerably between States. North Dakota, Iowa, and Nebraska had rates of increase well below South Dakota's.

Interstate and Intrastate Migration

Rural and urban population increases and decreases reflect a portion of the mass movement of the Nation's population. Information on changes of location of residence furnishes some more precise data on the mobility of population involving moves within States and regions of the country. During a 1-year period—March 1964 to March 1965, for example—38 million persons, or one out of every five persons, changed their residence. Two-thirds of these moves were within the same local areas. The remaining moves were almost equally divided between those persons who moved to a new home in the same State and those who moved to a different State. The most mobile group in the population were young people in their 20's. There were only about one-fourth as many moves by persons above 45 years of age (1, pp. 17, 18).

Mobility in South Dakota and Bordering States, 1955-65

During the 5 years from 1955 to 1960, 268,566 South Dakotans, or over two-fifths of the population 5 years of age or older, changed their places of residence. More than half of all moves, however, were local, involving changes within the same county. Ten percent moved to another area within the State; nine percent moved to a different State. More than half of those who moved out of South Dakota went to contiguous States.

The most mobile group in South Dakota's population was the younger adults; the most stable group, those over 45 years of age. The State's potential productive labor force lost about 5,800 persons a year who were 25 to 44 years of age and who moved out of State.

Over 37 percent of persons moving out of State in the 5-year period were between 25 to 44 years of age. Over 62 percent were between 15 to 44 years of age. (See table 11.)

Similarities and differences in mobility existed among the bordering States. For example, the proportion of total movers to total nonmovers—approximately 45 percent movers to 55 percent nonmovers—experienced in South Dakota was not unlike the mobility patterns of North Dakota and Minnesota. Both Wyoming and Montana, however, had greater

Table 11.—Movers from South Dakota to a different State, by age group; 1955-60

Age group	Number	Percent
Total	52,784	100.0
5-14	12,356	23.4
15-24	13,324	25.3
25-34	12,855	24.4
35-44	6,806	12.8
45-54	3,375	6.4
55-64	1,964	3.7
65 and over	2,104	4.0

Source: Appendix table A-9.

internal movement of their residents than did the other States.

Net Migration

South Dakota and her bordering States suffered net migration² population losses over the 20-year period 1940-60. For the white population, the loss in number of residents between those leaving and those entering South Dakota during the period 1940-50 was 74,000, a deficit of 11.9 percent of the State's population. For the next period, 1950-60, an even greater loss occurred, amounting to 90,000 residents, a deficit of 14.3 percent. In the bordering States, North Dakota had the highest net losses for both periods. Losses decreased slightly for the second period 1950-60 for all these States except Iowa and Wyoming.

Net migration for the nonwhite population showed a different pattern among these States. Iowa, Minnesota, and Nebraska had net migration gains in their nonwhite population during both periods. Wyoming experienced a gain during the first period and a subsequent loss during the second. South Dakota, North Dakota, and Montana sustained net losses during both periods. In South Dakota, the net loss was 5,000 persons from the nonwhite population during each period. The percent of net loss, however, was slightly less during the second period (19.4 percent) than during the first (21.2 percent).

The movement of South Dakota's people to urban areas and to other States and the decreased population of many counties create many difficulties in attempting to provide, maintain, and staff health services for rural areas. About 206,000 farm residents and 413,000 rural dwellers still represented 60.7 percent of the State's population in 1960. Yet between 1950 and 1960, in the State's 67 counties, 41 sustained popula-

² The numerical net balance of the movement of people into and out of a given locale.

tion losses. In seven counties there was little or no change. Six counties with fast-growing urban communities showed the largest gains. The changing distribution of the population must be considered in planning for the future.

Population Density

At mid-decade 1965, the Nation's population of 193,818,000 lived in an area of 3,548,974 square miles, with a density of 54.6 persons in each square mile. South Dakota's population density, 9.2 persons per square mile, was only one-sixth as dense as the national average, but it was nearly twice that of Montana and almost three times that of Wyoming. (See table 12.) North Dakota had a population density similar to South Dakota's, whereas Iowa, Minnesota, and Nebraska exceeded South Dakota in density but were below the national average.

Within South Dakota, the population density ranged from 0.9 in Harding County, in the extreme northwestern part of the State, to 106.2 in Minnehaha County, where the metropolis of Sioux Falls is located. The population was concentrated in the eastern part of the State, particularly in the southeast. Fifteen of the thirty counties in Regions I and II (table 13), the western half of the State, had population densities of 3.0 persons per square mile or below. All but four counties were below 10.0, and the highest densities were 21.3 and 21.0 for Lawrence and Pennington Counties. In the eastern half of the State, with 37 counties, the population density ranged from 3.0 to 19.9 in 27 counties and from 20.0 to 39.9 in 9 counties, whereas Minnehaha County had the density of 106.2, as mentioned previously. The movement toward the six cities in the eastern part of the State has influenced its population distribution. South Dakota must plan

Table 12.—Population per square mile, South Dakota and bordering States, 1965

State	Population per square mile	Rank
United States	54.6	—
South Dakota	9.2	45
Bordering States:		
North Dakota	9.4	44
Iowa	49.3	29
Minnesota	44.4	32
Montana	4.8	48
Nebraska	19.3	40
Wyoming	3.5	50

Source: Appendix table A-12.

health services for a population which in 1960 portrayed extremes in distribution from vast, sparsely settled areas to well-populated urban communities predominantly located in one part of the State.

Social and Economic Factors

The impact of social and cultural influences upon the population is evidenced in the occupational patterns of the Nation's people and in their levels of education and income as well as in their social problems.

Occupational Changes

A most important interrelated social trend is the continued and rapid technological advances that create new occupations and skills and cause others to disappear. In agriculture today, new machines plant, harvest, and field-pack crops produced under controlled conditions. Jobs in traditional work, such as tending and feeding stock, are being replaced by automatic and electronic sensing devices. The mechanization of farming has resulted in larger but fewer farms, and the total farm acreage in the Nation is less. Mechanization has, however, increased the value of farms.

In the 5-year period between 1954 and 1959, the Nation's farms decreased in number by 1,000,000, the average farm was 60 acres larger, and its value rose \$14,000. Land area in farms in South Dakota decreased by 98,000 acres, and there were 7,000 fewer farms in 1959 than in 1954. The State's 56,000 farms in 1959 averaged 805 acres each, 86 acres more than in 1954. A farm worth \$28,000 in 1954 was valued at \$40,000 in 1959. Because of the changing nature of farms and farm jobs, the employment opportunities, particularly for the unskilled worker, have been reduced. This situation has influenced the drift toward the city.

Table 13.—Population per square mile, by economic and trade regions; South Dakota; 1965

Region	Number of counties	Population per square mile
State	67	9.2
Region I	8	7.7
Region II	22	4.3
Region III	11	8.5
Region IV	11	15.1
Region V	14	18.1
Region VI	1	106.2

Source: South Dakota State Department of Health.

Advances in technology since the 1950's have brought about other changes in the distribution of workers among various types of occupations. Society in general offers fewer unskilled and semiskilled jobs, and requires higher levels of education and skills for employability. Advancing technology, requirements for education, and educational attainment in turn have created a public demand for better products and services and more education and training. To fulfill these needs, employment has grown in health, education, and welfare services as well as in State and local government services and private enterprises. The number of professional, technical, and white-collar service jobs has increased, whereas the number of blue-collar jobs has remained relatively unchanged and the number of jobs for farm workers has declined.

Sources of Personal Income

In order of magnitude, total personal income in 1964 was derived from the three major sources: private nonfarm income, government disbursements, and farm income. As shown in table 14, farm income in the United States represented 3.0 percent of total personal income; in South Dakota, 16.4 percent. The average government income disbursements were greater in South Dakota than in the Nation, but private income was less in South Dakota. The proportion contributed from each source to the total amount of personal income varied for the bordering States. All except North Dakota had higher private income than did South Dakota. All except Iowa and Minnesota averaged larger government income disbursements than the Nation, but South Dakota's government income disbursements averaged higher than those of its

Table 14.—Major sources of personal income, percentage distribution; United States, South Dakota, and bordering States; 1964

State	Farm	Government income disbursements	Private nonfarm income
United States	3.0	19.8	77.2
South Dakota	16.4	24.8	58.8
Bordering States:			
North Dakota	20.9	23.3	55.8
Iowa	12.7	17.8	69.5
Minnesota	5.0	18.5	76.5
Montana	11.3	24.6	64.1
Nebraska	12.0	21.1	66.9
Wyoming	6.5	24.0	69.5

Source: See appendix table A-14.

bordering States and the Nation. Farm income for these States ranged from a low of 5.0 percent for Minnesota to a high of 20.9 percent for North Dakota, the only State exceeding South Dakota.

Labor Force

In South Dakota in 1960 and 1964, government employed the largest portion of nonagricultural workers. Wholesale and retail trades were next; service industries ranked third. (See table 15.)

Table 15.—Percent distribution of nonagricultural employees, South Dakota, 1960 and 1964

Industry	Number (in thousands)		Percent distribution	
	1960	1964	1960	1964
Total	139	153	100.0	100.0
Government	39	45	27.5	29.3
Wholesale and retail	38	41	27.2	26.7
Service	20	24	15.2	16.0
Manufacturing	13	13	9.2	8.6
Construction	11	10	8.0	6.8
Transportation	10	10	7.2	6.5
Finance, real estate, and insurance	6	7	4.0	4.5
Mining	2	3	1.7	1.6

Source: *Statistical Abstract of the United States, 1961 and 1966*, Washington, D. C., published by U.S. Department of Commerce, Bureau of the Census.

The Nation's civilian labor force in 1960 averaged 73 million persons. Included were 79.7 percent of the male population 14 years of age and over and 36.1 percent of the females that age.

More than half of the labor force were men 20 to 54 years of age. Women represented about 30 percent, whereas males below 20 years and over 54 years accounted for less than 20 percent.

South Dakota's civilian labor force in 1960 numbered 247,811 persons. Participation from the male population 14 years and over about equaled that of the Nation, about 77 percent; female participation was slightly less, at 31 percent. The nonwhite population contributed less. Only 50 percent of the men and 20 percent of the women 14 years of age and over had jobs or were looking for work. Only 6 percent of the white male population 25 to 64 years of age were not in the labor force; for nonwhite males, the equivalent figure was 31 percent. About 58 percent of employed women worked full time; over 33 percent worked part time. Full-time male workers represented 78 percent

of the male force. The largest percent of part-time male workers were those under 24 years and those over 65 years of age.

Unemployment

In 1960, unemployment affected 5.6 percent of the Nation's total civilian labor force. The nonwhite population was more seriously affected, having a rate slightly over 10 percent. South Dakota's labor force experienced a lower rate of unemployment—4 percent, which followed the national pattern. Females in 1960 had lower unemployment rates than males had. Notable also were higher unemployment rates for young people just entering the labor force and considerably greater unemployment among nonwhite men. The latter was six times that for white males and stood at 25 percent in 1960. This rate reflects the socioeconomic plight of the Indian, who traditionally has less employment opportunity, skills, or training for entering and remaining in the labor force.

South Dakota's unemployment rate reflects the lower rates of States that are not highly industrialized. However, a decrease of 22 percent in rural employment opportunities is anticipated in the years ahead. If that happens and if there is not industrial development, there will be a lack of job opportunities in South Dakota. Also of concern is the effect of migration from South Dakota.

Personal Income

The years after World War II have represented a period of relatively high employment, high wages, and resulting general prosperity for the Nation. Total personal and per capita income increased substantially from 1950 to 1965. Income in South Dakota, however, was comparatively low. The State's share of the Nation's personal and per capita income decreased in the 15-year period as increases were less marked.³ Nationally, from 1950 to 1965, per capita income increased 45 percent or \$1,228, a rise from \$1,405 to \$2,724. For South Dakota, the corresponding increase was only 39.6 percent or \$813, a rise from \$1,242 to \$2,055. In 1965, residents of North Dakota, Iowa, Minnesota, Montana, Nebraska, and Wyoming had personal incomes lower than the national average but none were as low as South Dakota's.

Family Income

Since the end of World War II, there has also been a general economic upgrading of the average American family. Median family income has doubled

since 1950, and averaged \$5,660 in 1959. (See figure 2.) Income levels of families have been characteristically associated with the levels of educational attainments of family heads and the requirements of the jobs they hold for skills gained through successive levels of education and training. Nonwhite families and those of farm workers tended to be at the lower extremes whereas those technically, professionally, and administratively prepared were at higher levels. Nonwhite families, who traditionally have less training, had a median income in 1959 slightly more than half the national average, or \$3,161, whereas white families had a median of \$5,893.

Median family income for all groups in South Dakota in 1959 was \$4,251, three-fourths that of the national average. Farm residents received \$2,860, whereas the least amount of family income was received by Indians, only \$1,794 or a third of the national average. South Dakota's families ranked lowest in median income among her bordering States.

Of the 98,000 South Dakota families with children under 18, 53 percent of the family heads did not finish high school. This included 80 percent of the heads of nonwhite families. About 30 percent of all family heads with children under 18 had completed high school, 8 percent had completed college, and 10 percent had attended college from 1 to 3 years.⁴ About 36 percent of these families had two or more members in the labor force, and in 23 percent both the mother and the father worked. Further examination shows that only 4 percent of all these families had no member in the labor force, and of that 4 percent, one-fourth were nonwhite families.

South Dakota and several of its bordering States had a higher percent of families with incomes of less than \$3,000 in 1960 than the Nation had. In all probability, this was partially influenced by the larger percent of farm families in these States, and in South Dakota it was also associated with lower educational levels and the larger number of Indian families. The number with poverty incomes is not known. Although it is estimated that about half of the poor live in large and small cities and half live in small towns and rural areas, only 13 percent live on farms. In 1965, the annual cash income threshold to poverty was \$3,130 for a nonfarm family of 4 and \$2,190 for a farm family (2, pp. 8-12). In 1960, approximately 3,340,000 or 7.4 percent of families lived on farms in the United States as compared with South Dakota's 167,000 farm families or 30.3 percent. The percentage of families

³ See appendix table A-16.

⁴ See appendix table A-19.

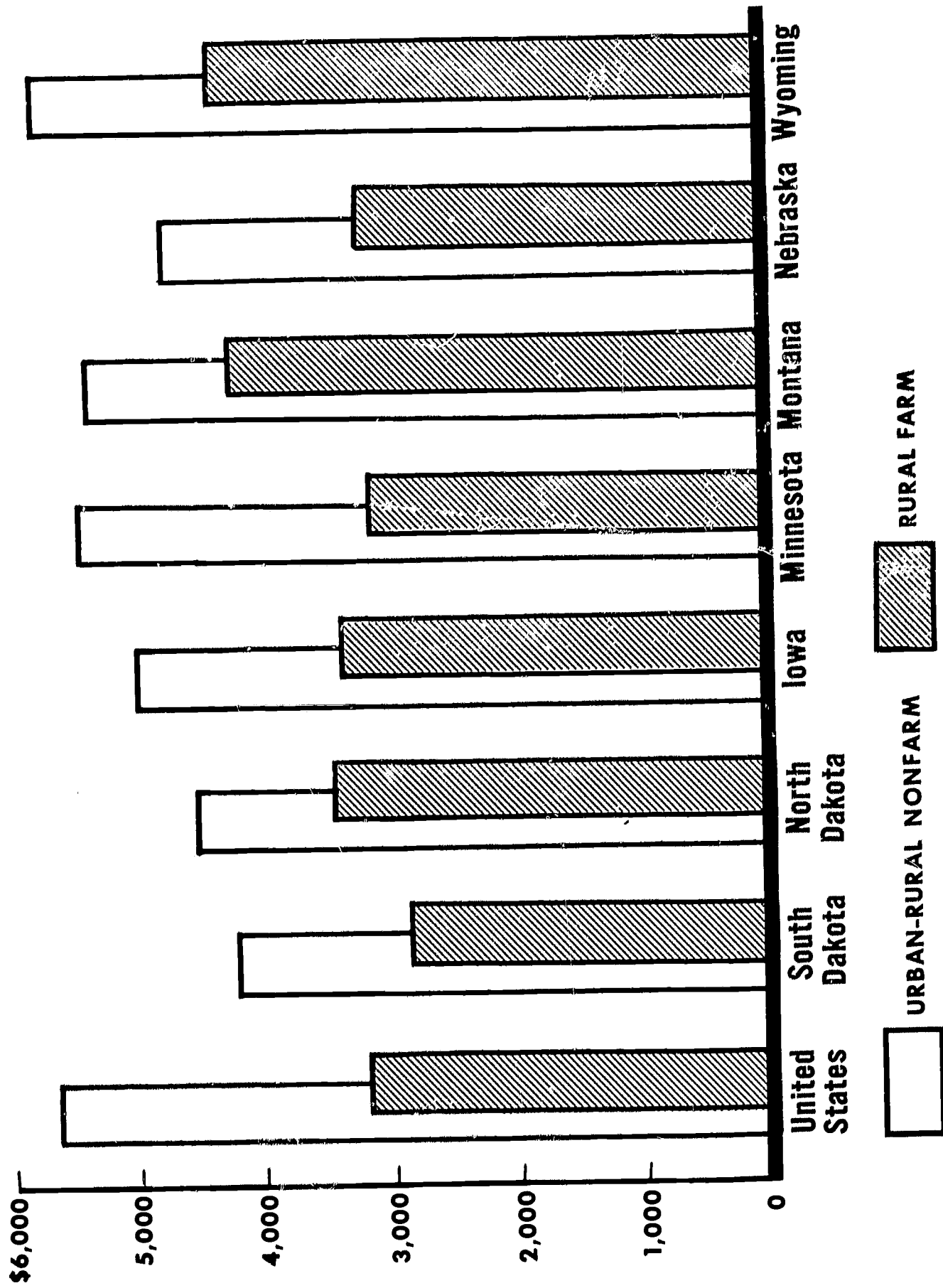


Figure 2.—Median family income, urban and rural nonfarm combined, compared with rural farm; United States, South Dakota, and bordering States; 1959

with incomes less than \$3,000 that year was 20 percent for the Nation and 33.5 percent for South Dakota.

Still other inequities existed. South Dakota had proportionately fewer families in the upper income level (3, p. 192). Only 12.6 percent of families had incomes of \$7,000 to \$9,999 compared with the Nation's 20 percent, and 7.6 percent of families earned over \$10,000 a year whereas the national figure was 15 percent. Many of the State's leaders feel that the increased numbers of youth in the 1960's who are achieving higher levels of education move out of State because of lack of job opportunities that utilize their skills and abilities and command higher wages.

Why has South Dakota had the lowest personal and family income among its bordering States, ranking with the 10 lowest of all States? There is no simple answer. Data comparing the cost of living in South Dakota with that in other areas of the United States are not available. The apparent lack of financial resources for purchasing goods and services, including health care, for a large proportion of the population is of concern. In terms of manpower planning, many questions can be asked. What is the relationship between family income and recruitment into schools of nursing, for example? How adequate are gift and merit scholarships as well as State and Federal loan funds in offsetting the financial deterrents inherent in the ever-rising costs of education? Are there untapped personnel resources for increasing the number of health manpower to provide needed services? If so, are these resources not being used because of need of financial assistance?

Educational Attainment

Educational needs and demands have created great pressure on the Nation's changing social structure. The dimensions of this pressure are evident in the educational attainment of the Nation's people, in the increasing number of high school graduates and college enrollments, and in the expanding measures made available to remove the deterrents to obtaining educational preparation at all levels.

Traditionally, high educational values have enabled South Dakota to keep pace with the Nation in meeting educational needs and demands. The State has below-average illiteracy and high school dropout rates, and closely approximates the Nation's rates for number of years of school completed, although estimated expenditures per pupil and average annual teacher salaries have been below average. The average annual expenditure per pupil in public schools in the

United States for the 10-year period 1956-66 was \$532. South Dakota's expenditure was \$507. The average annual teacher salary in the United States for the school year 1965-66 was \$6,500; in South Dakota it was \$4,650. The State's teachers, however, on the average had fewer pupils. In the fall of 1965, their pupil-teacher ratio was 19.7, compared with the national ratio of 24.6.

In 1960, median school years completed by South Dakota's residents were similar to the national average (table 16), with consistent gaps between the educational levels of the white and nonwhite population.

Table 16.—Median school years completed by persons 25 years of age and older, United States and South Dakota, 1960

Race	United States	South Dakota
Total	10.6	10.4
White	10.9	10.5
Nonwhite	8.6	8.6

Source: Appendix table A-21.

The years of schooling completed by South Dakota's residents, however, averaged slightly below that of its bordering States, with the exception of North Dakota. All these States exceeded the national average slightly.

Indians in South Dakota were the most educationally disadvantaged group. In 1959, slightly more than 50 percent finished grade school, as compared with the State's overall average of 86 percent.⁵ Median school years completed by Indians averaged 8.4, compared with 8.6 for all nonwhite groups and the State's 10.4 for all races. South Dakota's Indians did not vary greatly in attainment from Indians in the bordering States. Indian girls are looked upon as potential recruits for initial nursing education programs. Yet they are known to have considerable difficulty meeting admission requirements, because of both the level and the quality of their educational attainment.

Comparison of the number of years of school completed by South Dakota's residents at the beginning and end of the decade 1950-60 attests to the increased educational attainment at the elementary, secondary, and college level. For all major age groups 14 years and over, gains in the percent of persons having completed successive levels of education were recorded during the 10-year period.

⁵ See appendix table A-24.

Younger persons in South Dakota were better educated in 1960 than were the older persons. The educational levels of males and females 14 to 24 years of age compared with those 25 to 64 years shows that 11 percent more of the younger males and 9 percent more of the younger females had completed 10 to 12 years of education.

In both 1950 and 1960 in South Dakota, median school years completed by females exceeded that for males. The figures were 8.9 and 9.7 median years for males in the 2 years and 10.3 and 11.3 years for females. A larger percent of females 14 years of age and over had completed 10 to 12 years of education in 1950 and 1960, but the percent of males completing 3 or more years of college slightly exceeded that of females in 1950 and showed a larger gap by 1960. (See table 17.)

Table 17.—Percent of South Dakota population 14 years of age and older, by sex and school years completed; 1950 and 1960

Sex	None		10-12 years		Three or more years of college	
	1950	1960	1950	1960	1950	1960
Male	0.8	0.6	27.8	33.6	5.5	7.3
Female	0.8	0.6	35.2	41.1	5.3	6.0

Source: Appendix tables A-22 and A-23.

High School Graduates

The youth of this Nation are aware that in the years ahead a high school certificate will be a minimum requirement in the labor market. This is shown in the considerable increase in the number of high school graduates in the Nation. The increase reflects more than a larger population of high school age. In 1950, 59 percent of the population 17 years and over had completed high school; in 1964, the proportion had risen to 76 percent.

From 1956 to 1966, the number of high school graduates from public schools in South Dakota increased 58 percent, climbing steadily from 6,734 in 1956 to 11,481 in 1965. Some of these gains reflect the shift of the increased population of this age to the high school level. Other gains reflect the steady increase in the number completing programs of general education, who were the basic resource for advanced training for health manpower fields.

Female graduates slightly outnumbered male

graduates most years and for the total 10-year period. In 1965-66, however, male high school graduates appreciably outnumbered females for the first time in a single year. About half of the graduates constituted the recruitment pool for the predominantly female nursing fields. With the movement of nursing education into higher education systems, the development of clinical specialties in nursing, and the improvements in nurses' salaries, more active recruitment efforts to attract increasing numbers of men into nursing might be considered.

Degree Credit Enrollments

The great impetus for pursuing higher education in order to qualify for jobs with a future is seen in the increase in degree credit enrollments. As in high school enrollments, these increases reflect more than increases in the population in these ages. As shown in table 18, in 1960, South Dakota ranked 11th among all States in first-time degree credit enrollments, with a rate⁶ of 44.7 compared with the U.S. rate of 36.7. South Dakota's rate⁷ of total degree credit enrollments was 42.4, a rank of 16 among all States. South Dakota also had one of the highest college-going rates among its bordering States. First-time degree credit enrollment rates in the fall of 1960 exceeded those of all the bordering States. In total degree credit enrollments in 1960, only Nebraska and Minnesota exceeded South Dakota.

Table 18.—First-time and total degree credit enrollment, South Dakota and bordering States, 1960

State	First-time degree credit		Total degree credit	
	Rate	Rank	Rate	Rank
United States	36.7	—	—	—
South Dakota	44.7	11	42.4	16
Bordering States:				
North Dakota	44.5	12	39.8	23
Iowa	42.1	17	41.8	19
Minnesota	40.9	19	44.8	14
Montana	41.6	18	38.7	26
Nebraska	43.4	13	47.7	8
Wyoming	38.8	21	40.1	21

Source: U.S. Department of Health, Education, and Welfare, Office of Education, *Opening Enrollment in Higher Education, 1960*.

⁶ Number of full-term freshman degree credit students of any age enrolled per 100 youth 18 years old.

⁷ Total number enrolled, any age, per every 100 youth who are 18, 19, 20, and 21 years of age.

First-time fall admissions of degree credit students in South Dakota increased 42 percent, from 4,114 in 1959 to 7,009 in 1965. Both male and female enrollments increased. The ratio of male students to female students admitted in 1959, 1963, and 1965 was 6 to 4. In 1965, the national ratio moved close to 5 to 5.

Vocational Education

Society no longer offers equal opportunity without equality of education. The Manpower Development and Training Act, the Economic Opportunity Act, and the Vocational Education Act assist States in providing economic and social opportunity through education and training, predominantly for the non-college population and for the culturally and educationally deprived. These and other programs are responses to the need to adapt education to reflect changes in technology and in job content, to retrain the present work force, and to prepare the future work force.

South Dakota has availed itself of Federal assistance with the inception of most new programs. In 1964, for example, vocational educational program funds in the United States amounted to about \$333 million, of which 16 percent was Federal support.⁸ South Dakota received \$1.2 million of this amount, of which 30 percent was the Federal share. The State allocated almost equal funds to programs in agriculture and home economics, 35.5 and 37.2 percent, respectively. Trade and industry programs received 14.1 percent. Technical education received about 5 percent, of which more than half was in practical nursing education. Programs in practical nursing have received Federal assistance since 1956. Manpower Development and Training funds have been used for refresher courses for inactive registered nurses, to prepare them to return to work. The State is now planning to initiate additional vocational education courses for training technicians in several of the health disciplines.

School Population Projections

It can be anticipated that South Dakota will have increased numbers of youth to educate in the decade ahead, because of natural increases in population and the expectations of the public for higher levels of education.

School population projections for 1965-75 for age groups representing primary, secondary, and college age populations show that the largest in-

creases will be in the secondary and college age groups. The number of children of primary school age will remain virtually unchanged from the 1965 level of those already eligible for enrollment.⁹

The number of secondary school children, those 14-17 years of age, will increase by 4,000 between 1965 and 1970 and another 1,000 by 1975. There will be 8,000 more college-age youth in 1970 than in 1965, and then 2,000 more by 1975. Many of these increased numbers of children are already in secondary education programs and are shaping their careers. The ability of South Dakota's educational and recruitment programs to tap this resource for programs of nursing or for other health disciplines should be assessed.

Crime Rate

A social dimension affecting both health and educational services in many areas of the country is the local crime rate. Health institutions and agencies probably have not experienced the same difficulties in recruiting and employing students and personnel in South Dakota as in a number of cities in other States, because of high crime rates. South Dakota's crime index is comparatively low for all reported offenses.¹⁰ Although the number and rate of crimes increased in the United States in 1965 over 1964, South Dakota had more decreases than increases in specific offenses.

Population Projections, 1970-85

United States

Between 1965 and 1985, the population of the United States as a whole, is expected to increase by about 50 to 80 million (4, pp. 2, 3). Important shifts in age structure of the population are expected as the result of past trends in birth rates. Between now and 1985, the most rapidly growing groups are expected to be those of college age, 18 to 24, and those in young adulthood, 25 to 34 years of age. By 1975 there will be fewer persons 35 to 44 years of age. This deficit will shift to the 45 to 54 age group by 1985.

State changes in age composition during the next 20 years will, to a large extent, parallel those at the national level. However, substantially lower than average growth as well as some losses are projected for all age groups in States with heavy out-migration.

South Dakota and Bordering States

Compared with its bordering States, South Dakota's rate of population growth will be the second

⁸ See appendix table A-27.

⁹ See appendix table A-29.

¹⁰ See appendix table A-28.

lowest for the period 1960-80. Only Iowa will have slower growth. Minnesota, with an estimated increase of 24.2 percent in population, will come closest to reaching the expected U.S. average increase of 35.1 percent (table 19). The largest increases in all of these States are expected to occur in 1970-80.

Table 19.—Estimated population increases; United States, South Dakota, and bordering States; 1960-80

State	Estimated increase (in thousands)	Percent increase
United States	62,988	35.1
South Dakota	69	10.1
Bordering States:		
North Dakota	93	14.7
Iowa	217	7.9
Minnesota	827	24.2
Montana	154	22.9
Nebraska	223	15.8
Wyoming	57	17.3

Source: Appendix table A-1.

South Dakota

Varying estimates project a population of from 750,000 to 839,000 for South Dakota by 1980, and 895,000 by 1985. The largest increases are expected to occur between 1975 and 1985. The higher estimates (4, p. 34) indicate an increase of 107,000 in the State's total population in 25 years. This is assuming that the fertility rate will have a moderate decline from the 1960 levels and that there is a convergence of the 1955-60 gross migration rates during the projection period. In the 10 years 1960-70, 64,000 persons will have been added. An increase of 84,000 is anticipated

between 1970 and 1980. By 1985, the State will have another 56,000 residents, for the total of 895,000.

Age Composition

Major growth will result in a future U.S. population of which about half will be under 25 years of age by 1985. Between 1970 and 1985, residents under 18 will constitute almost 40 percent of the total population. One-third of the population, 31-37 percent, will be 18 to 44 years of age whereas the mature adult group, 45 to 65 years, will decline slightly from 19 to 14 percent. Persons 65 and over will comprise 9 to 10 percent. Although age distribution of South Dakota's population does not indicate a drastic change between 1960 and 1985, differences are evident that have importance in terms of fulfilling the State's growing needs for health manpower. In the coming decade and a half, 1970-85, children and young adults under 18 are expected to increase by 58,000. (See table 20). Those persons 18 to 24 years of age will increase by 13,000. The increases will be greatest at the college-age level from 1970 to 1975, then shift to the elementary and high school level by 1985.

Those who will be eligible for a college education in the 1970-75 period will be the recruits for the labor force of the latter 1970's. South Dakota will have a bumper crop of youth to be trained and educated in the 1970's and 1980's. Whether or not youth go to college, occupational educational opportunities for health careers can supply meaningful answers for needed manpower. An investment could be made in these youth that would keep pace with change and respond to the competition of other fields. The challenge of a health career will have to equal that of other major employment fields also requiring increased numbers of high-level professional and technical workers.

Table 20.—Age distribution of actual and projected population of South Dakota; 1960, 1970, and 1985

Age group	1960		1970		1985	
	Number (thousands)	Percent of total	Number (thousands)	Percent of total	Number (thousands)	Percent of total
Total	681	100.0	755	100.0	896	100.0
Under 5	83	12.2	88	11.6	110	12.3
5-17	179	26.3	205	27.3	241	26.9
18-24	58	8.5	90	11.9	103	11.5
25-44	158	23.2	159	21.0	229	25.6
45-64	131	19.2	137	18.1	130	14.5
65 and over	72	10.6	76	10.1	83	9.2

Source: Appendix table A-32.

Chapter 3

Health in South Dakota

In varying degrees, States share common public health problems with bordering States and with the Nation. Although data available fall far short of portraying the actual health status of the population, conventional statistics do give some measure of the extent of health problems. Comparisons of similarities and differences in interrelated health spheres and consideration of the underlying characteristics and related causes of health problems can help define the needs for improving, expanding, and developing health services and health manpower.

According to estimates from the National Health Survey in 1965, acute illness and injury caused an average of 8.2 days of restricted activity per person, including 3.7 days in bed (1, p. 1). About 85 percent of the population over 65 years of age had at least one chronic condition. Persons were injured at the rate of 23.7 per 100 population.

Acute illness strikes children under 15 years of age nearly twice as frequently as it does adults, and one of every five children is affected with a chronic ailment. Of every 100 children, three suffer some form of paralysis, crippling condition, or impairment. About 10.2 million children in the Nation are in need of eye care, and 1.5 million have hearing impairments. A disproportionately larger share of illness and disability is borne by the 15 million children of families living in poverty.

Maternal and Child Health

South Dakota's birth rate has closely approximated that of the Nation since 1940. In 1965, the national birth rate was 19.5 per 1,000 total population and was almost identical to that of 1940. The rate was 19.6 in 1940, rose to 27.7 in 1950, dropped to 25.9 by 1960 and to 21.8 by 1964, thus depicting the Nation's increasing birth rate of the 1950's and decreasing birth rate of the 1960's.

In South Dakota in 1965, there were 13,674 births—slightly more than the 12,629 births in 1940, but fewer than the 18,074 births in 1950 and the 15,620 births in 1964.

Most babies in South Dakota are born in hospitals, and the births are attended. In 1964, 99 percent of births in South Dakota were hospital-attended, as compared with 97.5 percent for the Nation as a whole. Also 10 percent more births to nonwhite mothers were attended in South Dakota than in the Nation. Unattended births were concentrated in two areas of the State, the largest number occurring in the most sparsely settled region.

In South Dakota, as in the Nation, the highest percentage of births is to women in the 20-24 age group. For example, in 1964 in South Dakota, births to women 20 to 24 years of age accounted for 35 percent of all births.

About 62.5 percent of all babies born in South Dakota in 1964 were to women 20 to 29 years of age, 12.9 percent to young women 15 to 19 years old, and 14.7 percent to women 30 to 34 years of age.¹ Compared with the white population, the nonwhite had smaller proportions of childbearing among women in their 20's and larger proportions among women in their teens and 30's.

In the Nation, illegitimate births continue to increase. About 7 percent of the births in 1965 were out of wedlock, a ratio of 81.6 per 1,000 live births (2, pp. 1-25). South Dakota, in 1965, had 758 illegitimate births, which comprised 5.5 percent of total births and a ratio of 55.8 per 1,000 live births (3, p. 17). Out-of-wedlock birth rates in South Dakota have been increasing rapidly since 1962. (See table 21.)

Despite the decrease of 35 illegitimate births between 1964 and 1965, the rate actually rose because of the large decrease in total live births. The ratio for nonwhite illegitimate births in 1965 was 279.1 per 1,000 total live births, compared with 38.8 for white illegitimate births. Detailed State data show that the largest number of mothers of babies born out of wedlock in 1965 were in their late teens and early 20's. Young women 15 to 19 years of age had 302 illegitimate births or 40.3 percent of the total; women 20 to 24 years of age, 260 births or 34.4 percent.

¹ See appendix table B-3.

Table 21.—Resident, out-of-wedlock births; South Dakota; 1960–65

Year	Number	Rate
1965	758	55.8
1964	793	50.7
1963	738	44.2
1962	600	35.0
1961	591	33.7
1960	528	30.0

Source: South Dakota Department of Health. *South Dakota Public Health Statistics, 1965. Annual Statistical Report. Division of Public Health Statistics, Pierre, South Dakota, p. 17.*

Information on the place of occurrence of 128 illegitimate live births is available for South Dakota for the year 1964.² Seventy-five percent of those births reported were among the white population. Of those, 45 percent occurred in urban places of 10,000 or more population.

Studies have shown higher rates of infant mortality in deprived socioeconomic areas and among socioethnic groups (4, pp. 1–19). A relationship has been established between infant mortality and low State per capita income, nonattendance at birth, births out of wedlock, high frequency of social problems, and too little or too late prenatal care. These factors also contribute to premature births, handicapping conditions, and mental retardation.

In 1964, the infant mortality rate in the United States was 24.8 deaths of children under 1 year of age per 1,000 live births. This rate had declined from 47.0 in 1940, and was the lowest ever recorded for the United States. The infant death rate for nonwhite children was almost double that of white children. In 1964, the rates were 41.1 and 21.6, respectively. The high nonwhite infant mortality rate has not been recorded for white infants since the early 1940's. The neonatal mortality rate for nonwhite infants was 64 percent above that for white infants.

South Dakota has consistently had an overall infant death rate below that of the Nation. In 1964, the rate was 22.4 deaths of children under 1 year of age per 1,000 live births. Nonwhite infant mortality was below the U.S. average rates in 1964 but exceeded them in 1960. A marked decline of 39.8 fewer deaths per 1,000 live births was noted during the period. Excess neonatal mortality for nonwhite infants over white infants was 2.5 deaths in South Dakota. Of these deaths, the largest number, or 17.4 percent, was due to nutritional diseases. Infections such

as pneumonia and gastroenteritis caused 16 percent and congenital malformations 15.7 percent. Asphyxia and atelectasis claimed 12 percent. Accidents accounted for 6.0 percent of deaths; of those, 4.9 percent were violent and accidental causes other than motor vehicle accidents (5, p. 47).

The further reduction of infant mortality rates calls for sufficient health and medical services and better utilization of available services. Many of South Dakota's counties do not have public health nursing services that could strengthen pre- and post-natal care and provide maternal and child health supervision.

Communicable Diseases

General illness statistics are the best indicators of the level of health within a community but, unfortunately, data showing the incidence and prevalence of many illnesses are available for only the Nation as a whole. Although they do not present the full picture, data on reportable communicable diseases are available for local areas. For example, of the total reported cases of selected notifiable disease in South Dakota during the years 1960–65, gonorrhea, syphilis, and tuberculosis were the most prevalent.³ Gonorrhea cases represented 69.5 percent, syphilis 10.4 percent, and tuberculosis 8.5 percent of all cases reported. These indicators of health problems within communities can be related to demands for health manpower for specialized health programs and services.

An upward trend in the incidence of infectious venereal diseases in the Nation began in 1958, with a reported incidence 3.5 times that in 1957. These diseases are moving up the socioeconomic ladder and down into the lower age groups. The largest number of infections are occurring between children and young people 10 to 24 years of age whereas the upper age groups have a gradually decreasing incidence (6, p. 14). There is higher incidence in cities than in towns or rural areas. By reliable estimates, 75 percent of all infectious venereal disease patients are treated by private physicians, and of these only 11 percent are reported for epidemiological followup.

In the period 1960–65, total syphilis reporting in South Dakota accounted for 938 cases, averaging close to 160 cases a year and showing little change over the period in incidence or distribution by age group. Of these 938 cases, prevalence was almost equal for those persons 15 to 24 years of age and those 25 to 34 years—17 and 18 percent of cases, respectively. Persons 35 to 44 years of age and 45 to 54

² See appendix table B-4.

³ See appendix table B-9.

years had slightly lower case incidence, or about 12 percent each. Twenty-eight percent of the cases were among persons over 35 years of age. Teenagers had 6.6 percent of all reported cases.

Reported cases of gonorrhea in South Dakota increased steadily from 1960 to 1964, then decreased 66 percent, from 1,144 reported cases in 1964 to 762 cases in 1965. For the 5-year period 1960-65, the largest number of cases, about 30 percent, was among persons 20 to 24 years of age; 17 percent among persons 15 to 19 years old; and 27.9 percent among persons 25 to 34 years old. Although South Dakota followed the national pattern of increased cases of venereal disease in the 1960's, the predominance of cases in the younger age groups, particularly for syphilis, was not as marked.

The incidence of tuberculosis began to decline sharply in the early 1950's, but declined very slowly in the 1960's. There were 110,000 known active cases of tuberculosis on tuberculosis registries in the United States in 1962. In addition, there were 250,000 contacts of newly reported cases and 250,000 inactive cases who had had active disease less than 5 years ago (7, p. 5). Actually, this health problem affected 610,000 persons. Morbidity tends to be higher in the older age groups, and among all males, and in the nonwhite population. Half of the new active cases reported are in persons over 45 years of age, but 20 percent of total cases are in persons under 25 years of age, and these cases are the most easily prevented.

In 1960, South Dakota's tuberculosis case rate was 17.9 per 100,000 population as compared with 30.8 for the United States (8, p. 9). The number of new cases reported in the 1960's has fluctuated and was highest in 1965, when 166 new cases were reported.⁴ The fewest new cases were reported in 1963. The total number of cases dropped in 1960, rose in 1961, then dropped each year thereafter to a low of 1,202 cases in 1964. Statistics reflect the high incidence of tuberculosis among the Indian population. South Dakota had a higher percentage of new cases of tuberculosis in younger persons than the Nation had. Of the 766 new active cases reported during the 5-year period 1960-65, 29 percent occurred in persons under 20 years of age and 39 percent occurred in persons 45 years of age or older.

The prevalence and incidence of other communicable diseases in South Dakota have less significance. No poliomyelitis has been reported in the State since 1963. Incidence of infectious hepatitis, meningitis,

and encephalitis are sporadic. Vector-borne intestinal diseases are minimal. Today's challenge of the communicable diseases is ultimate eradication, but staff for services to achieve this goal is seen as the most difficult aspect. The requirements involve motivating interest among health personnel in these diseases, special training of professionals, preservation of competencies, and the development and wise use of personnel for control activities related to these diseases and for other tasks that do not require professional skills.

Mental Retardation

In 1962, it was estimated that throughout the Nation 3 percent of the total population, or 5.4 million children and adults, were mentally retarded—some severely, most only mildly (9, pp. 1-9). The Mental Retardation Planning Committee of South Dakota estimated that in 1960, 1.81 percent of the State's total population, or over 12,000 persons, were mentally retarded. The largest percent was in the age group 10 to 19 years of age, followed closely by those 5 to 9 years of age. A figure of over 13,000 retarded or 1.78 percent of the population is projected for 1980. A whole range of diagnostic, institutional, rehabilitative, and educational services was recommended to meet the needs of these people.

Life Expectancy

Life expectancy is increasing for the national population. The average age at death has risen from 63.6 years in 1939-41 to 68.1 in 1949-51 and to 69.9 in 1959-61 (10, p. 5-13). This type of projection is available for South Dakota for the white population by sex. State health authorities report that South Dakota ranked first among the States in life expectancy at birth, for white males, for the period 1949-51; life expectancy for females was fourth among the States (11, p. 61). Life expectancy for males in the 1959-61 period was estimated at 68.2 years and for females 75.5 years. (See table 22.) Although the State's average life expectancy exceeded the national average for both periods, the Nation was closing the gap. The increase in years of life expectancy for South Dakota between the 1950 and 1960 periods was less than for the United States. White females in South Dakota gained 1.9 years whereas those in the Nation gained 2.2 years. White males in South Dakota lost 0.2 year. A higher mortality rate among males 21 to 25 years of age was believed to have influenced the decline.

⁴ See appendix table B-11.

Table 22.—Life expectancy of the white population, by sex; United States and South Dakota; 1949–51 and 1959–61

Year	United States		South Dakota	
	Male	Female	Male	Female
	<i>Years</i>	<i>Years</i>	<i>Years</i>	<i>Years</i>
1959–61	67.4	74.2	68.2	75.5
1949–51	66.3	72.0	68.4	73.6

Source: South Dakota Department of Health. *Public Health Statistics, 1962. Annual Report.* Division of Public Health Statistics, Pierre, South Dakota. Tables 34 and 35, pp. 70 and 71.

Mortality

Mortality rates give a measure of the status of health of the population. In interpreting this data for particular communities, one must consider the influence of the availability and adequacy of health facilities in the area, their utilization, and the age and socioethnic composition of the population.

The crude death rate in the Nation (the number of deaths per 1,000 population) has declined slightly,

from 10.8 in 1940 to 9.4 in 1965. South Dakota's crude death rate was 8.9 in 1940 and 9.3 in 1965. The higher rate in 1965 can be attributed partially to a higher proportion of older persons in the population. South Dakota has consistently had a crude death rate that fell in the median range between that of the Nation and that of South Dakota's bordering States. Wyoming has had the lowest death rate for the whole period.

Heart and vascular system diseases and cancer are the chief killers in the United States, with 7 out of 10 Americans dying of these ailments. Accidents rank fourth. However, for persons 1 through 34 years of age, accidents continue to take the greatest toll. Next in order of importance are diseases of early infancy, influenza and pneumonia, arteriosclerosis, diabetes mellitus, and other diseases of the circulatory and respiratory systems. (See table 23.)

In 1964, the rank for these 10 leading causes of death in South Dakota was identical to that for the United States in general. Only the death rates for vascular disease and other diseases of the circulatory and respiratory systems and for accidents exceeded

Table 23.—Ten leading causes of death in the United States, South Dakota, and bordering States; 1964
[Italic figures indicate rates higher than the U.S. average]

Causes of death	Death rate per 100,000 population							
	United States	South Dakota	Bordering States					Wyoming
			North Dakota	Iowa	Minnesota	Montana	Nebraska	
Diseases of the heart	365.8	355.0	330.2	420.5	354.7	334.9	385.0	274.6
Malignant neoplasms ¹	151.3	142.7	134.3	170.6	154.9	139.1	160.7	118.1
Vascular lesions affecting central nervous system	103.6	117.9	99.8	142.5	126.2	99.0	128.1	83.7
Accidents	54.3	70.3	63.4	58.8	57.1	95.5	64.5	90.1
Certain diseases of early infancy	31.5	27.4	33.2	25.7	27.7	33.3	30.6	42.6
Influenza and pneumonia ²	31.1	27.1	38.1	35.2	34.5	36.7	37.0	30.3
General arteriosclerosis	19.4	18.5	18.4	31.0	23.2	23.0	23.4	16.0
Diabetes mellitus	16.9	11.6	14.7	18.4	15.5	20.3	20.2	12.2
Other diseases of circulatory system	13.5	14.4	12.7	14.2	14.9	12.8	11.9	15.2
Other broncho-pulmonic diseases	12.2	12.7	7.6	14.3	10.5	17.2	12.0	17.2

¹ Includes neoplasms of lymphatic and hematopoietic tissues.

² Except pneumonia of newborn.

Source: U.S. Dept. of Commerce, Bureau of the Census, *Statistical Abstract of the United States: 1966.* 87th Annual Edition, p. 59. Washington, U.S. Government Printing Office, 1966.

the national average, with the excess for accidents being most marked.⁵ Accidental fatalities totaled 70.3 persons per 100,000 population as compared with the United States rate of 54.3. More than half of South Dakota's accidental deaths were due to motor vehicle accidents. The other major causes were falls, machinery accidents, fires, and drownings. For the bordering States, in general, deaths due to influenza and pneumonia and diabetes exceeded South Dakota's rate in all six States. The number of deaths from diseases of early infancy was greater in five States; from arteriosclerosis, four States; and from accidental deaths, two States. Three or fewer of the six bordering States had death rates exceeding those of South Dakota for heart disease and cancer and other diseases of the circulatory and respiratory system.

In 1964, South Dakota had 6,612 deaths, a rate of 924.8 per 100,000 population.⁶ The major cardiovascular and renal diseases accounted for 3,701 or 56 percent of total deaths. Malignant neoplasms, the second leading cause, took 1,020 lives or 15.4 percent. Accidents claimed 503 lives, or 7 percent. Two hundred seventy deaths, or 4.1 percent, were due to congenital malformations and other diseases of early infancy; pneumonia and influenza accounted for 2.9 percent of total deaths. Other causes accounted for less than 100 deaths each and in diminishing proportions of the total deaths.

Sixty-one percent of the 6,612 deaths in 1964 occurred among males. Of the total 356 nonwhite fatalities, 205 or 57 percent were male. By age group, among persons over 65 years old there were 4,380 deaths, or 66 percent of all deaths in the State. For the white population, 67.9 percent of the deaths were in persons over 65 years old; for the nonwhite, however, the equivalent figure was for persons under 64 years of age. (See table 24.) Since 1930, the pattern of age at death has been changing. These changes reflect a decrease in deaths due to communicable diseases

Table 24.—Percent distribution of deaths, by age; South Dakota; 1964

Age	Total	White	Nonwhite
Under 15	7.2	6.5	20.9
15-44	7.4	6.6	22.9
45-64	19.1	19.0	20.2
Over 65	66.3	67.9	36.0

Source: Appendix table B-16.

⁵ See appendix table B-15.

⁶ See appendix table B-15.

and other diseases of childhood and an increase in deaths due to chronic diseases in the older age group.

Indian Health in the United States

The health status of Indians is about a generation behind that of the general population, largely because of unfavorable environmental conditions. Most illnesses among Indians are due to infectious diseases. Deaths of Indians from tuberculosis and gastroenteritis, for example, are five to six times greater than among the general population.⁷ Indians have a high incidence of respiratory disease, streptococcal sore throats, and communicable diseases and their secondary complications.⁸ Measles and secondary pneumonias are prevalent among Indian children. Otitis media is a common health problem. In 1963, 3,254 cases were reported in the Aberdeen area (12, p. 16). From 16 to 35 percent of Indian children have been found to have hearing loss, which seriously retards their education.

Trachoma, rare in the general population, affected two out of every 1,000 Indians in 1964 and is highest among children 5 to 15 years of age. To combat the Indians' health problems requires extensive preventive services. Complicating the providing of these services is an array of cultural deterrents, including problems of communication, taboos, religious beliefs, and the stoicism of the Indian, who accepts illness as a natural part of life.

Infant mortality among Indians exceeds that of the general population by 11 deaths per 1,000 live births. Almost one fifth of the deaths among Indians occur during the first year of life, compared with one-twentieth among all races. The post-neonatal death rate among Indians is three times that of the general population. Indians who survive the first year can expect to live 63.5 years, or about 7 years less than the average man or woman in the United States.⁹

The leading cause of Indian deaths is accidents, and nearly one-half are motor vehicle accidents. The rate is three times that of the general population. Heart disease ranks second among the causes of Indian deaths. The rate is less than half that of the United States. Yet, the high incidence of degenerative diseases is less easily explained, since Indians are predominantly a young population, the median age being 17.3 years as compared with 29.5 for the general

⁷ Based on vital statistics reports of the Division of Indian Health for beneficiaries of health programs on Federal Indian Reservations. See appendix table B-22.

⁸ See appendix table B-17.

⁹ See appendix table B-20.

population. Deaths from gastroenteritis and tuberculosis are next.

Indian Health in South Dakota

In South Dakota the Indian population is also young. Its most pressing health problems, too, are those of children and infants. Half of the population is under 20 years of age, and the birth rate is more than double that of the State's population in general.¹⁰

Yet progress has been made in improving the health of Indians in South Dakota. The infant death rate per 1,000 live births declined appreciably from a high of 71.8 deaths in 1958 to 47.4 in 1963. The Indian infant death rate was still about twice that of the State's in general, but the decline was three times greater than that for all Indian reservation populations throughout the United States. Improvement in this respect had been more marked in South Dakota than in the bordering States, where the death rates declined less or even increased.

The incidence of reportable infectious and communicable diseases for all Indian reservation States is known, but not the proportion for South Dakota Indians. It can be assumed, however, that they have a high incidence since they are a sizable part of all Indians residing on reservations.

Most of the death rates for the leading causes of death¹¹ among South Dakota Indians exceed those for all Indians in all other reservation States. The greatest disparity is found in the death rate from accidents, which is the highest of the 10 leading causes of Indian deaths. The death rate from motor vehicle accidents for South Dakota Indians was half again as high as that for Indians in all other reservation States in 1957-59 and 1958-60, and double that of Indians in other reservation States in 1959-61.

¹⁰ See appendix table B-21.

¹¹ See appendix table B-22.

Also, the rate of accidental deaths from all causes among South Dakota Indians (224.5 per 100,000) was over 40 percent higher than that for Indians in other reservation States in 1959-61. Although later statistical data were not available, there is no evidence to indicate that the death rate from all accidents among South Dakota Indians has lowered substantially since 1961.

In 1964, the death rate per 100,000 population from all accidents was 70.3 for South Dakota and 54.3 for the Nation.

Deaths from heart disease, the second leading cause of deaths among Indians, claimed 50 more South Dakota Indians per 100,000 population than among the total population of all Indian reservations. For all Indians, the death rate from gastroenteritis was greater than that for tuberculosis in 1956-61. Among South Dakota's Indians, however, deaths from tuberculosis outranked those for gastroenteritis. Their death rate from tuberculosis was twice that for all Indians and 16 times that of South Dakota's general population. The death rate from gastroenteritis among South Dakota Indians was somewhat higher than that for all Indians on reservations, but it was 10 times greater than the death rate from this cause in the general population of the State.

Available data point up some of South Dakota's health problems and the principal needs for health care and services, but more precise information related to the health status of the State's population is needed for planning. Mortality and morbidity registries that reflect adequate reporting of all major diseases would be useful in assessing health needs on a local, State, and regional basis. Also the coordination of available data within a State would be of great assistance. With these bases for planning, the health problems of a community could be related to specific health interests, program goals, and budgetary prospects, and personnel utilization patterns could be determined.

Chapter 4

Health Facilities and Services

The health care system of today is a changing and growing complexity of therapeutic, diagnostic, preventive, rehabilitative, and health maintenance facilities and services. A myriad of organizational patterns, distribution of sources, and availability of components of care in various stages of development for meeting health care requirements are manifest in national, State, and community health resources. Trends influencing the delivery of health care and services command leadership and initiative for the rational development and use of health manpower.

Hospitals

Hospitals have been most affected by the factors influencing health care. In 1950, South Dakota had 56 hospitals with 7,131 beds; in late 1966, 78 hospitals with 8,263 beds.¹ Figure 3 shows the counties and trade regions in which these hospitals are located, and the number of hospital beds for each county. South Dakota had more Federally owned and operated hospitals than most States. There were no proprietary hospitals. South Dakota also had a higher ratio of voluntary nonprofit hospitals and beds than the Nation had as a whole.

Hospitals and Beds by Ownership

When hospitals of all types were taken into account, 35.8 percent of all hospitals and 61 percent of all hospital beds in South Dakota were government-operated in 1966. Voluntary facilities comprised the remaining 64.2 percent of hospitals and 39 percent of total beds.

The Federal government's 10 hospitals had almost 19 percent of all hospital beds in the State. Long- and short-term care was provided in three hospitals for veterans. The Indian Health Service maintained five small rural facilities for the short-term care of reservation Indians and one tuberculosis hospital in Rapid City. The Air Force operated a short-

term facility in Rapid City for military personnel and dependents.

The State government operated four hospitals, with 37 percent of all beds pertaining almost entirely to mental illness and chronic care. County and city governments were solely concerned with short-term general hospital facilities, most of which were small rural installations. They operated 14 hospitals, with 5 percent of the total beds.

There were 50 voluntary facilities in the State. Of these, 49 were for the care of short-term acute illnesses and one specialized in orthopedic care for children. Church groups sponsored half of the voluntary facilities and slightly more than 17 percent of total hospital beds in the State.

Short-Term General Hospitals

In 1966, South Dakota had 5.6 short-term general hospital beds per 1,000 population. The number of hospital beds had been more than sufficient to keep pace with the growth in population. Federal, county, and city governments and voluntary organizations combined operated 69 short-term general hospitals with 3,848 beds.² Sixty-three short-term general hospitals with 3,559 beds were non-Federal. Nearly 500 beds had been added to these hospitals since 1960.

Expansion of Hospitals

A requirement for 246 additional general hospital beds is estimated for South Dakota within the next 5 years.³ Between 1966 and 1971, 29 hospitals will need to modernize or replace present facilities, which have a total capacity of 1,221 beds. The State currently has one specialized facility for rehabilitation, and two general hospitals offer rehabilitation services. A need is seen for 10 additional rehabilitation facilities or service units. These increases in health care resources will create additional demands for nurse manpower in the years ahead. The small hospitals of

¹ See appendix table C-1.

² See appendix table C-4.

³ See appendix table C-9.

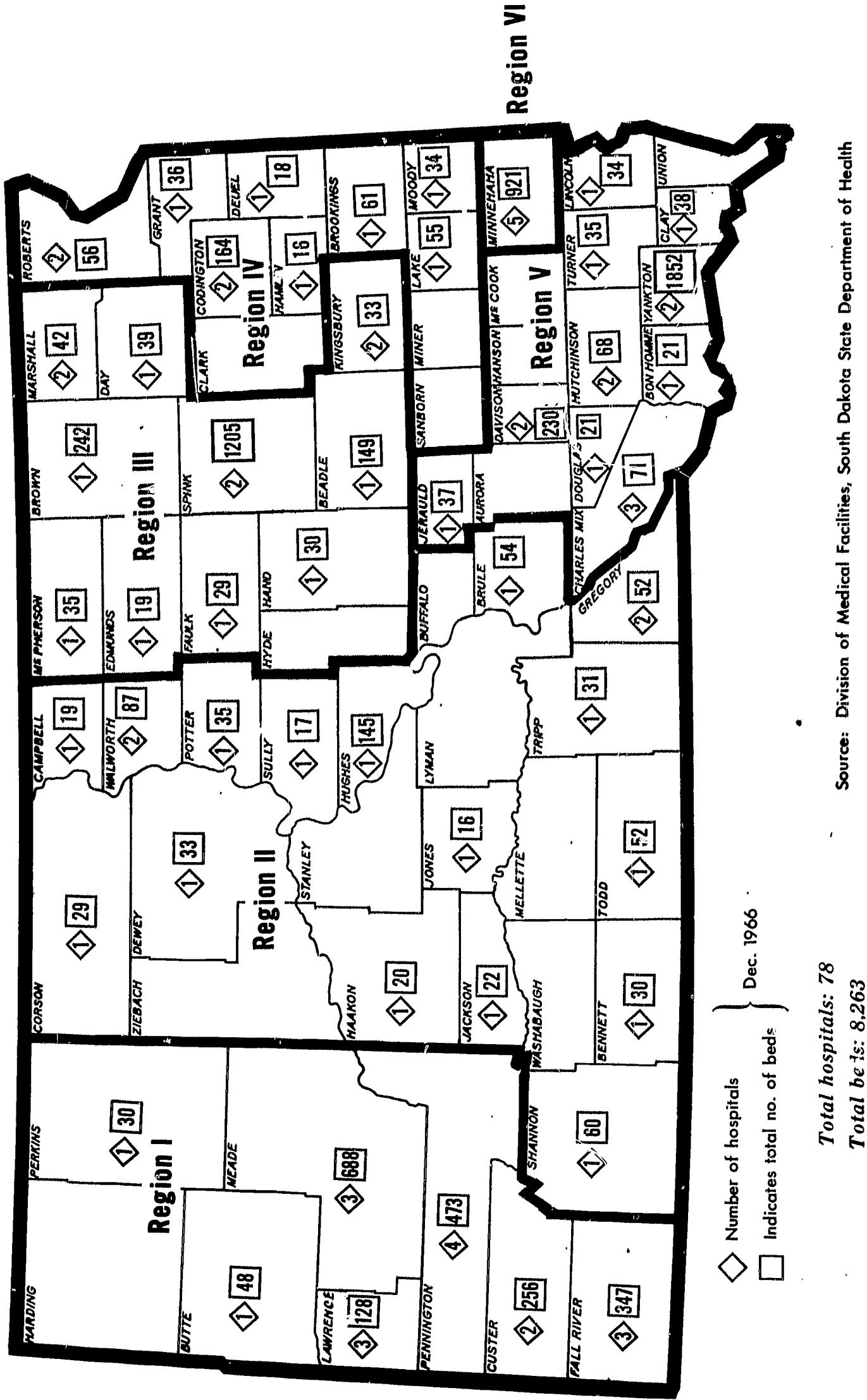


Figure 3.—Distribution of hospitals and hospital beds in South Dakota, by county and region; 1966

rural communities and the Indian Health Service have considerable difficulty in obtaining qualified health personnel. The veterans' hospitals, however, offer better employment incentives and are considered competitive in terms of available health manpower for staffing the State's hospital facilities.

Geographic Distribution and Size of Hospitals

General hospital beds in South Dakota are geographically distributed in proportion to the population. One-quarter of all the State's hospitals have fewer than 25 beds, and almost two-thirds have fewer than 50 beds.⁴ All but one of these are short-term general hospitals located in small communities and outlying areas of the State. In general, the size of short-term general hospitals increases with the size of the communities in which they are located. The larger cities—Sioux Falls, Rapid City, Mitchell, Aberdeen, and Watertown—have two or more short-term general hospitals of moderate size, ranging from 100 to 300 beds. The three largest hospitals in the State, with 450 or more beds, are specialized facilities for psychiatric and mental retardation care.

Hospital Services

Hospitals are evolving as the focuses of all health care through the expansion and extension of services and links with other community agencies for improved care. Of 53 hospitals in South Dakota reporting to the American Hospital Association in 1966, 21 had post-operative recovery rooms and nine had intensive care units.⁵ One intensive care unit in Sioux Falls and one in Rapid City have cardiac monitoring equipment. Training for personnel has been provided at the American Heart Association courses and regional programs in Minnesota. Pacemakers are available in hospitals in Watertown, Sioux Falls, and Rapid City. Accessibility as needed of personnel skilled in the use of this equipment has not been reported. Cobalt therapy is available in Sioux Falls.

Psychiatric units with a total of 74 beds have been added to general hospitals in Aberdeen, Huron, Sioux Falls, and Yankton.⁶ Ten hospitals have nursing home facilities and most are part of short-term general hospitals. These services are available at Sturgis, Vermillion, Pierre, Platte, Mobridge, Lemmon, Kadoka, Milbank, Belle Fourche, and Chamberlain. It is the larger short-term general hospitals that have the ca-

pability to develop and expand specialized treatment services and that can command the most adequate staff.

The farthest distance from any hospital for a South Dakota resident is estimated at about 90 miles. Yet precious time is often lost in acquiring needed treatment because of a lack of a variety of critically needed services and skilled personnel in small rural facilities. With modern transportation conditions, most patients could get to a larger hospital if emergency medical services were immediately available locally. This would relieve problems of staffing, physician coverage, and the expense of maintaining facilities to meet all possible peak needs in sparsely populated areas. Some of the State's health authorities and leaders feel that rural communities could reap many advantages of improved care if they would identify with larger community areas, hospitals, and health facilities for a coordinated system of care.

Nursing Homes and Homes for the Aged

Nursing homes under proprietary and voluntary auspices have attracted public attention because of the extended care facility benefits of medicare. Demands for patient care in these facilities in South Dakota are also influenced by the fact that Yankton and Redfield State Hospitals are planning to transfer the chronically ill to nursing homes. An estimated 500 patients at Yankton and 80 at Redfield could be transferred to these facilities.

In August 1964, the State updated its minimum standards and regulations for the licensure of nursing homes, homes for the aged, and related facilities (1). Existing homes were given 3 years in which to comply for continued licensure. Neither the term "skilled nursing home" nor "extended care facility" is used in South Dakota for classification for licensure for homes for the care of the aged and chronically ill. Four types of homes are licensed:

(1) *Intensive care*: Provides care for persons not acutely ill, but requiring nursing care and related medical services. Has nursing services under the supervision of a registered nurse and a registered nurse on duty at all times working under the direction of a physician. Minimum of 2.0 hours of nursing care required per resident for each 24 hours.

(2) *Nursing care*: Provides care for persons not acutely ill, but requiring nursing care and related medical services. Has nursing services under the supervision of a registered nurse with

⁴ See appendix table C-5.

⁵ See appendix table C-6.

⁶ See appendix table C-7.

at least one registered nurse or licensed practical nurse on duty at all times working under the direction of a physician. Minimum of 1.6 hours of nursing care required per resident for each 24 hours.

(3) *Intermediate care*: Provides care for persons not acutely ill, but who require nursing care and related medical services. Has nursing services under the supervision of a registered nurse or a licensed practical nurse working under the direction of a physician. Minimum of 1.2 hours of nursing care required per resident for each 24 hours.

(4) *Supervised living care*: Provides personal care for aged and infirm who are dependent upon services of others for normal daily activities, but not requiring nursing care. Services of a registered or licensed practical nurse not required. Minimum of 0.8 hours of nursing care required per resident for each 24 hours.

Number of Nursing Homes

As of November 1966, South Dakota had 136 licensed nursing homes and homes for the aged, with 4,727 beds.⁷ Their distribution, by county, region, and type of facility, is shown in figure 4. About 35 percent were supervised living facilities and 50 percent were classed as intermediate care facilities. Of the remaining 15 percent, 10 homes were intensive care facilities and seven were nursing care homes. By meeting the State's minimum requirements for nursing service personnel for licensure, these 17 homes with 1,050 or 22 percent of all beds could conceivably meet the nursing service requirements for participation in the medicare program. About 10 homes were expected to be certified when the medicare program was initiated. Achieving certification is hindered by difficulties in meeting the conditions for participation. Allied health personnel are extremely scarce in South Dakota.

Ownership of Nursing Homes

Information for the most part is available on the ownership and control of nursing homes and homes for the aged. Nonprofit organizations are known to operate about 59 homes with 3,109 beds. These homes are predominantly controlled by church-affiliated groups. Corporations operate five homes totaling 260 beds. Two homes totaling 80 beds are government-owned and -operated. Homes under proprietary control represent about half of the facilities (70) but represent only 1,278 total beds.

⁷ See appendix table C-10.

Size of Nursing Homes

The smallest nursing home or home for the aged in South Dakota had four beds; the largest had 148 beds. Three-fifths of all beds in these homes were in installations ranging from 25 to 99 beds.⁸ Bed capacity varied by type of home.⁹ Intensive care facilities had 31 to 84 beds. Nursing care homes tended to be slightly larger, ranging from 58 to 103 beds. The size of intermediate care homes ranged from 5 to 148 beds, but the majority had between 25 and 80 beds. Most homes for supervised living had fewer than 10 beds each, but 8 homes with over 25 beds each accounted for almost half of all beds in this type of facility. The size of nursing homes and the levels of care appropriate to the needs of patients in these homes influence requirements for health manpower and the efficient and economical use of available personnel.

Expansion of Nursing Homes

Between 1964 and 1966, 31 new nursing homes or homes for the aged were licensed in South Dakota and 20 others were no longer operating. Between July and September 1966, 7 new homes with 177 beds opened, and existing facilities added 68 beds. In the last 6 months of 1966, about 40 to 60 new beds were added each month in new and existing facilities. It is anticipated that the State will gain 600 more beds in nursing homes over the next 5 years. Corporations franchised under commercial firms such as Americana Incorporated are considering constructing nursing homes in South Dakota. State plans also include replacing over 1,000 beds that do not conform to standards.

As the number of nursing homes and homes for the aged steadily increases, their administration becomes more complex and patients cared for in these homes have a wider array of medical, surgical, rehabilitative, or special problems of the aged. Nursing homes, perhaps, offer the newest challenge in establishing high standards of care and in resolving problems of staffing, recruitment, and retention of personnel. Many more registered nurses need to be attracted to this field. Shortcomings in the education and experience of nursing personnel in providing progressive patient care also need to be overcome.

Mental Health Care

South Dakota is moving toward a community-based program of comprehensive mental health care

⁸ See appendix table C-11.

⁹ See appendix table C-12.

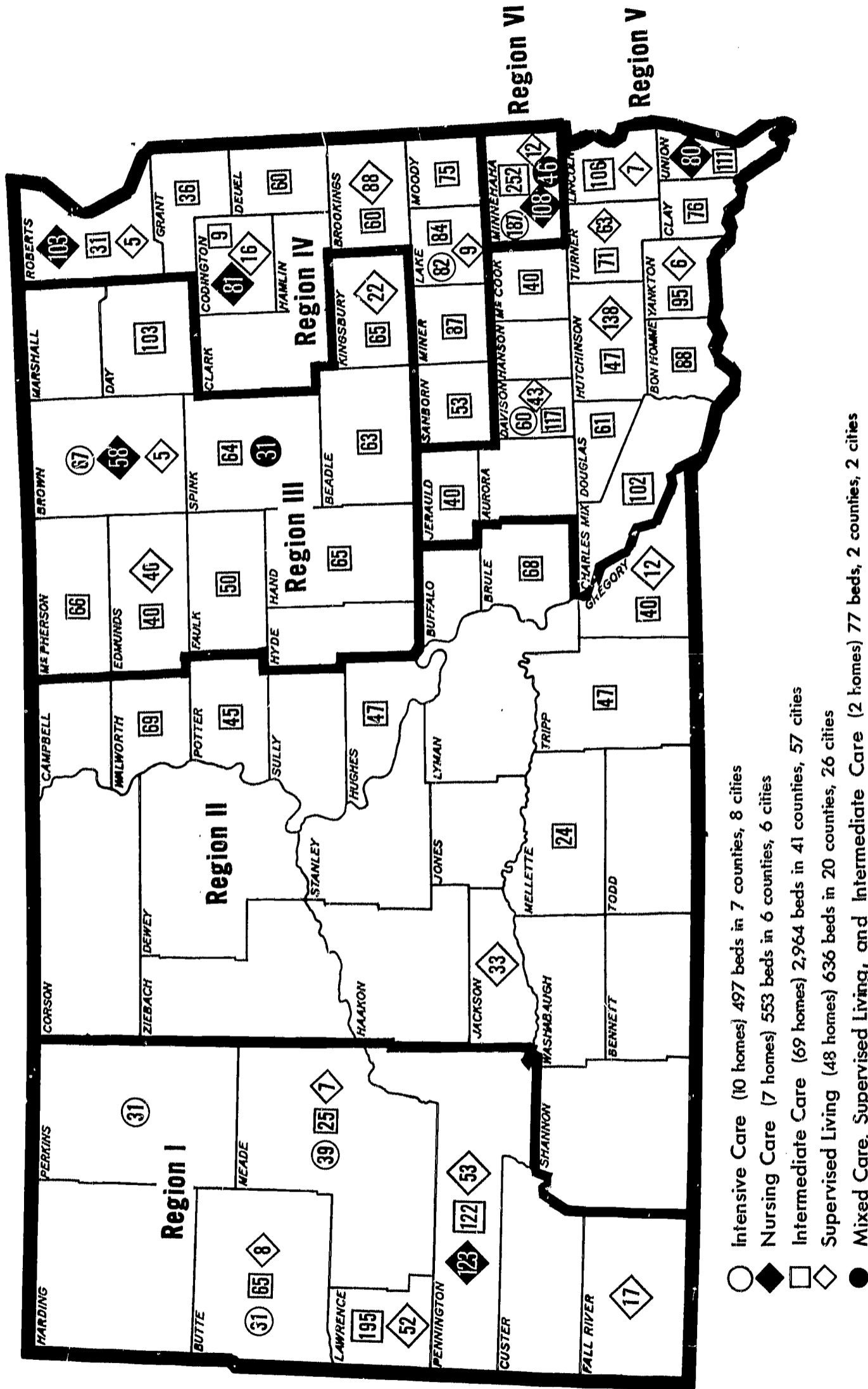


Figure 4.—Distribution of nursing homes and homes for the aged in South Dakota; by county, region, and type of facility; 1966

(2). In July 1966, the State Commission on Mental Health and Mental Retardation replaced and assumed the duties of the Mental Health Section of the State Department of Health, to strengthen and coordinate mental health services throughout the State.

There are 1,650 psychiatric beds in the State Hospital at Yankton. Other resources for hospitalization are the psychiatric units in general hospitals and the Veterans Administration's 631 psychiatric beds at Fort Meade. The Redfield State Hospital and School provides 1,165 beds and the Custer State Hospital provides 240 beds for the mentally retarded. An alcoholic treatment unit and vocational rehabilitation programs are based at the Yankton State Hospital.

Psychiatric outpatient treatment services are available in six multicounty mental health centers. Located in the central cities of Rapid City, Sioux Falls, Huron, Watertown, Brookings, and Aberdeen, these centers serve five of the six economic and trade areas. The centers are administered by autonomous boards of interested citizens and are multifinanced by Federal, State, and local appropriations from public funds and also have private support.

Sheltered employment and adjustment training for the mentally retarded are also privately sponsored. These activities are centered in Rapid City, Aberdeen, Mitchell, and Sioux Falls. Lack of boarding and foster home arrangements, however, limit the number of trainees.

Varied community resources in health education and social welfare are participating in efforts to bring and extend a broad range of preventive and curative mental health services to those in need. Mental health education, counseling and guidance, early detection, referral, intensive therapy, and early return of cases to productive community life are being stressed in cooperative programs. Obtaining a full complement of professionals to staff psychiatric and mental health teams is seen as the greatest difficulty in fully implementing the modern-day concepts of mental health care, although most mental health facilities report a chronic inability to recruit and keep adequate staff at all levels. For example, aides trained at the Yankton State Hospital are known to migrate to Iowa, where better job opportunities exist. The estimated turnover of aides is 400 per year.

Better facilities and financial opportunities are recognized as needed incentives for preventing migration of talented and educated people to cities and for attracting to these facilities and programs professionals not trained in the State. The State Hospital

at Redfield has recently received a grant of \$100,000 for a 3-year program to stabilize personnel.

Tuberculosis Care

The treatment of tuberculosis is also moving from large specialized hospitals into the community and into general hospitals in the State. In 1950, South Dakota had one veterans', one Indian, and one State institution—with a total of 322 beds for tuberculosis care. Today, the Indian Health Service hospital at Rapid City, with 122 beds, is the only specialized tuberculosis facility in the State. When the patient census in the State sanitarium fell to 20 in 1963, it was converted to a facility for the mentally retarded. The State Health Department now administers a program whereby tuberculosis patients are cared for in general hospitals, with reimbursement from State funds. Sioux Valley Hospital in Sioux Falls, St. Luke's in Aberdeen, and Watertown Memorial Hospital are chiefly used for this purpose. Some State residents go to Mineral Springs, Minn., for care.

In the effort to eradicate tuberculosis, South Dakota has an intensified program of tuberculosis control. Through cooperation of the South Dakota State University, Indian Health Service, and the South Dakota Tuberculosis and Health Association, the knowledge and skills of tuberculosis workers have been improved by means of workshops and attendance at special courses offered out of State. Case finding through sample surveys of selected population groups and application of new and improved treatment methods are being emphasized.

County public health nurses carry out case-detection activities, follow up on contacts and suspected cases, give instruction for home care of cases, and participate in tuberculosis testing clinics. The U.S. Public Health Service has assigned two advisors to South Dakota to assist in the State program. A need to have more hospitals do routine screening for tuberculosis on all hospital admissions and to expand the program in counties without public health nursing services is recognized. A tuberculosis outpatient clinic for the heavily populated Sioux Falls area has been proposed.

South Dakota has one of the lowest rates of reported new cases of tuberculosis in the 50 States. Although considerable progress has been made in recent years in decreasing the incidence of tuberculosis among Indians, the greatest incidence and needs for services are still among this population group.

Out-of-Hospital Facilities and Services

Health care services not requiring hospitalization are provided through three principal sources in South Dakota: private physicians, hospital outpatient departments, and programs of the State Health Department and local jurisdictions.

Physicians' Services

South Dakota had 545 practicing physicians in 1966. They practice in about 335 solo, partnership, or group practice offices (3, pp. 3-19). About half of the physicians have a general practice; the others are specialists. Physician services are considered inadequate for meeting the State's needs, particularly in rural areas. For example, about seven counties have no physicians, 12 counties have only one physician each, 44 counties have fewer than five each, and 53 counties have fewer than 10 each. Physicians are concentrated in the larger cities. As mentioned before, rural areas lack the social, cultural, and educational advantages desired by physicians and their families.

Clinic and Emergency Services

Although all of South Dakota's hospitals provide outpatient and emergency services, only 20 have organized outpatient departments and 45 have emergency departments. In 1965, an estimated 95,000 visits were made to the 12 outpatient departments of short-term general hospitals in the eight large cities. Yet even in these cities, four outpatient departments are not thought to be strategically located for meeting outpatient service needs. In many areas, residents are solely dependent upon medical and emergency services available in hospitals regardless of their location. The State's need for a well-developed satellite clinic and medical emergency service program has been cited in previous studies of available health services and health manpower.

Public Health and Preventive Programs

In South Dakota, the major share of efforts toward protecting the health of the population at large is rendered by units of official government, with various types of support from voluntary health and welfare associations (4, 5, 6). Together they carry out regulatory, informational, case-finding, and health maintenance and protecting activities, including the provision of care in the home. Lack of public support and understanding, inadequate financing, and personnel shortages are noted as major barriers to the extension and improvement in these community health services.

The South Dakota State Department of Health is responsible for planning and executing the public health program. The Department serves a dual function of rendering advisory and supervisory services and of staffing functional units for local health services. Pinpointed population concentrations and comparatively small communities present financial problems, thus deterring the development of adequately staffed local health units. Only one unit is fully organized, hires personnel, and renders full-time services—the Pennington County Health Department. Among the State Health Department's variety of health services, programs partially supported by Federal grants tend to be emphasized.

Public Health Nursing Services

A heavy burden of providing needed public health services falls upon the 26 county public health nursing units of semiorganized health departments. (See figure 5.) County nurses render generalized public health nursing services, and, since the initiation of medicare, have expanded bedside nursing care services. The Division of Public Health Nursing of the State Health Department provides direction for the nurses in the local areas and renders direct services on a priority basis in areas not covered by local public health nurses.

Public health nurses are involved in direct care services, case detection, supervision, and followup in conjunction with the State's maternal and child health, communicable disease, tuberculosis, venereal disease, cancer control, heart disease, and mental health programs. Referrals are made to them from the relatively new alcoholism program.

The Indian Health Service supports public health nursing teams that work out of eight centers and service the nine reservation counties. (See figure 5.) In addition, at Rapid City the Indian Health Service operates a health center that provides health services, including public health nursing, to the Indians living in the Rapid City area. Close cooperation is maintained with other health facilities and health service programs in the State to bring a wide range of curative and preventive services to bear on the special health problems of the Indian.

Maternal and Child Health Services

Local political jurisdictions offer maternal, infant, and child health services in relation to the existence and availability of public health nursing services. Well-baby clinics are held in Aberdeen, Rapid City, and Sioux Falls. Mother and baby and parent classes

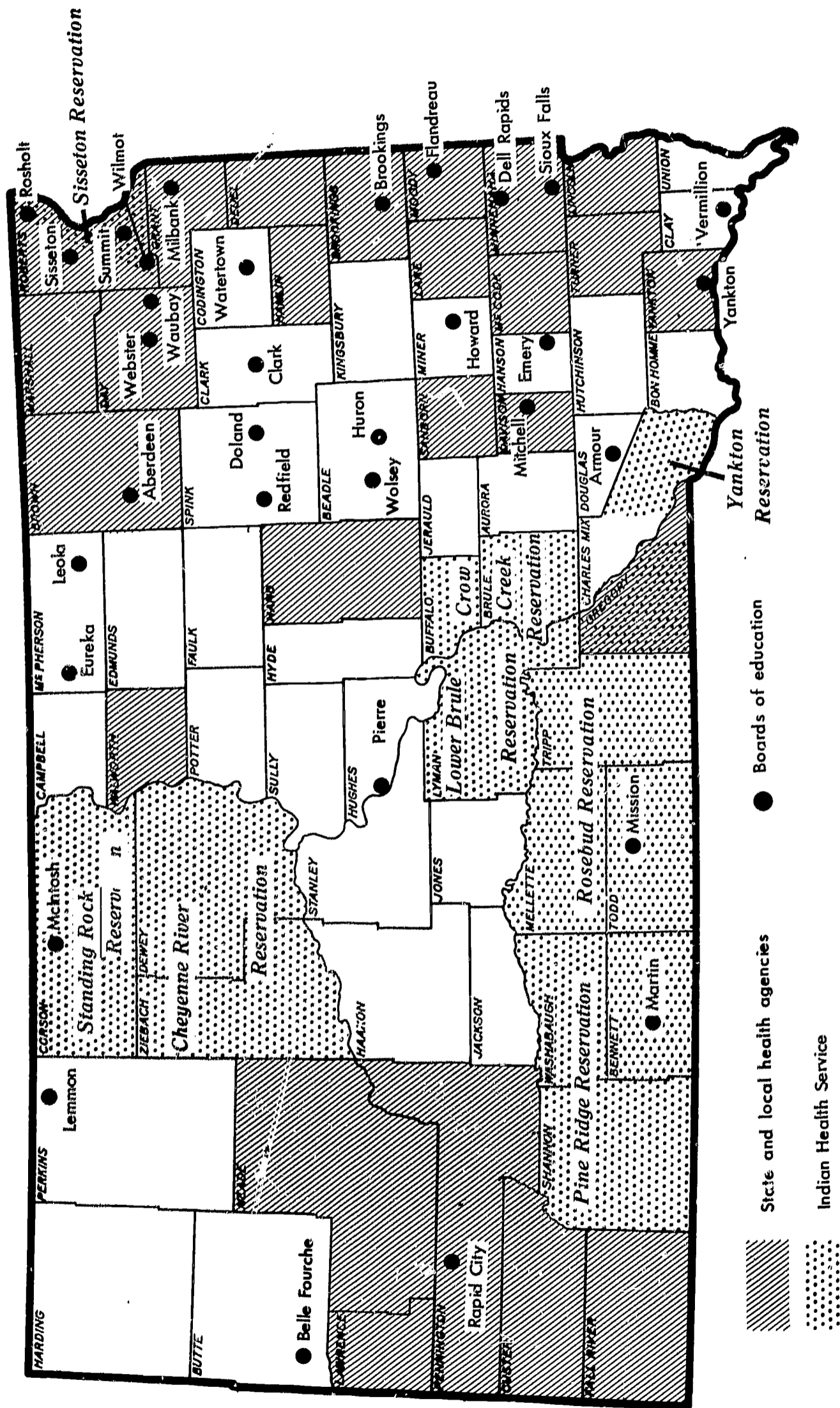


Figure 5.—Availability, by county, of public health nursing services provided by State and local health agencies, boards of education, and Indian Health Service; South Dakota; 1966

are offered in a few areas. There are no official prenatal and postnatal clinics. The Lutheran Church operates a home for unwed mothers.

It has been difficult to interpret needs for services for the health surveillance of preschool children. The well child, generally, is not being supervised although public health nurses organize and participate in immunization clinics. Biologicals are provided by the State Health Department. Some schools require preschool entrance examinations but some do not. The relatively recent Head Start Programs are looked upon as being very successful in filling this gap. This program utilizes part-time nurses and pays for corrective treatment for defects when families cannot afford such care.

The critical need throughout the State for more and widely extended services for the protection and supervision of the health of mothers and young children is a major concern of health authorities.

School Nursing Services

School nursing services in South Dakota are available in 40 of the 67 counties. (See figure 5.) Boards of education hire school nurses in some areas. Some of the positions for school nurses are funded under the Elementary and Secondary Education Act, which provides for school health services. County public health nurses provide school health services in 26 counties. In addition, public health nursing personnel of Indian Health Service render school nursing services in some of the nine reservation counties. The Indian Health Service also provides school health services for two boarding schools for Indians—one located at Pierre and one at Flandreau.

Crippled Children's Services

The State's crippled children's program includes clinic diagnostic and treatment services, hospital inpatient care, convalescent home care, services by physicians on a fee-for-service basis, case finding, and follow up. Crippled children clinics are held annually. They are cosponsored by the State Health Department and the South Dakota Elks Association, and are staffed by orthopedists, pediatricians, speech and hearing technicians, brace and appliance technicians, and public health nurses. The program includes children

handicapped by congenital heart conditions. Crippled children on Indian reservations are also included in this program.

Heart Disease Control

The heart disease program includes maintenance of a rheumatic fever register and distribution of penicillin to indigent patients. Public health nurses offer supervision and consultation services for referred cases. The South Dakota Heart Association emphasizes primary prevention and health education activities and supports educational activities in heart disease for physicians and nurses.

Other Supporting Services

To provide basic supporting services for all health programs and to assure a safe environment for the State's citizens, the State Health Department carries out varied educational, inspectional, licensing, and enforcement activities, as well as epidemiological and diagnostic laboratory services. A major part of these activities concerns the food and water supply and the detection and prevention of health hazards within the environment.

There are few other health services in South Dakota. A visiting nurse agency has recently been formed to give bedside nursing care in Sioux Falls. Also, an association of homemakers operates in this city. Occupational health services are maintained by the Morrell meat packing industry in Sioux Falls and the Homestake Mine. Industrial development may create demands for health personnel in the future, but none is imminent.

South Dakota's major health service requirements are: To make all services available to the total population; to make critical services more accessible; and to develop and upgrade services to keep pace with technological advances and modern concepts of care. A priority need exists for additional health manpower to extend services and to more adequately staff existing services. Health planners urge that new approaches be tried to broaden health protection and care systems. Coordinated regional programs of State and interstate areas, where feasible, should be considered. New ventures in the use of personnel are recommended for the most effective staffing and use of manpower:

Chapter 5

Health Expenditures in South Dakota

Rising Expenditures and Costs

Today's improved techniques, facilities, and services for providing health care are expensive. Consumer and public outlays for all types of health services have been steadily increasing. In fact, the country's total health expenditures in 1965 were \$40.8 billion, as opposed to \$12.9 billion in 1950. As part of the gross national product, these expenditures increased from 4.5 to 6.0 percent from 1950 to 1965 (1, pp. 3-13). When adjustments are made for changes in the cost of living, statistics show that per capita health expenditures rose from \$84.49 in 1950 to \$209.40 in 1965, an increase of 89 percent. Consumer prices in 1965 averaged 10 percent above the 1957-59 level; medical care costs averaged 22 percent higher (2, pp. 19 and 14).

Hospital Costs

The biggest increase in medical care costs occurred in hospital room rates. For example, for all types of hospitals in the Nation, which today provide the largest portion of health care, the average expenses per patient day increased \$10.55 or 71.5 percent between 1958 and 1965. (See table 25.) South Dakota, during this period, had a comparable increase of \$9.21 or 62.8 percent. Average hospital expenses per patient day vary by type of hospital. The nonprofit voluntary short-term hospital has the highest expense, which had risen to \$35.51 in South Dakota in 1965. Definite contrasts were evidenced for other types of hospitals in the State.

Two trends account for the rise in hospital expenses per day: (1) the extension in range and volume of services provided; and (2) increased payroll expenses. Expansion of services has required more auxiliary workers and more highly skilled professional employees for medical, paramedical, and specialized services. A substitution of cash payments for fringe benefits, reduction in the work week, and the inability of hospitals to match rising costs with increased

productivity also contribute to increasing payroll expenses.

The cost of manpower for staffing services is the largest expenditure of hospitals. In 1965, payroll expenses in 61 of South Dakota's hospitals amounted to over \$27 million, or 64 percent of total expenses. The extension of minimum wage regulations covering certain types of hospital personnel and the continuing upward adjustment in hospital pay scales are expected to increase such costs.

Costs of Public Programs

Expenditures of official governments for health services have also increased. Costs of maintaining, improving, and expanding public health and preventive services, costs for care of the medically indigent, and costs for providing traditional hospital services have required increased outlays of public funds. For the Nation, public expenditures of close to \$10 billion in 1965 for health represented 22.5 percent of total health expenditures, and had almost tripled since 1950. In fact, these expenditures rose over \$2.5 billion or 43 percent between 1960 and 1964 (2, p. 136).

Table 25.—Increases in average hospital expense per patient day, by type of hospital; United States and South Dakota; 1958-65

Type of hospital	Expense 1965	Increase over 1958	
		Amount	Percent
United States—all hospitals	\$ 25.29	\$ 10.55	71.5
South Dakota—all hospitals	23.87	9.21	62.8
Federal	30.11	11.27	43.7
Psychiatric	5.81	2.59	44.6
Other long-term	17.23	5.52	47.1
Short-term general:			
Voluntary	35.51	13.39	60.5
State and local government	31.85	15.44	48.5

Source: Appendix table D-1.

For fiscal year 1964 (July 1, 1963 to June 30, 1964), the expenditures of the South Dakota State Department of Health amounted to \$1,123,610, an increase of 17.9 percent over 1960. (See table 26.) Expenditures by type of service have fluctuated.

Table 26.—Increases in total expenditures and for three areas of greatest expenditure, South Dakota State Department of Health, 1960–64

Service area of expenditure	Expenditure FY 1964	Increase over 1960	
		Amount	Percent
All expenditures of Department	\$1,123,610	\$168,479	17.9
Local public health nursing	148,489	68,496	4.8
Environmental sanitation	146,171	18,313	-4.2
Hospitalization of crippled and handicapped children	120,145	28,014	30.4

Source: Appendix table D-8.

Over that 5-year period, an increasing proportion of the health dollar was spent for local public health nursing services, which in 1964 exceeded expenditures for environmental sanitation services for the first time. Tuberculosis and communicable disease control, maternal and child health, and mental health services have taken an increasingly larger share of public funds. The Department's budget and expenditure records reflect changing health needs, changing program emphasis, and the changing levels of support of Federal programs.

Financing Health Care

Health care is financed through a variety of sources, including out-of-pocket payments, insurance, and prepayment plans, as well as public funds. Private and public health protection insurance plans for which employers pay all or part of the costs are a widely accepted fringe benefit. Gaps in income and health care protection coverage and an inability to meet the high costs of health care are met by philanthropy and public assistance programs.

Health Insurance

Health insurance arrangements are increasingly helping individuals to meet the high costs of health care. At the end of 1964, 151 million or about 79

percent of the Nation's people were protected in whole or in part for hospital expenses by some type of health insurance, as compared with 108 million in 1955. Almost half, 48.7 percent, were covered by plans sponsored by private insurance companies, over 33 percent by Blue Cross and Blue Shield plans, and about 4 percent by various types of independent plans. It is estimated that in 1950 about 35 percent of consumer expenditures for hospital care were covered by insurance payments, as compared with 71.2 percent in 1965. The amount of benefit expenditure varies by type of plan and area of residence of the insured (3, pp. 15-17).

The pattern of insurance coverage of hospital expenses for South Dakota's people differed from that of the Nation as a whole, but conformed in many respects to that of the bordering States and Kansas and Missouri (3, pp. 15 and 16). All the bordering States—North Dakota, Iowa, Minnesota, Montana, Nebraska, and Wyoming—had higher coverage by insurance companies than the national average, with South Dakota having the second highest. However, only 9 percent of South Dakota's residents were protected by Blue Cross and Blue Shield plans, one of the lowest rates of coverage by that plan in the Nation. Although the bordering States' residents had two or three times more coverage of this type, they did not reach the national average. Independent plans were most frequently utilized in South Dakota and Wyoming, but all seven States were below the national average for this type.

About 70 percent of South Dakota's people were protected by hospital insurance, a percentage lower than that of all the bordering States except Montana. The difference ranged from -2.5 to +14.3 percent, with Minnesota, North Dakota, and Iowa exceeding the national average of 79 percent. Like the Nation and her bordering States, South Dakota had decreasing numbers of people covered by other types of insurance. In 1964, 66.6 percent had surgical and 47.3 percent had regular medical coverage, as opposed to 70.2 percent with hospital protection.

Though the characteristics of the population of South Dakota covered by health insurance are not known, a 1962-63 survey by the Public Health Service (4) showed that middle and higher income groups had more health insurance protection than did lower income groups and white people had more than non-white. Farm laborers were among the least protected, whereas persons living in cities were insured to a greater degree than those in rural areas.

Health Insurance for the Aged (Medicare)

The newest health insurance plan, popularly known as medicare, protects the Nation's aged, who as a group tend to have more illness and inadequate income or insurance coverage for health care. Beginning July 1966, nearly 19 million persons 65 years of age and over were eligible for benefits under medicare's basic plan. Also, by that date an estimated 17.6 million persons or 93 percent had enrolled for supplementary medical insurance (5, pp. 21 and 23).

In 1964, South Dakota had approximately 72,000 persons 65 years of age or over. About 65,000 residents received income benefits for the aged (including beneficiaries 62 to 65 years of age) under social security. On July 1, 1966, when hospital benefits under medicare were initiated, 67,000 persons aged 65 and over were enrolled under the basic plan, and about 63,000 persons had applied for supplementary medical insurance. As of January 1, 1967, 78,300 persons were enrolled in medicare's hospital insurance program. Levels of expenditure for this program for individual States are not yet available.

Public Assistance Programs for the Medically Indigent (Medicaid)

In 1965, there were 9,258 medically indigent aged in South Dakota receiving medical care under the Medical Assistance to the Aged (Kerr-Mills) and Old Age Assistance Programs. Expenditures for all types of care rendered totaled over \$2 million. Parts of this financial burden are now borne by medicare. The State Welfare Department has also elected to pay the \$3 monthly insurance premium for supplemental medical plan coverage for persons who are on public assistance and are unable to pay these costs.

Public assistance programs are being gradually extended to protect that one-fifth of the population of the Nation who cannot afford health care. About 2,000 disabled workers, 2,000 widowed mothers, and 10,000 children were social security beneficiaries in South Dakota in 1964. This group, like the aged, potentially have little health care protection. To their number can be added recipients of public assistance programs such as General Assistance, Aid to the Blind, and Aid to Dependent Children, the unemployed, and members of families with poverty incomes.

In July 1967, South Dakota adopted medicaid (title XIX of the Social Security Act) to merge and extend medical assistance benefits for more comprehensive health care for an estimated 24,000 residents. Included are the medically indigent adults, aged, blind,

disabled persons, dependent children and their parents who would qualify as recipients of public assistance.

For example, the basic needs formula for a mother and three children in South Dakota is \$2,184 a year, including \$1,104 for food, clothing, and personal items, and \$1,080 for shelter. The State has a lien provision and real property limitation for eligibility for assistance. Liquid assets on personal and household effects may not exceed \$500 for a single person or \$1,000 for a couple. The limitation on real estate is a home valued at \$6,000.

Medicaid expenditures for the first year are expected to approximate \$8,767,000; 73 percent of the cost will be borne by the Federal Government.

Federal Grants-in-Aid for Health Services

Federal grants-in-aid to which States and local communities contribute a share supplement the State's financial resources for providing health services. They enable States to improve and expand facilities and services, develop manpower, and conduct research and demonstration projects. Grants-in-aid are a growing proportion of health expenditures primarily because of new legislation and programs. In 1965, Federal grants-in-aid for health services alone totaled \$381,216,000. South Dakota's allocation was \$2,389,000.

In general, grants tend to vary inversely with personal income, the lowest income States receiving the highest grant per capita. Grants per capita for the United States averaged \$2.02 in 1964. South Dakota ranked 10th among the States, with \$3.37 per capita. For the bordering States, only North Dakota ranked higher, or fifth, at \$4.63 per capita. Yet South Dakota's expenditures for health and hospitals averaged \$13.49 per capita in 1965—the lowest of any State. The U.S. average was \$27.66. The ability of South Dakota to match Federal grants-in-aid funds for increasing expenditures is limited. A high property tax is the chief source of State and local revenue. More Federal support is available than is utilized, although the situation is changing. In 1966, enabling legislation removed the ceiling on the amount of Federal funds that could be expended by the State Department of Health.

Federal Support for Indian Health Services

In 1965, there were 490,000 Indians residing in 23 Federal Indian Reservation States. Of these, 70 percent or 337,000 were potential beneficiaries of health care under the Indian Health Service programs. Eligibility varied considerably from State to State, as did the population. Five States—Arizona, Oklahoma,

New Mexico, California, and North Carolina—had 303,000 or 60 percent of this population. South Dakota ranked sixth with 27,400 or 5.5 percent of the total; its bordering States had smaller percentages of the Indian population. Eligibility of Indians for health care ranged from 99.8 percent of Oklahoma's 64,700 Indians to 6.0 percent of California's 43,000. South Dakota ranked fourth among the States in eligibility, with 23,500 potential beneficiaries, or 86 percent of its Indian population.

An estimated 4,000 to 5,000 Indians live off the reservations in South Dakota. They are located primarily in the Rapid City area but also dwell in the Yankton, Aberdeen, and Sioux Falls areas. Indians moving off the reservations are provided with hospitalization and medical services by the Division of Indian Health for 1 year from the day they leave the reservation. Through contract arrangements, services are provided in community health facilities. After 1 year, communities are responsible for providing health care for medically indigent Indians through existing social welfare programs, although some areas still

consider off-reservation Indians wards of the Federal Government.

A special survey conducted in 1966¹ revealed that only Indians residing in the Rapid City area had difficulty in securing and paying for health care because of the Indians' lack of knowledge of resources and existing interpretations of responsibility and eligibility. The Indian Health Service has subsequently extended services to this area through the establishment of a special clinic.

The ever-increasing ability to finance care for all persons in need of health services creates new demands for services and health manpower. The economics of health care are important considerations in planning. The relative importance given to the population's health needs, influenced by the means provided for financing health care, is reflected in an area's expenditures for various types of services.

¹ Joint Report by the Division of Indian Health and the Bureau of Indian Affairs for the Senate Committee on Appropriations Concerning Health, Education, and Welfare Resources for Indians in Off-Reservation Communities, unpublished, 1966.

Chapter 6

Utilization of Health Facilities and Services

Many variables contribute to the utilization of health facilities and services. For example, patterns of illness create demands for patient care in health facilities. Demographic trends in the characteristics of the population indicate the amount of health care that people seek. Demands for health services and their use are interrelated with their availability. Both geographic and financial accessibility affect utilization of health facilities and services. Also, the utilization of health resources is correlated with the level of an individual's educational achievement, the more highly educated using more health resources than the individual with less education.

There are serious gaps in information essential to planning for manpower in relation to health care requirements and the utilization of services. There is also a great need for developing methods and data collection systems for State, regional, and national planning that would relate service utilization with definitive, coordinated, and comparable data on the following: Needs for all types of services, availability of services, extent of coverage of the population, and gaps in service.

Physician Visits

Data from the National Health Survey give some indication of the usage of medical care (1, pp. 1-5). It has been estimated that for the Nation during the period June 1963 through July 1964 the number of visits to a physician averaged 4.5 per person. That number declined proportionately by place of residence, from metropolitan area to nonfarm to farm dwellers. In general, the number of visits averaged slightly higher as family income rose and the educational attainment of the head of the family increased. Physician visits averaged lower for nonwhite than for white persons with equal family income and educational levels. It is interesting to note that the definition for "physician visits," as used in the National Health Survey, included telephone consultation provided by the physician, nurse, or other personnel working under

a physician's supervision. In South Dakota, most referrals to the health services are believed to be made by physicians.

Hospitals

Admissions

The advancement of scientific medicine and growing demands for health care have increased hospital use in general. These influences are evidenced in the steady rise in the total number of hospital admissions and the ratio of admissions to population during the past 15 years. South Dakota, over these years, has had higher ratios of admissions to population than the Nation as a whole has had. This reflects the consistently higher rates of hospital admissions for States in that area of the country. Admissions to South Dakota's hospitals rose 27.7 percent between 1950 and 1960 and another 1.7 percent by 1965. There were 31 more admissions for every 1,000 residents in 1960 than in 1950 and an additional 2.8 admissions by 1965. (See table 27.)

Admissions to different types of hospitals reflect the patterns of medical practice, the changing methods in the delivery of health care, and the changing health care system. These factors influence requirements for health personnel. About 91 percent of the hospital

Table 27.—Number and rate of total hospital admissions per 1,000 population; United States and South Dakota; 1950, 1960, and 1965

Year	United States		South Dakota	
	Number (thousands)	Rate	Number (thousands)	Rate
1950	17,000	122.2	94	144.5
1960	25,000	139.1	120	176.2
1965	28,000	148.7	122	179.0

Source: Computed on the basis of data appearing in Part II of the annual *Hospitals, Guide Issue* of the American Hospital Association, and earlier data appearing in the *Journal of the American Medical Association*.

Table 28.—Number and rate of hospital admissions with a psychiatric diagnosis; South Dakota; 1964 and projected for 1970

Type of service	Admissions		Rate per 1,000 population (1964)
	1964	Estimated 1970	
Total	4,370	4,597	6.12
Yankton State Hospital	1,530	1,609	2.18
Alcoholic treatment program	694	731	0.99
General hospitals ¹	2,146	2,257	3.05

¹ Based on reports of 33 of 68 general hospitals.

Sources: State Department of Health, Mental Health Section. *The South Dakota Report on Mental Health Planning*. Pierre, South Dakota, July 1, 1965.

Appendix table E-4.

admissions in the Nation are to the non-Federal short-term general hospital. The admission rate to this type of hospital rose from 110.5 per 1,000 population in 1950 to 137.9 in 1965. Over 118,000 persons were admitted to South Dakota's non-Federal short-term general hospitals in 1965, a rate of 169 per 1,000 population or about one out of every six of the State's residents.¹ Admissions that year were below the 1963 and 1964 levels, although they had increased 5 percent between 1960 and 1965. The number of Federal short-term general hospitals in the State may account for the fact that only about 86 percent of all admissions were to the non-Federal short-term general hospitals in 1965.

In 1964, out of every 1,000 of South Dakota's citizens, 175 were admitted to short-term general and special hospitals combined.² The admission rate for mental hospitals was 3.3 and for tuberculosis hospitals 0.5 per 1,000 population. Admissions to South Dakota's short-term general and special hospitals exceeded the U.S. average by 30 per 1,000 population, but for mental and tuberculosis hospitals the difference was less than 1 per 1,000 population.

The South Dakota Coordinating Committee for Mental Health Planning has furnished more precise data, as shown in table 28, on those hospital admissions with a psychiatric diagnosis for the calendar year 1964, and has projected admissions for 1970 (2, pp. 66 and 67).

More patients were admitted to general hospitals in 1964 for psychiatric services than were admitted to the State mental hospital, as shown in table 28. Information on 1,709 of these patients showed that half had an average hospital stay of from 1 to 10 days;

¹ See appendix table E-1.

² See appendix table E-2.

only 59 had a stay exceeding 30 days. Sixty-five percent had not had a previous psychiatric diagnosis. Of 1,591 patients, 98 were known to have been transferred to the State hospital. The trend toward intensive therapy and the inclusion of psychiatric services in general hospitals increases the need for nurse clinicians. Auxiliary nursing personnel on psychiatric services in general hospitals also require special training and skills for the care of these patients.

Patient Days

South Dakota's admission rates to short-term general and special hospitals, higher than the Nation's rates, are reflected in more patient days per 1,000 population, as shown in table 29.

In the Nation, about 50 percent of all hospital beds are in mental hospitals. South Dakota's equivalent proportion was 44.6 percent in 1964, and the State's admission rate to mental hospitals was slightly higher than the national average. However, the rate of patient days was lower, which indicates shorter periods of hospitalization. The degree of movement toward community-based mental health programs, assimilation of new methods of treatment, and transfer of geriatric cases to extended care facilities could

Table 29.—Number of patient days per 1,000 population, by type of hospital; United States and South Dakota; 1964

Type of hospital	United States	South Dakota
Short-term general and special	1,327.1	1,434.5
Mental	1,325.7	1,176.7
Tuberculosis	57.3	41.7

Source: Appendix table E-5.

account for the difference in the rate of patient days. Influencing South Dakota's low rate of patient days in tuberculosis hospitals in 1964 (table 29) were the rapidly changing patterns of care for tuberculosis cases and the low incidence of the disease.

In 1964, South Dakota ranked 15th among all States in its rate of patient days in short-term general and special hospitals. For mental hospitals, the rank was 23d; for tuberculosis hospitals, 32d.

Average Daily Census

The average daily census, which depends upon admissions and average length of stay, is probably the best measure of hospital utilization. The average daily patient census for all hospitals in South Dakota has decreased since 1960.³ In that year it averaged 6,215 patients, dropped to 5,095 in 1964 and to 4,791 in 1966. A decrease in the average daily patient census in mental hospitals appears to have influenced this decline. The average daily patient census in short-term general and special hospitals has remained constant, at close to 2,000 patients from 1960 to 1966. For mental hospitals, a decrease of 1,200 in the average daily patient census is noted. A slight decrease is also recorded between 1964 and 1966 for Federal hospitals that have short-term and long-term as well as psychiatric inpatient services.

Occupancy

Another indicator of hospital use—and one which particularly influences staffing and the judicious use of health manpower—is the level of occupancy. The overall occupancy rates in South Dakota's hospitals have been below those for the Nation in general.⁴ Psychiatric hospitals, long-term general hospitals, and other special hospitals have tended to maintain almost full occupancy. Occupancy rates in short-term general hospitals since 1960 have ranged from 63 to slightly over 68 percent, rates 8 to 10 percent below the U.S. average for this type of hospital. Increases in the number of available beds and periods of low occupancy in the small rural hospitals influence these rates. Rural facilities particularly have experienced problems of staffing related to their low and peak needs for nursing care.

Outpatient Department

There is a trend toward the increased use of hospital outpatient departments and emergency rooms, but only limited comprehensive data are available on

their utilization. For South Dakota, some data are available for specialized types of programs and services.

Transportation is a major problem to Indians needing health services. Yet in 1965, there were 77,166 outpatient visits to the clinics in the six hospitals of the Indian Health Service (3, pp. 2 and 34). This represented an average of 3.2 visits for every Indian eligible for service. In addition, 3,654 visits were made to the health center at McLaughlin, and 1,524 patients were seen by physicians in the school health centers at Pierre and Flandreau. Visits to clinics of the Indian Health Service on all reservations are estimated to be increasing on the average of 5 percent per year.

The State's six mental health outpatient centers have provided the most complete data on the utilization of outpatient services (2, pp. 50-59). In 1964, the number of patients admitted for treatment was 4,223, an estimated rate of 601 per 100,000 population. In 1965, there were 4,171 patients admitted to service. The forecast for 1970 is 4,442. Data have been tabulated by sex, race, age, county of residence, region of the State, and diagnostic classification. Without similar data from all agencies offering outpatient services, it is difficult to assess the extent to which outpatient services are utilized and needed.

Public Health Services

Crippled Children's Services

In 1964, State programs for crippled children served over 400,000 children in the Nation (4, p. S-86). In 1964—the last year for which statistics are available—2,320 children in South Dakota received clinic service, hospital inpatient care, convalescent home care, and physician services for handicapping conditions (5, p. S-56). The number of children served was the highest in 6 years (6, p. 18), as shown:

1959	1,887
1960	1,908
1961	2,141
1962	1,939
1963	1,663
1964	2,320

South Dakota's crippled children received services at the rate of 7.5 per 1,000 children under 21 years of age, compared with the national average of 5.1. Reports of the State Health Department point to the fact that additional appropriations and nursing staff are required for this program, to provide for

³ See appendix table E-6.

⁴ See appendix table E-9.

closer supervision of cases and to expand the program to include children with additional handicapping conditions.

Maternal and Child Health Services

Under the State and local public health maternal and child health program, in 1964 in South Dakota, about 11 children per 1,000 live births received well-child conference services, as compared with the U.S. average of 144. In that year, 170 infants and 306 children over 1 year of age received examinations, conferences with parents, referrals, and related services. However, a total of 4,403 infants and other children received child health nursing services. South Dakota ranked 46th among the States in the rate of well-child conference services.⁵ Two of the bordering States—North Dakota and Wyoming—did not offer these services, and the other neighbor States fell below the U.S. average. Like 17 other States, including five of its neighbors, South Dakota had no maternity medical clinic services, but 233 mothers received public health nursing services. Lack of funds, of public health nursing personnel, and of physician services retards the expansion and extension of these services.

Other Public Health Services

Little detailed information is available that is indicative of the utilization of other public health services. Reports of the activities of public health nurses enumerate the number of persons receiving specific services.⁶ Although these data are meaningless in relation to the needs for services, they do show the relative emphasis given to various types of services where generalized public health nursing services were available.

For 1965 in South Dakota, 12,288 persons were admitted to public health nursing services. Forty-two percent were children 5 to 17 years of age admitted for school hygiene services. Infant and preschool admissions totaled 1,624 or 13 percent. Crippled children and the mentally retarded, most of whom were children or young adults, accounted for 1,148 admissions or 9 percent. Persons admitted for nursing services related to the communicable diseases, tuberculosis, and venereal diseases numbered 1,916 or slightly over 15 percent. The remaining 20 percent were admitted for services under the cardiac, cancer, mental health, and alcoholism programs. Only 650 persons admitted were 65 years of age or over. However, data now becoming available reflect the demands for home health services

created by medicare and the extension of public health nursing services to the aged.

Utilization of Health Services Under Medicare Program

Before July 1, 1966, when hospital benefits under medicare became effective, about 25 percent of all hospital days were utilized by persons 65 years of age and over. One year later the program had resulted in a 5 percent rise in overall patient days in hospitals. The average hospitalization of medicare beneficiaries during the year amounted to 17 days.

Between July 1, 1966, and June 30, 1967, there were 5,000,000 admissions to more than 6,800 certified hospitals in the United States, or about 263 admissions to short-term and long-term hospitals for every 1,000 aged persons enrolled under the program. Distribution by States of the hospital admissions per 1,000 enrollees showed considerable variation, ranging from a low of 196 in three eastern States to 398 in North Dakota. South Dakota ranked third among the States, with an admission rate of 358 per 1,000 enrollees. There were 28,000 hospital admissions of medicare beneficiaries in South Dakota in the first year of operation of the program. In the Nation, one out of every 12 hospital admissions was later admitted to an extended care facility. In South Dakota, however, utilization of extended care facilities by persons enrolled under medicare was the second lowest among all the States for the period January 1 through June 30, 1967. There were only 300 admissions to extended care facilities, a rate of 3.8 per 1,000 potential beneficiaries, as compared with the U.S. rate of 10.6 per 1,000 enrollees.

A major factor in this rate of admission in South Dakota is the availability of certified beds. In the first 6 months of operation of this portion of the program, only three out of each 1,000 beds in extended care facilities were certified (7, p. 2). To overcome the obstacles to certification and particularly to supply adequately qualified health manpower for compliance with the conditions of participation in the program will require the special attention of health planners.

A higher proportion of South Dakota's aged enrolled under both the hospital and medical insurance programs of medicare benefited by home health services. The number of enrollees for whom home health care services were started in the first 6 months of 1967 numbered 900, a rate of 11.5 per 1,000 enrollees, as compared with the U.S. rate of 12.2. South Dakota's rate of "home health starts of care" was well above

⁵ See appendix table E-10.

⁶ See appendix table E-11.

that of four of its bordering States, was closely approximated by Minnesota, and was exceeded by only Iowa.

Although South Dakota's proportion of persons 65 and older will decrease in the years ahead, the number is expected to increase by 11,000 by 1980. A higher demand for and use of health services by the aged can be expected. Therefore, development of additional health manpower resources is of crucial importance in extending the health care provision of medicare to all of South Dakota's elderly citizens.

Trends in medical and health care indicate that available services and their utilization will continue to increase as the population grows, as economic barriers to care are further reduced, and as a more knowledgeable public continues to demand more health care. Further, as planning for comprehensive health services overcomes the deficiencies of the health services and integrates the advances of modern technology into improved and coordinated services, greater needs and demands for various and new types of health manpower will be created.

Chapter 7

Manpower for Health Services

The availability and utilization of health services depend, in large measure, upon personnel for staffing and providing those services. In 1966, an estimated 2.8 million workers in the Nation were employed in health occupations (1, p. 15). Because of technological advances, new and expanded health services, and insufficient increases in professional personnel to keep pace with these changes, a variety of allied, paramedical, and auxiliary health service occupations have been created. They support and supplement the service of professionals. Yet, despite phenomenal increases in health manpower in recent years, not enough health personnel are becoming available to provide modern and optimum health care for all. When long-range trends are considered, a need for 3.7 million health workers by 1975 has been projected.

Physician Manpower

The need for physicians in the United States is most critical. The ratio of physicians to population has changed very little since 1950 but is lower than in 1900. Along with expanding requirements for physicians' services and the trend toward specialization in medical practice, the number of physicians in general practice has decreased. Foreign-trained physicians entering the United States have helped to provide needed services.

Trends in the supply of physicians in South Dakota show a decline in the number practicing. The State had 64 fewer doctors of medicine and osteopathy practicing in 1966 than in 1962. There were 545 practicing physicians in late 1966, a ratio of 78 per 100,000 population,¹ as compared with the U.S. ratio of 153. South Dakota's ratio was lower than that of all the bordering States. In South Dakota, as in the Nation, 60 percent of the physicians were in specialty practice and 40 percent were in general practice. An analysis of the location of health personnel in relation to population in 1962 showed wide variation in their geographic distribution (2, p. 36). South Dakota's

¹ See appendix table F-1.

physicians and registered nurses had a similar distribution pattern. Rural areas tended to have the fewest physicians and nurses per 100,000 population; metropolitan areas, the most, as shown in table 30.

Figure 6 shows the number of licensed and practicing physicians per county in South Dakota in 1962 and in 1966.

It was estimated that in 1960, in South Dakota, 40,000 persons—or 6 percent of its population—lived more than 15 miles from a physician (3, pp. 63 and 70-72). Forty towns had no physician and 39 towns had one physician each. Twenty of those towns with no physician were within a 20-mile radius of a hospital; the remaining towns were more than 20 miles from a hospital. All of these towns had a small or declining population. It is unlikely that they could attract or hold a physician. However, 21 of the towns were seeking physicians. Forty percent of the physicians in one-physician towns were educated in foreign countries. Most were general practitioners. Rural areas had the most acute need for physicians and depended particularly upon the foreign-educated physicians for

Table 30.—Number of physicians and nurses per 100,000 population, by urban-rural status of counties; South Dakota; 1962

Area	Physicians		Active R.N.'s
	M.D.	D. O.	
Total	82.1	6.6	287.9
Lesser metropolitan ¹	126.5	5.6	471.4
Adjacent to metropolitan ²	40.3	1.3	175.5
Isolated semirural ³	98.7	7.4	339.3
Isolated rural ⁴	50.2	4.3	164.3

¹ Counties with population of 50,000 to 1,000,000.

² Counties contiguous to greater or lesser metropolitan areas.

³ Counties with at least one incorporated place of 2,500 or more persons.

⁴ Counties containing no incorporated place of 2,500 or more.

Source: U. S. Dept. of Health, Education, and Welfare. *Health Manpower Source Book. Section 19, Location of Manpower in 8 Occupations.* Public Health Service Pub. 263, p. 36. 1965.

providing needed services. The South Dakota Medical Society reports that most foreign physicians in the State were Spanish, German, English, or Filipino.

According to estimates in 1966, South Dakota needed 123 general practitioners alone for family practice and personal care services (3, p. 35). The State has a 2-year medical school and students must transfer to another State to complete their education. Only a low proportion of these students return to South Dakota to practice (3, p. 90).

Group practice is seen as a mechanism for extending physician services, and there is a trend in South Dakota in this direction. The State Medical Society reported that in 1966 about one-quarter of the practicing physicians were in partnership with one other physician, and another quarter had group practice arrangements. Group practice clinics tended to be small. The availability of physicians and the characteristics of their practice affect the distribution of health services, the need for other health manpower for staffing services, and the utilization of various categories of available personnel in the delivery of services.

It is interesting to note that South Dakota ranked sixth among the States in 1965 in its number of chiropractors in relation to population. There were 134 chiropractors practicing in the State, a ratio of 18.8 per 100,000 population as compared with the U.S. ratio of 12.3 (4, p. 36). Chiropractors are not trained in South Dakota; the nearest schools are in Iowa, Minnesota, and Illinois.

No composite estimates are available as to the total number and types of personnel employed by the health services in South Dakota. Data from many sources, however, give some indication of the number of health personnel in various categories, trends in health manpower occupational composition, and requirements for additional personnel. The proportion and types of health workers in a State vary with the availability and kind of facilities and services in the State and the approaches to health care.

Manpower in Hospitals and Other Institutions

Hospitals in the Nation in 1960 employed two-thirds of all workers in the health field. This proportion is expected to reach three-fourths in 1970 (5, p. 7). Those South Dakota hospitals participating in the 1966 Survey of Manpower Resources in Hospitals employed an estimated 7,188 persons in 1966 (6, p. 41). Of these, 62 percent or 4,452 were pro-

fessional and technical personnel and their assistants; 2,736 worked in administrative and supportive service jobs. An immediate additional need for 424 professional and technical personnel and assistants was reported. The five most urgent needs, in order of priority, were for: Registered nurses; licensed practical nurses; aides, orderlies, and attendants combined; medical technologists; and radiological technologists. (6, p. 67).

Hospitals reported priority needs for medical and radiological technologists; also, offices, clinics, and laboratories employ and may need more of these technologists. It appeared that these types of personnel may be easier to procure than are other types of health manpower. Although few programs are as yet offered in South Dakota's colleges, universities, and schools for training in most health professional and technical fields, in the academic year 1964-65 the State had seven accredited schools for medical technologists and six approved schools for X-ray technologists (4, pp. 41, 42, 136, and 137). In that year the medical technology schools enrolled 41 students and graduated 26; the X-ray technology schools enrolled 39 students and graduated 21. An estimated 168 medical technologists and 85 radiological technologists were employed in South Dakota's hospitals in 1966. Reporting hospitals saw a need for nine additional medical technologists and eight radiological technologists. However, the places of employment attracting these technologists following graduation, their distribution throughout the State, and their rate of turnover in the health services are not known.

For diagnostic services, 30 laboratory assistants were employed in hospitals and five more were needed. The State had an approved school for certified laboratory assistants, which had two students in 1966. For other diagnostic services, hospitals employed four cytotechnologists, 19 electrocardiographic technicians, and four electroencephalographic technicians. Total need for these personnel was reported as four more. No formal training courses for these personnel existed in the State.

Nine of South Dakota's larger hospitals had services for radioactive isotope and/or radium therapy. Eleven physicians were board-certified radiologists. The use of specialized technical and auxiliary personnel for rendering these services was emerging. Hospitals reported they employed, in 1966, two radiation therapy technologists and four assistants. Assistants for inhalation therapy were also being developed. Memorial Hospital, in Watertown, trains

inhalation therapists. Eighteen were employed in hospitals in 1966, and another eighteen were reported as being needed.

Professional personnel and their assistants for other therapeutic services were in short supply. Employed in health fields in 1965 were: 29 dietitians, 27 physical therapists, 18 occupational therapists, and 26 speech pathologists.² Most physical and occupational therapists were believed to be working in hospitals. In 26 hospitals there were employed 25 physical therapy assistants and 8 occupational therapy assistants. No schools in the State offered training programs at the professional level in any of these fields. Assistants to physical and occupational therapists are believed to be trained through inservice programs in hospitals and health agencies. The expanding staff requirements of nursing homes and agencies rendering home health services to meet standards established under medicare have accentuated shortages in these professions. To provide for progressive patient care and rehabilitative services that will restore patients to a maximum level of self-reliance, considerable increases in the present supply will be needed. Estimates of needs are available only for hospitals; they reported a need in 1966 for six additional occupational therapists, 14 physical therapists, and one speech pathologist.

The growing importance of nursing homes in the health care system has pointed up an additional manpower need in South Dakota. Nursing homes report that they are particularly affected by the shortage and distribution of pharmacists in the State. In 1965, in South Dakota, there were only 69 pharmacists per 100,000 population as compared with the U.S. ratio of 605, although the State does have a school of pharmacy (4, pp. 124-126).³ Without the part-time or consultative services of a pharmacist, nursing homes may not dispense drugs from stock supplies. One nursing home reported that administering medications was unduly time-consuming, since 100 to 200 individual prescription bottles had to be used, checked, and verified several times daily.

The supply of other health professionals in South Dakota was also limited. In 1964, there were 44 dentists per 100,000 population, compared with the U.S. ratio of 52. Optometrists were 13 per 100,000 population, compared with the Nation's ratio of 106. In 1965, three nutritionists were employed in South Dakota. In 1964, 19 psychologists, 10 of whom were

clinical psychologists, were employed in health fields. There were 11 practicing psychiatrists or 2 percent of all physicians, as compared with the U.S. average of 6 percent. Mental health programs alone have revealed pressing needs for psychologists and psychiatrists. To staff mental hospitals, South Dakota allows limited licensure for foreign physicians until they can qualify to take the required examination of the Educational Council for Foreign Medical Graduates.

The South Dakota Hospital Association reported that in 1966 the State had only three educationally prepared hospital administrators. In addition, a need existed for substantial increases in the number of medical record librarians. Securing professionals for South Dakota's health services depends greatly upon recruitment activities and career satisfaction among those now practicing in the State. Most of South Dakota's professionals are trained out of State.

Manpower in Indian Health Program

Statistics are not available on the number and types of professional, technical, and auxiliary health manpower (except nurses) employed and needed for the Indian Health Program. It is known, however, that there is a trend to train and utilize a variety of technicians and assistants to professional personnel for reservation health programs. Included are dental assistants, community health aides, sanitarian aides, and food service supervisors.

Manpower in Public Health Programs

On January 1, 1966, the South Dakota State Department of Health employed 79 persons at the State level for public health work.⁴ Of these, 34 were professional, technical, or auxiliary health personnel. Included were one physician, seven public health nurses, seven engineers, five sanitarians, eight laboratory personnel, one statistician, and five public health investigators. Clerical, administrative, maintenance, and service workers accounted for 45 employees. At that time, no dentist, veterinarian, health educator, nutritionist, social worker, psychologist, X-ray technician, or physical therapist was employed.

Statistics are scant on the number of vacancies and types of manpower required for public health services in South Dakota. Reports of the State Health Department allude to continuing shortages and needs

² See appendix tables F-10 and F-11.

³ See appendix table F-12.

⁴ Report of State Health Department Personnel by Organization Unit as of Jan. 1, 1966, to the Public Health Service, Bureau of State Services, Division of Community Health, August 1966; unpublished data.

for personnel for the expansion of all public health programs. Coverage of communities by local or county health departments and provision of services to meet local needs would require a wide range of manpower for environmental and personal health services. Additional physicians, sanitary engineers, sanitarians, health administrators, nurses, and health educators would be required. Laboratory and X-ray technicians would be needed, as well as physical, occupational, and speech therapists, and many varieties of health aides, such as homemakers, hearing and screening technicians, clinic aides, and other aides for professional personnel.

Securing professionals for the health services in South Dakota depends greatly upon widely based recruitment activities. The State Medical Society, for example, uses the placement service of the American Medical Association, and makes contacts in all States for physicians interested in relocating. The potential capability and future goals of South Dakota's colleges and universities for adding programs for educating health professionals has not been ascertained.

Educational Resources for Health Manpower

There is a trend for more paramedical education to be offered in schools and colleges rather than in hospitals and by health agencies. Programs in South Dakota's vocational education institutions appear destined to become increasingly diversified to train the technical persons needed in future years for the health services.

Under South Dakota's Vocational Education Program, specific vocational-technical courses are offered to high school students, post-high school students, and adults. As preparatory programs are needed for the State's trades and occupations, new courses or programs are offered. The State Department of Vocational Education coordinates activities involving public, private, local, and area programs, and between schools and occupational fields and agencies. Training programs under the Manpower Development and Training Act are included.

Vocational education resources in South Dakota are being expanded to meet the increasing demands for technical skills and knowledge. The area vocational school concept is being implemented through the development of five technical-vocational education centers at Watertown, Sioux Falls, Rapid City, Springfield, and Mitchell. Particular emphasis is being placed on designing and providing specific instruction and

laboratory experience in these centers to meet the demands for personnel in the health disciplines.

One center now offers a 1-year core program for training assistants to professionals in various health disciplines, with specialization the second year for medical assistants. Specialization for dental assistants is being planned, and specialization for surgical aides and inhalation therapists is being considered.

Programs funded under the Manpower Development and Training Act have afforded training opportunities for a variety of personnel in the health services. A 4-year project offers a program of summer workshops for training in food service management in nursing homes. Teachers are provided by South Dakota's universities and colleges, by nursing homes, and by hospitals. In 1965, 54 persons received training. Enrollment was expected to reach 80 in 1967 and 100 in 1968. Workshops for ward clerks were to be offered in 1967. It was planned to hold classes in about 15 locations throughout the State for from eight to 10 students. Standards for licensure for nursing homes was another workshop offering for nursing home personnel. Cost accounting in relation to medicare and inservice education programs for the health services were proposed subjects for future workshops to meet the continuing education needs of health service personnel.

Data available preclude extensive analysis of the utilization of most professional, technical, and auxiliary health personnel. Yet, information is needed on: (1) the extent to which the capabilities of registered nurses and other health personnel are being utilized to replace the skills of physicians; (2) the extent to which a variety of new and emerging paramedical personnel are filling the gaps for health professionals; and (3) the extent to which they may be utilized safely for both patient and practitioner.

Local, State, and regional planning for the health services requires regular data collection on supply, distribution, and capability of all types of personnel. These data are essential for determining appropriate personnel ratios, distribution, and trends in their use for all types of health services. These data need to be periodically analyzed and an assessment made as to the effects on quality of patient care. Additional needs for health manpower and the educational resources required for producing them should be viewed in terms of the economic resources available, the mix of personnel, the responsibilities delegated to each, and the contribution of each to satisfactory health services and patient care.

Chapter 8

Nurse Manpower in South Dakota

More health manpower is engaged in nursing and related services than in any other group of health occupations. In fact, it has been estimated that nearly half of all health jobs are held by nursing personnel, including registered nurses, practical nurses, nursing aides, orderlies, and attendants (1, p. 13). Yet, despite continuing increases in the supply of nursing personnel, many more are needed to meet the growing demands for health services.

Registered Nurses

Registered nurse inventories are compiled by the American Nurses' Association under contract with the Public Health Service and in conjunction with the State Boards of Nursing. Those inventories provide basic data regarding the number and characteristics of the registered nurse supply throughout the Nation. In 1962, the total number of registered nurses residing in South Dakota was 2,836. Of these, 1,977 were active. They were distributed, by county of residence, as shown in figure 7. In 1966, there were 2,907 registered nurses either employed in South Dakota or unemployed and residing in the State. Of these nurses, 2,055 were employed, 804 were not, and 48 did not report their activity status.

Active Nurses

South Dakota's nurse supply, like the Nation's, has been steadily increasing. Between 1950 and 1966, while South Dakota's population increased 6.6 percent, the number of employed registered nurses increased more than 100 percent. Between the 1962 and 1966 inventories, an increase of 4 percent was realized. In 1966, the ratio of active registered nurses per 100,000 population in South Dakota was 303, a rise from 156 in 1949 and from 263 in 1962.¹ Compared with the U.S. ratio of 200 in 1949, the ratios of South Dakota and five of the six bordering States were lower. In 1962, South Dakota's ratio was less than the national ratio of 286, but all six of the bordering

¹ See appendix table G-1.

States had higher ratios than the U.S. ratio. In 1966, South Dakota's ratio was the same as that for the United States, 303, and the ratios of all six bordering States continued to exceed the U.S. ratio.²

More important for planning than the overall State ratio of registered nurses to population are the distribution and availability of nurses throughout the State. Computation of the county and regional distribution of nurses from the inventory data is helpful in developing action programs to meet the specific needs of local areas, in cooperation and conjunction with regional and other areas of the State.

The age level of employed nurses in South Dakota, as in the Nation, has been rising. This may reflect the fact that inactive nurses are returning to work. However, data show South Dakota's nurses to be younger than the average U.S. nurse and younger than the average nurse in most of the bordering States. There, too, nurses are younger than the U.S. average.³ The largest proportion of South Dakota's young nurses work in hospitals and schools of nursing. Office nurses, according to 1966 inventory data,⁴ were relatively younger than nurses employed in school nursing, public health, private duty, and industrial health. The national median age of employed nurses in 1966 was 40.3 years; South Dakota's median was 38.3 years. Table 31 shows the age comparison of employed nurses in the United States and South Dakota in 1962 and 1966 and the change in age distribution.

An increasing number of married nurses are among the supply of active registered nurses. In 1949, 39 percent of the nurses employed in South Dakota were married. In 1962, the proportion had increased to 66 percent, and in 1966 to 71 percent.⁵ The increase is believed to be due chiefly to the number of inactive married nurses who return to work when family responsibilities lessen.

² American Nurses' Association, Research and Statistics Department; unpublished data from the 1966 inventory, April 1968.

³ See appendix table G-2.

⁴ American Nurses' Association, The 1966 Inventory of Registered Nurses, South Dakota; unpublished data.

⁵ See appendix tables G-3 and G-4.

Table 31.—Percent distribution of employed registered nurses, by age group; United States and South Dakota; 1962 and 1966

Age group	United States		South Dakota	
	1962	1966	1962	1966
	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
Total	100.0	100.0	100.0	100.0
Under 30	24.8	25.5	33.2	29.6
30-39	24.5	22.2	25.8	23.7
40-49	22.9	23.5	19.8	23.7
50-59	17.7	17.8	13.0	15.1
60 and over	7.1	7.9	5.8	6.0
Not reported	3.0	3.1	2.4	1.9

Source: The American Nurses' Association. *The Nation's Nurses, The 1962 Inventory of Registered Professional Nurses*. New York, The Association, 1965, p. 27. Also unpublished data from the 1966 Inventory.

Inactive Nurses

A slight decrease since 1962 in the supply of inactive registered nurses is noted for South Dakota. The 804 inactive nurses in 1966 represented 27.7 percent of the licensed registered nurses. In 1962, 858 nurses, or 30.2 percent, were inactive. Throughout the Nation in 1962, about one-third of the nurses were not employed, a ratio of 152 inactive nurses per 100,000 population. South Dakota's comparable ratio in 1962 was 119, and it dropped to 118 in 1966.

Inactive registered nurses who renew their licenses but do not practice are essentially from the younger, married nurse population. Of the 804 inactive registered nurses residing in South Dakota in 1966, about one-quarter were under 30 years of age and one-third were between 30 and 39 years. (See table 32.) Four-fifths were under 50 years of age. In 1966, inactive registered nurses as a group were slightly older than the comparable group in 1962.

Table 32.—Age distribution of inactive registered nurses residing in South Dakota, 1962 and 1966

Age group	1962	1966
	<i>Percent</i>	<i>Percent</i>
Under 30	29.8	24.1
30-39	33.6	34.5
40-49	19.3	21.4
50-59	9.5	10.8
60 and over	4.8	7.7
Not reported	3.0	1.5

Source: American Nurses' Association. *The Nation's Nurses, The 1962 Inventory of Professional Registered Nurses*. New York, The Association, 1965, p. 28. Also unpublished data from the 1966 Inventory.

The proportion of married inactive registered nurses has remained fairly constant. In 1949, 87 percent were married; in 1966, 89 percent.

A survey of South Dakota's inactive registered nurses conducted in February 1967 indicated that most nurses left the labor force because of home and family responsibility (4). Inactive nurses represent the greatest potential for recruitment into active employment. Of 71 nurses who took refresher courses in South Dakota in 1967, 46 (or 65 percent) were employed in December 1967. It is interesting to note that, in the inactive nurse survey of February 1967, 13 nurses reported that there was no hospital or nursing employment in the area where they resided.

Men Nurses

In 1966, 38 of South Dakota's registered nurses were men. They represented 1 percent of the registered nurse supply, a rate that closely approximated the national average. Thirty of these nurses were employed; the remaining eight were inactive in nursing. Twenty-six of the men worked in hospitals, two were employed in schools of nursing, one was employed in public health work, and one in private duty. Eight of these men nurses reported they were instructors, supervisors, and administrators; seven were in general duty staff positions; the remaining fifteen did not report their position levels. Two men specialized in psychiatric nursing. The marital status or educational preparation of these men is not known.

Part-Time Nurses

Another aspect of the registered nurse supply that should be considered is the number of nurses employed part time. A large proportion of the increase in the number of registered nurses employed in hospitals and other health agencies in the past 15 years is due to the growth of part-time nursing. Part-time nurses provide needed services but, in terms of supply, the service provided by two part-time workers equals roughly that of one full-time worker (2).

Although complete State statistics are not available, the 1966 Survey of Manpower Resources in Hospitals revealed that of 1,247 registered nurses employed in hospitals in South Dakota, 366 nurses, or 29.4 percent, worked part time (3, p. 41).⁶ Data from the South Dakota State Department of Health showed that of 193 registered nurses employed by licensed homes for the aged and by nursing homes in December 1966, 42.4 percent were employed part time. Studies have shown that many nurses would

⁶ See appendix table G-52.

not work if part-time work were not available. Although part-time nurses may cause staffing problems in nursing service administration, their contribution to available nursing service is sizable.

Sources of the Nurse Supply

Licenses to practice nursing are issued by every State and the District of Columbia. They are issued on the basis of an examination taken in the State, and States also issue *endorsements of licensure*, which are issued on the basis of credentials of previous licensure in another State or a foreign country. In some instances, endorsement of licensure requires partial examination.

State boards of nursing report annually the number of nurses licensed within the jurisdiction and the method of licensure. These figures are not equivalent to the number of nurses reported for specified years in the nurse inventories. Some nurses maintain licensure in more than one State, some are employed in States in which they are not licensed, and inactive nurses may or may not reside in the State in which they are licensed. However, information regarding the source of a State's nurse supply and the interstate mobility of nurses can be gained from licensure statistics.

In 1965, in South Dakota there were 217 new registrations for licensure, compared with 237 in 1960.⁷ Most of these licenses were issued to graduates from nursing education programs who took the State licensing examination.

As for foreign nurses, South Dakota—unlike States with large metropolitan areas—licenses only a small number of nurses on the basis of a qualifying certificate or license from a foreign country.⁸ The South Dakota Board of Nursing has supplied information on the country of origin of 25 nurses licensed by endorsement between 1958 and 1966.⁹ Ten of these nurses immigrated to South Dakota from Canada, the country from which most endorsements of foreign nurses are made (5, p. 57). Six of the nurses were from Norway, three from England, three from the Philippines, and three from Central and South American countries.

The majority of licenses issued each year are renewals of existing licenses. The number of South Dakota licenses issued as renewals, although fluctuating from year to year, increased 15 percent—from 3,364 in 1960 to 3,893 in 1965. In 1965, 135 renewals were endorsements of licenses issued under the laws

of another State and 101 were reinstatements of previously held licenses.

The South Dakota Board of Nursing maintains an annual inventory of States from which licenses are endorsed. Trend data on the total number of endorsements differ from that reported by the American Nurses' Association because collection and reporting periods vary. Between 1958 and 1966 in South Dakota, 1,079 licenses were issued by endorsement from other States. The highest number, 258, or 24 percent, came from Minnesota,¹⁰ 11 percent from Iowa, 9 percent from North Dakota, 8 percent from Nebraska, and 7 percent from Illinois.

The South Dakota Board of Nursing also maintains trend data on the number of nurses who were previously licensed in South Dakota but have been endorsed to other States for licensure. From 1958 through 1966, South Dakota lost 2,439 nurses through endorsement to other States, and gained only 1,079 nurses through endorsement from other States.^{10 11} The net loss was 1,410, or an average net loss of 176 nurses per year during that period. Minnesota attracted the largest number, 494 or 19.8 percent, followed by Colorado, Iowa, Nebraska, and Illinois.

Despite losses due to increased numbers of endorsements out of State and fewer licensures by examination, overall gains in the *potential* nurse supply were realized between 1958 and 1966. These gains were due to the steady increase in the number of *renewals* of licensure during the period. However, in 1966 the number of endorsements out of State exceeded by 75 the numbers licensed by examination and by endorsement,¹² resulting in a net loss to South Dakota of 75 nurses. New entrants to the registered nurse supply, principally from educational programs, are no longer compensating for net losses from endorsements to other States. This fact has heightened concern regarding the State's future supply of registered nurses.

Distribution of Registered Nurses, by Field of Employment

The distribution of South Dakota's registered nurses by field of employment during the past 15 years has differed from that of the Nation as a whole. (See table 33.) Hospitals have employed the majority of nurses, but the proportion of total nurses employed in these institutions has been greater in South Dakota than in the Nation as a whole. Physicians' and den-

⁷ See appendix table G-5.

⁸ See appendix table G-6.

⁹ See appendix table G-7.

¹⁰ See appendix table G-8.

¹¹ See appendix table G-9.

¹² See appendix table G-10.

Table 33.—Rank order of proportions of registered nurses, by field of employment, United States and South Dakota: 1949, 1962, and 1966

Field of employment	United States			South Dakota		
	1949	1962	1966	1949	1962	1966
Hospitals	1	1	1	1	1	1
Private duty	2	2	2	2	3	5
Public health	3	4	4	5	5	4
Office nursing	4	3	3	3	2	2
Occupational health	5	5	6	6	6	6
Nursing education	6	6	5	4	4	3

Source: Appendix table G-16.

tists' offices in South Dakota, in contrast to those of the Nation, have employed more nurses than were in private duty. Nursing education is given more importance as a field of nursing in South Dakota than in the United States as a whole, whereas occupational health is given less importance in South Dakota than in the Nation.

Within specific fields of nursing, the adequacy and quality of the nursing care rendered depend upon the administration of nursing services, the types of personnel employed, the positions they hold, and the supervision they receive. South Dakota has differed in some respects from the Nation as a whole and from the bordering States in the proportion of registered nurses employed in various positions for the delivery of nursing services.

Since 1949, a larger percentage of registered nurses in South Dakota than in the Nation as a whole has been employed in administrative and supervisory positions, and for most years a smaller percentage has been employed in head nurse positions in South Dakota than in the Nation.¹³ Since 1951 there has been a slightly higher rate of consultant positions in South Dakota. The proportion of active nurses employed in instructor positions in the Nation has remained fairly constant, whereas South Dakota's proportion more than doubled between 1949 and 1962. Like the Nation, South Dakota has steadily increased its proportion of active nurses employed in general duty staff nurse positions to about 50 percent in 1962.

Compared with the bordering States in 1962, South Dakota had proportionately more nurse administrators, consultants, and instructors in the active supply. As for supervisors and head nurses, South Dakota's proportionate number equaled or was slightly

below that of the bordering States. Four of those States had a larger percentage of their active supply of nurses in general duty staff positions¹⁴ than South Dakota had.

In 1966, registered nurses were employed in the following proportions, by type of position and percent as shown, in the United States and South Dakota:

Position	United States Percent	South Dakota Percent
Administrator	3.4	5.6
Consultant	0.5	0.6
Instructor	3.5	5.9
Supervisor	9.8	10.0
Head nurse	14.8	13.8
General duty staff nurse	53.5	54.3
Other stated positions, and unknown	14.5	9.8

Educational Preparation of Registered Nurses

A significant factor affecting the quality of nursing services is the educational preparation of nurses for the positions they hold. The nursing profession recommends baccalaureate preparation for the position of head nurse and for public health and school nurses. A master's degree is recognized as basic qualification for the position of director of nursing, and there is a trend toward the same preparation for supervisors. Master's degrees and above are prerequisites for qualified nurse faculty. In addition, the trend toward specialization in nursing practice demands advanced preparation for clinical specialties for increasing numbers of registered nurses.

Information on the educational preparation of South Dakota's nurses is available from the 1962 and 1966 Inventories of Registered Nurses. In general, the academic qualifications of South Dakota's employed nurses in 1962 were similar to those of nurses in 15 States with whom they were compared.¹⁵ Further, compared with the Nation's nurses in 1962, South Dakota's employed nurses had a higher proportion of baccalaureates. (See table 34.) Although the State has no master's or higher degree programs in nursing, its nurses kept pace with the Nation in attaining these types of degrees (5, p. 11).

In 1966, 249 of South Dakota's 2,055 employed registered nurses had baccalaureates and 53 had master's or higher degrees, including degrees in fields other than nursing.¹⁶ (See table 35.) The total num-

¹⁴ See appendix tables G-20 and G-21.

¹⁵ See appendix tables G-42 and G-43.

¹⁶ See appendix tables G-31, G-32, G-43, and G-44.

¹³ See appendix table G-19.

Table 34.—Percent distribution of employed registered nurses, by educational preparation; United States and South Dakota; 1962 and 1966

Educational preparation	United States		South Dakota	
	1962	1966	1962	1966
Diploma or associate degree	90.0	87.1	79.8	80.5
Baccalaureate	7.9	10.4	11.6	12.1
Master's degree or above	2.1	2.5	2.3	2.6
Not reported	—	—	6.3	4.8
			13.9	14.7

Source: Appendix tables G-29, G-43, and G-44, for South Dakota data. American Nurses' Association, *Facts About Nursing, A Statistical Summary, 1967 Edition*, p. 11, for U.S. data.

ber of nurses in these two groups increased from 238 in 1962 to 302 in 1966.

A substantial number of baccalaureate and higher degrees were held by South Dakota's younger nurses.¹⁷ Of the nurses with baccalaureates, 59.6 percent were under 40 years of age; of those with master's and higher degrees, 25 percent were under 40.

In 1966, South Dakota's inactive nurse supply of 804 nurses included 96 nurses with baccalaureates and higher degrees, 514 with diploma or associate degrees, and 194 who did not respond to the inventory question.¹⁸ (See table 36.) Of the 86 potential recruits for reactivation in nursing employment with baccalaureates, 80 percent were under 45 years of age, 28 percent were under 30 years, and over 50 percent were under 35 years. Of the nine inactive nurses re-

¹⁷ See appendix tables G-31 and G-33.

¹⁸ See appendix tables G-37 and G-39.

Table 35.—Number and percent distribution of highest educational preparation of actively employed registered nurses; South Dakota; 1962 and 1966

Highest educational preparation	1962		1966	
	Number	Percent	Number	Percent
Total	1,716	100.0	2,055	100.0
Diploma or associate degree	1,369	79.8	1,655	80.5
Baccalaureate	199	11.6	249	12.1
Master's degree in nursing	31	1.8	40	1.9
Master's degree in another field	7	0.4	11	0.5
Doctorate in nursing	1	0.1	1	0.1
Doctorate in another field	—	—	1	0.1
No answer	109	6.3	98	4.8

Source: Appendix tables G-29 and G-31.

porting they held master's degrees, two were under 45 years of age and two were of retirement age. Almost 400 of the nurses with diplomas or associate degrees were under 45 years of age.

As for educational preparation of nurses by fields of employment in 1966, the nurses on faculty of schools of nursing had the highest percentage of baccalaureate and higher degrees.¹⁹ (See table 37.) Public health nurses were the next best educationally prepared. School nurses ranked third in educational preparation, and nurses employed in hospitals outranked those in private duty and office nursing. However, between

¹⁹ See appendix table G-41.

Table 36.—Number and percent distribution of highest educational preparation of registered nurses, by activity status; South Dakota, 1966

Highest educational preparation	Total ¹		Active		Inactive	
	Number	Percent	Number	Percent	Number	Percent
Total	2,907	100.0	2,055	100.0	804	100.0
Diploma or associate degree	2,177	74.9	1,655	80.5	514	63.9
Baccalaureate	338	11.6	249	12.1	86	10.7
Master's degree in nursing	48	1.5	40	1.9	3	0.4
Master's degree in another field	17	0.6	11	0.5	6	0.8
Doctorate in nursing	1	(²)	1	0.1	0	—
Doctorate in another field	2	0.1	1	0.1	1	0.1
No answer	329	11.3	98	4.8	194	24.1

¹ Includes 48 nurses who did not report their activity status.

² Less than 0.1 percent.

Source: Appendix tables G-26, G-32, and G-38.

1962 and 1966, only in the hospital field was there an appreciable increase in the proportion of nurses with baccalaureate or higher degrees. Hospitals, in 1966, employed over half of all nurses with baccalaureates. Schools of nursing employed the majority of nurses with master's degrees.

Table 37.—Number and percent distribution of registered nurses with baccalaureate and higher degrees, by field of employment; South Dakota; 1962 and 1966

Field of employment	1962		1966	
	Number	Percent	Number	Percent
Total	238	14.7	302	13.9
Schools of nursing	85	67.5	94	66.7
Public health	15	31.2	21	30.9
School nursing	13	39.3	12	24.0
Hospitals and institutions	99	8.8	150	10.4
Private duty	9	7.1	8	7.2
Office nursing	13	6.5	11	5.3
Industrial health	0	—	0	—
Other specified fields	2	50.0	2	66.7
Field not reported	2	4.5	4	11.1

Source: Appendix tables G-43 and G-44.

Nurse instructors are the best prepared, educationally.²⁰ Two-thirds reported they had a baccalaureate or higher degree. Consultants, although few in number, were almost as well prepared. Administrators ranked third in educational preparation; 39 percent reported they held baccalaureate or higher degrees; supervisors, general duty nurses, and head nurses were next. About 78 percent of the nurses in supervisory positions, 87 percent in general duty, and 88 percent in head nurse positions had not attained a baccalaureate or higher degree.

To meet the recommended educational requirements for leadership positions, 523 registered nurses, or 70 percent of those now in administrator, consultant, instructor, supervisor, and head nurse positions in South Dakota's health services, would need to attain the baccalaureate. In addition, 116 administrators, consultants, instructors, and supervisors would need to acquire more advanced preparation.

The educational preparation of South Dakota's registered nurses by type of position in the service fields will be considered as nursing personnel are examined by field of practice.

²⁰ See appendix table G-45.

Practical Nurses

The present number and characteristics of licensed practical nurses are not known, although data will be made available in 1969 from the first national inventory of practical nurses, which is being conducted by the American Nurses' Association. U.S. Census data reported 605 active licensed practical nurses in South Dakota in 1960, an increase of 58 percent over the 383 employed there in 1950. The ratio of active licensed practical nurses in South Dakota increased from 59 per 100,000 population in 1950 to 89 in 1960. The 1960 ratio for South Dakota was well below the U.S. average and well below that of all but two of South Dakota's bordering States.²¹

Information about practical nurses is available from licensure data, although these data do not differentiate the activity status of practical nurses who maintain licensure. The data include information on practical nurses licensed in South Dakota and residing in other States, but may have excluded information on some practical nurses who were employed in South Dakota and were licensed elsewhere.

South Dakota enacted legislation for the licensure of practical nurses in 1949. Since then, the number of new licenses issued yearly has fluctuated widely. Since 1960, slightly more than 100 new licenses have been issued yearly.²² Most of these are issued to graduates of the State's practical nurse programs who take the licensing examination. Although the number of licenses issued to practical nurses previously licensed has also fluctuated from year to year, the overall trend in the 1960's has been upward.²³ In 1965, South Dakota issued 805 renewals of licenses, an increase of more than 100 percent over the 386 issued in 1960. Renewals have included a small number of licenses issued by endorsement from other States and reinstatement of licenses, amounting to slightly over 4 percent yearly. The total number of licenses issued to practical nurses in South Dakota in 1965 was 917.

From data on endorsements maintained by the South Dakota Board of Nursing, it appears that South Dakota's practical nurses as a group may be more mobile than registered nurses. Between 1958 and 1966, 461 practical nurse licenses were endorsed to other States, three times as many as were endorsed to South

²¹ See appendix table G-11.

²² See appendix table G-12.

²³ See appendix table G-13.

Dakota from other States.²⁴ The number of endorsements to other States climbed steadily, from 17 in 1953 to 88 in 1966. Although the number of endorsements to South Dakota changed little in the late 1950's and early 1960's, some increases were noted in 1965 and 1966.

Like registered nurses, practical nurses also most frequently migrated to and from Minnesota. About 30 percent of the practical nurse endorsements from South Dakota and 31 percent of those to South Dakota were exchanged with Minnesota. Iowa, California, Nebraska, and Colorado attracted the most of South Dakota's practical nurses, and the practical nurses coming in to South Dakota, most were from North Dakota, Nebraska, and Washington.

The increasing out-of-State migration of South Dakota's nurses seriously affects the available supply. An updated study of the factors influencing the migration of all nursing personnel might suggest ways to retain more nurses in South Dakota and to attract more nurses to the State.

Other Nursing Personnel

Because needs for registered and practical nurses have increased much faster than the supply, health services have employed large numbers of nursing aides and other personnel who participate in nursing care. It has been estimated that, of the 1.3 million nursing personnel employed in health fields in 1965, about 500,000 were aides, orderlies, and attendants (6, p. 108). Trends in the supply of health manpower indicate that these categories of nursing personnel, combined, increased 68 percent between 1955 and 1965, whereas the number of registered nurses in practice increased 44 percent and of practical nurses in practice 55 percent. The large increase in the number of nursing aides is related to: (1) the widespread concern over reducing unemployment; (2) the creation of Federally assisted programs for training this level of personnel; and (3) the existence of job opportunities in hospitals and other health facilities.

Data on the numbers of the various categories of nursing personnel other than registered and practical nurses are available only from special studies. These data can be presented best in the discussion of nursing personnel by fields of practice. An analysis and assessment of other nursing personnel for planning purposes should include consideration of standards for their selection, training, and placement in the

health services. Attention should be given to the ratio of registered nurses and licensed practical nurses to assistants to nurses (aides, orderlies, and attendants), for meeting needs in particular situations without threatening the quality of care. The supervision that auxiliary personnel receive is another important factor in their effective utilization for extending nursing care and health services.

Nursing Personnel in Hospitals and Other Institutions

Registered Nurses

Today the majority of nurses work in hospitals and other related institutions. South Dakota, like most of its bordering States, has over the years, employed a greater percentage of its total registered nurses in hospitals than the Nation has.

In 1949, the percentage of the active nurse supply employed in hospitals and other institutions was 54.4 for South Dakota and 47.2 for the Nation; in 1962, it was 66.4 for South Dakota and 63.0 for the Nation.²⁵ The number of nurses working in these institutions in South Dakota between 1949 and 1962 increased 135 percent—from 536 in 1949 to 1,261 in 1962. This increase was the same as for the United States—135 percent (from 141,266 in 1949 to 335,404 in 1962).²⁶

Between 1962 and 1966, the number of registered nurses employed in South Dakota's hospitals increased another 13 percent. In 1966, 69.7 percent of the 2,055 employed nurses worked in hospitals and other institutions. Of these nurses, about 70 percent were married. Hospital nurses, as a group, were younger than those in other fields. This is not surprising since the general duty staff nurse position is the usual entrance level to practice. Of all employed nurses, 54 percent held staff level positions in 1966, and 75 percent of these positions were in hospitals and other institutions.

Little information is available to evaluate hospital nursing services, particularly the efficiency of utilization of nursing personnel. Some clues can be obtained, however, from data on staffing patterns, position assignments, and the skills which nursing personnel bring to their work as a result of academic training. South Dakota's hospitals and related institutions maintained a ratio of approximately one administrator, two supervisors, and three head nurses for every 10 staff nurses. A slight increase in the proportion of ad-

²⁴ See appendix tables G-14 and G-15.

²⁵ See appendix table G-18.

²⁶ See appendix table G-16.

ministrators and head nurses and a decrease in the proportion of staff level positions are noted between 1962 and 1966. In comparison with the United States in 1966, South Dakota had proportionately more administrators and fewer head nurses. (See table 38.)

Table 38.—Percentage of registered nurses, by position category, in hospitals and other institutions; United States and South Dakota; 1962 and 1966

Position	United States		South Dakota	
	1962	1966	1962	1966
Total, all positions	100.0	100.0	100.0	100.0
Administrators	3.6	3.6	4.8	6.0
Supervisors	12.5	12.8	12.3	12.4
Head nurses	18.2	19.4	15.7	16.7
Consultants and instructors	1.1	1.3	1.1	1.5
General duty staff	59.3	58.6	59.4	58.6
Other	2.7	2.3	3.9	3.2
Not reported	2.6	2.0	2.8	1.6

Sources: American Nurses' Association. *Facts About Nursing. A Statistical Summary. 1967 Edition*, p. 15. *1968 Edition*, p. 22. Also Appendix tables G-50 and G-51.

The number of clinical nurse specialists with preparation and clinical skills for coordination of specialized nursing care employed in South Dakota is not known. Also unknown is the extent to which team leaders are used in the supervision and management of patient care in order to increase the availability of services and to insure the best use of the talents and skills of professional and auxiliary personnel.

The educational attainment of registered nurses employed in hospitals and other institutions in South Dakota in 1966 matched their position levels, as shown in table 39. Administrators were the best prepared. Supervisors, head nurses, and general duty staff nurses, in that order, had less academic preparation. In 1966, one-fourth of the administrators reported they held a baccalaureate or higher degree, mostly baccalaureates. Although the proportion declined between 1962 and 1966, general duty staff nurses had attained the highest proportion of all baccalaureates held by institutional nurses.²⁷

Institutional nurses in all positions raised their levels of preparation between 1962 and 1966. The

²⁷ See appendix tables G-50 and G-51.

Table 39.—Educational preparation of registered nurses employed in hospitals and other institutions, by type of position; South Dakota; 1966

Position	Percent			
	Master's or above	Baccalaureate	Diploma or associate degree	Not reported
Total nurses	2.6	12.1	80.5	4.8
Administrators	3.3	23.6	67.5	5.6
Supervisors	1.7	13.0	80.2	5.1
Head nurses	0.7	11.6	85.8	1.9
Staff and other	0.1	7.6	89.5	2.8
Position not reported	—	—	86.9	13.1

Source: Appendix table G-46.

biggest gains were made in the attainment of the baccalaureate. (See table 40.)

The educational preparation of South Dakota's registered nurses employed in hospitals and other institutions can be compared with that of institutional nurses included in the 15-State study of 1962.²⁸ Although overall educational attainment did not vary greatly in South Dakota, the biggest discrepancies were for nurses in top-level positions.

The development of leadership in nursing through educational preparation is cited as a priority need

Table 40.—Highest educational preparation of registered nurses employed in hospitals and other institutions in South Dakota, 1962 and 1966

Highest educational preparation	1962		1966	
	Number	Percent	Number	Percent
Total	1,128	100.0	1,433	100.0
Diploma or associate degree	980	86.9	1,236	86.3
Baccalaureate	92	8.2	141	9.8
Master's in nursing	4	0.3	6	0.4
Master's in another field	2	0.2	3	0.2
Doctorate in nursing	1	0.1	0	—
Doctorate in another field	0	—	0	—
Not reported	49	4.3	47	3.3

Source: Appendix tables G-48 and G-49.

²⁸ See appendix tables G-47 and G-48.

throughout the Nation. Attainment of preparation presents a particular challenge for South Dakota because of the inaccessibility of educational programs. To meet recommended educational requirements, 412 professional nurses, or 82 percent of the administrators, supervisors, and head nurses employed in South Dakota's institutions in 1966, would need to attain baccalaureates. In addition, 245 administrators and supervisors would need to acquire advanced preparation beyond the baccalaureate.

Other Nursing Personnel

Data on all types of nursing personnel employed in hospitals are available from the 1966 Survey of Manpower Resources in Hospitals.²⁹ Estimates indicate that slightly more than one-third of all hospital nursing personnel in the Nation were registered nurses; almost half were aides, orderlies, and attendants; and the remainder were practical nurses. (See table 41.) South Dakota's staffing pattern for hospital nursing personnel was characterized by a slightly higher proportion of aides, orderlies, and attendants, and a lower proportion of practical nurses than the Nation's staffing pattern showed.

Figure 8 shows the number of registered nurses, licensed practical nurses, and aides, orderlies, and attendants employed in hospitals in the United States, South Dakota, and bordering States in April 1966, together with estimates of the total numbers actually needed.

²⁹ Conducted by U.S. Department of Health, Education, and Welfare, Public Health Service, Bureau of Health Manpower, and American Hospital Association.

Table 41.—Estimated nursing personnel ratios in hospitals in the United States and South Dakota, 1966

Type of personnel	United States		South Dakota	
	Number	Percent	Number	Percent
Total	1,021,168	100.0	3,704	100.0
Registered nurses ..	360,969	35.4	1,302	35.1
Licensed practical nurses ..	150,569	14.7	335	9.1
Aides, orderlies, and attendants, including surgical technical aides	509,630	49.9	2,067	55.8

Source: Appendix table G-55.

Of South Dakota's 78 hospitals, 54 reported that they employed 3,469 nursing personnel. Included were 1,247 registered nurses, 317 practical nurses, and 1,905 aides, orderlies, and attendants. Twenty-nine percent of the registered nurses and 16 percent of the practical nurses, aides, orderlies, and attendants worked part time. A slightly higher proportion of aides, orderlies, and attendants in South Dakota than in the Nation worked part time.³⁰

The proportion of each type of nursing personnel varied by type of hospital, as shown in table 42. Non-Federal government hospitals had the lowest ratios of registered nurses and the highest ratios of aides, orderlies, and attendants. Aides in South Dakota's mental hospitals outnumbered registered nurses six to one.

³⁰ See appendix tables G-52 through G-55.

Table 42.—Number and percent of registered nurses, practical nurses, and aides, orderlies, and attendants employed, by hospital control and type; South Dakota; 1966

Hospital control and type	Total personnel		Percent of personnel		
	Number	Percent	Registered nurses	Practical nurses	Aides, orderlies, and attendants
Total	3,469	100.0	35.9	9.2	54.9
Federal Government	662	100.0	37.3	8.6	54.1
Government non-Federal	628	100.0	19.9	2.5	77.6
Non-Government	2,179	100.0	40.1	11.2	48.7
Short-term	2,143	100.0	40.5	11.4	48.1
Long-term	36	100.0	22.2	—	77.8
Psychiatric	0	—	—	—	—

Source: Appendix tables G-52, G-53, and G-54.

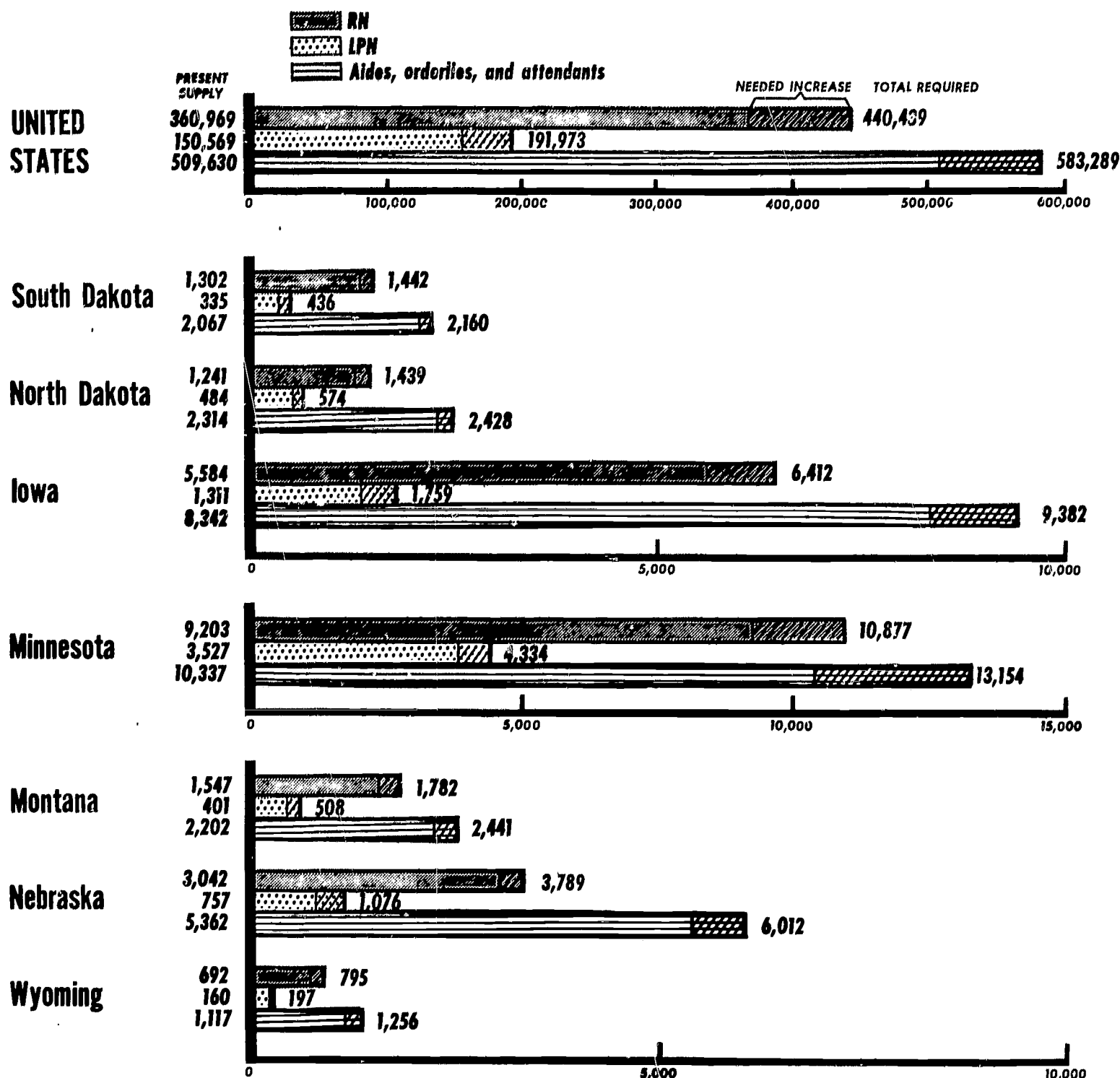


Figure 8.—Nursing personnel employed in hospitals and estimated total number needed; United States, South Dakota, and bordering States; April 1966

The voluntary short-term general hospital tended to employ more registered and practical nurses than did other types of hospitals.

One approach to assessing the amount, kinds, and adequacy of nursing care provided in hospitals is to compute the average daily hours of nursing care available per patient. In 1957, South Dakota's average daily hours of nursing care available per patient in non-Federal, general, and allied special hospitals were below the U.S. average. (See table 43.) By 1966, South Dakota exceeded the U.S. average number of hours for all categories of nursing personnel except practical nurses. The U.S. average changed little between 1957 and 1966, with an increase of less than 1

percent for all types of nursing personnel. The largest increase, however, was for practical nurses and aides. The aides, the least trained nursing personnel, gave almost half of all care.

Utilization of Nursing Personnel

Increased demands for nursing care and inability to obtain sufficient professional staff have produced many inequities in the use of nursing personnel and have changed nursing practice. Registered nurses have accepted increased responsibility for more specialized nursing skills and for administrative, supervisory, clerical, and managerial functions. At the same time, they have increasingly delegated more patient care

Table 43.—Estimated average daily hours of nursing care available per patient in general and allied special hospitals, United States and South Dakota, 1957 and 1966

Nursing personnel	United States		South Dakota	
	1957	1966	1957	1966
Total ¹	4.33	4.56	3.67	4.94
Registered nurses	1.32	1.35	0.98	1.54
Licensed practical nurses	0.86	0.99	0.45	0.68
Aides	2.17	2.21	2.24	2.72

¹ Because of independent rounding, the sum of the parts may differ from the totals shown.

Sources: U.S. Department of Health, Education, and Welfare, Public Health Service, and American Hospital Association; "The Study of Nurse Staffing in Hospitals, 1957." Unpublished data.

U.S. Department of Health, Education, and Welfare, Public Health Service, Bureau of Health Manpower, and American Hospital Association; Survey of Manpower Resources in Hospitals, 1966. Unpublished data.

functions to practical nurses and aides. Rural hospitals in South Dakota experience the most difficulty in the effective and appropriate use of nurses and their assistants. The extremes are perhaps portrayed in these accounts from interviews held in the State. Registered nurses and practical nurses serve as rural hospital administrators. Some are both administrators and directors of nursing services and may also serve as operating room nurse and anesthetist.

Rural communities depend on nurses in the local area to staff hospitals and nursing homes. They attract women who do not need to work but do so out of a sense of community pride. Part-time nurses are used to meet staffing needs. A "buddy system" operates in many small communities, in which registered nurses pledge service as needed, depending upon the patient load and availability of other nurses. Financial remuneration is not considered. The permanent full-time staff of many rural hospitals and nursing homes is predominantly nursing aides. Because of multiple problems of financing, recruitment, and availability of personnel for rural areas, many of these rural facilities are reluctant to propose their needs for registered nurses and have become content with using auxiliary nursing personnel.

In some communities, registered nurses are available on a regularly scheduled part-time basis, but hospital administration was said to be inflexible in adjusting schedules to accommodate to the hours which these nurses could provide. Yet some hospitals in the State were reported to be overstaffed with nurses.

Some aides were seen as being unable to provide safe and appropriate care because they were poorly trained. Registered nurses, it was reported, did not know how to use aides or properly supervise them.

Among these reports that highlight some of the problems in nursing were numerous instances of efforts to improve the quantity and quality of available nursing personnel and nursing care. Hospitals of 100 beds or more were increasingly relieving nursing personnel of housekeeping and clerical duties. Ward clerk and manager systems were being initiated. A cafeteria for ambulatory patients in one short-term general hospital has helped to make more nursing care available for other patients. Improved staff utilization and patient care were enthusiastically reported in a newly opened hospital with patient care units in the round. Measures to improve the utilization of South Dakota's available nursing personnel were seen as having more immediate promise for meeting nursing needs until other measures could be found to attract and retain nurses in the State.

Needs for Nursing Personnel

The 1966 Survey of Manpower Resources in Hospitals includes estimates of additional needs for nursing personnel. Needs were expressed in terms of budgeted vacancies and additional personnel needed, based on current and projected patient loads and services. Fifty-four of South Dakota's hospitals reported a need for 403 additional nursing personnel. Numerically, the greatest need was for registered nurses. (See table 44.)

The 1966 Survey of Manpower Resources in Hospitals indicated a need for only 18 additional registered nurses and 10 aides for psychiatric hospitals, which contain approximately half of all hospital beds. The role and the utilization of nurses in mental health services are unclear. As previously pointed out, there

Table 44.—Additional nursing personnel needed by South Dakota hospitals, by number and percent of increase; April 1966

Personnel	Additional personnel needed	Percent of increase needed
Registered nurses	189	15.2
Practical nurses	111	35.0
Aides, orderlies, and attendants	103	5.4

Source: Appendix tables G-52, G-53, and G-54.

is a lack of personnel for community, preventive, diagnostic, treatment, and rehabilitative mental health services to meet total family needs. In the changing pattern of delivery of mental health services from large public facilities to community-based services, the staffing patterns for nursing personnel and their training and development need to be carefully planned. The clinical nursing specialist is viewed as a key figure in developing and implementing nursing services within the new system of mental health care. Both the kinds and the numbers of nursing personnel required should be determined with reference to the local situation and professional resources should be considered.

Nursing Personnel in Nursing Homes

The South Dakota State Department of Health has supplied information on nursing personnel employed in nursing homes and homes for the aged. In 1966, 264 registered nurses and licensed practical nurses were employed in the State's 136 homes, which maintained 4,727 beds. Data on the number of aides employed were not available. Close examination of these data showed a relationship between the classification of homes, the State's requirements for licensure for nursing coverage and supervision, and the number of licensed nursing personnel employed in these homes. State regulations set minimum requirements and not qualitative standards. South Dakota, through its licensure code, has attempted to assure a level of nursing care higher than that of many States. Of the 264 licensed nursing personnel, 261 were employed in 88 homes with 4,091 beds; these homes were required, for licensure, to have supervision or coverage by licensed practical and/or registered nurses. About 9 percent of all active registered nurses in South Dakota and 13 percent of all South Dakota's institutional nurses worked in nursing homes and homes for the aged in 1966.

Of the registered nurses, 56 percent worked full time and over 42 percent worked part time. (See table 45.) Of the licensed practical nurses, about 79 percent worked full time; 18.3 percent, part time. Higher proportions of both registered and practical nurses employed in nursing homes worked part time than did those employed in hospitals.

In the future, there will be increasing needs for adequate care for older people and the chronically ill in nursing homes. No standards are yet available for evaluating the nursing needs of patients in these facilities. Staffing levels that consider the quantity, quality, and types of personnel required need to be

Table 45.—Number and percent of licensed nursing personnel employed in nursing homes and homes for the aged, South Dakota, 1966

Personnel	Total		Percent		
	Num-ber	Per-cent	Full time	Part time	Not specified
Total	264	100.0	62.2	35.9	1.9
Registered nurses	193	100.0	56.0	42.5	1.5
Licensed practical nurses	71	100.0	78.9	18.3	2.8

Source: Appendix table G-58.

determined. Knowledge and experience related to the nursing care requirements of the aged and chronically ill will have to be applied in projecting essential nursing needs and recommending staffing levels for nursing homes.

Nurses Employed in Nursing Education

The value that South Dakota places upon the education of nurses is demonstrated by the fact that nursing education was the fourth largest field of employment in nursing in the State from 1949 through 1962. The number of registered nurses serving on faculties of schools of nursing increased 103 percent (from a total of 65 in 1949 to 132 in 1962) as the number of schools increased and the types of nursing education programs changed. In comparison, in the United States as a whole, nursing education has ranked sixth as a field of employment in nursing, and the number of nurses serving on faculties of schools of nursing increased only 35 percent from 1949 to 1962.

Of the total supply of active registered nurses in the United States, 4.0 percent were engaged in nursing education in 1949 and 3.1 percent in 1962; in South Dakota, 6.6 percent in 1949 and 7.0 percent in 1962.

For most of South Dakota's bordering States, in 1962, larger proportions of nurses had also been employed in nursing education than for the Nation as a whole. In most of these States, which are predominantly agricultural, more emphasis has been placed on nursing education than on occupational health and public health nursing.

In 1966, nursing education became the third largest field of employment for nurses in South Dakota; the 141 registered nurses serving as faculty

members comprised 6.9 percent of all active registered nurses. This number, however, fell short of requirements.

The annual census of nursing school faculty for 1966, conducted by the National League for Nursing, has furnished some data on unfilled registered nurse faculty positions in South Dakota. For the Nation as a whole, 85.7 percent of the education programs for practical nurses and for registered nurses responded to this survey. There were 81 total full-time faculty positions for registered nurses in South Dakota's programs participating in the survey. (See table 46.) Eleven of these positions, or 14 percent, were vacant. Associate degree programs reported no vacancies, whereas diploma and baccalaureate programs each had a 14 percent vacancy rate. This rate was higher than for all programs reporting in the Nation, and higher than for all the bordering States.

The most critical shortage in nursing education is for nurses with educational qualifications comparable to those expected in other teaching fields. Nursing education requires relatively small numbers of nurses, but these nurses need a high level of education to plan, direct, and teach in a variety of programs that prepare practitioners to meet the needs for quality nursing care.

In 15 States in 1962, 70.9 percent of the registered nurses serving as faculty in schools of nursing had attained baccalaureate or higher degrees; in South Dakota the percentage was 67.5. A higher proportion of nurses serving on faculties in South Dakota than in the 15 States had at least a baccalaureate; however, fewer of South Dakota's nurses had attained master's degrees. Between 1962 and 1966, the educational preparation of registered nurses in faculty positions in South Dakota improved slightly. The number of registered nurse faculty members with baccalaureates

Table 46.—Number of full-time faculty positions for registered nurses in schools of nursing, and number and percent of unfilled budgeted vacancies; South Dakota; 1966

Type of program	Total positions	Vacant	
		Number	Percent
Total	81	11	14.0
Baccalaureate	35	5	14.0
Associate degree	4	—	—
Diploma	42	6	14.0

Source: Appendix table G-78.

Table 47.—Highest educational preparation of nurses on the faculty of schools of nursing in South Dakota, 1962 and 1966

Highest educational preparation	1962		1966	
	Number	Percent	Number	Percent
Total	126	100.0	141	100.0
Diploma or associate degree ..	41	32.5	44	31.2
Baccalaureate	59	46.8	59	41.9
Master's in nursing	22	17.5	27	19.2
Master's in another field	4	3.2	7	4.9
Doctorate in nursing	0	—	0	—
Doctorate in another field	0	—	1	0.7
Not reported	—	—	3	2.1

Source: Appendix tables G-48 and G-44.

remained constant, but nine additional members of the registered nurse faculty held master's and higher degrees. (See table 47.) Yet in 1966, almost one-third of the faculty members of South Dakota's nursing schools had little education beyond their diplomas, and fewer than half of the faculty members had baccalaureates.

Data are not immediately available on the educational preparation of South Dakota's nurses who serve on faculties of nursing schools, by type of program in which they are employed. It is assumed, however, that—in South Dakota as in the Nation—diploma programs have the greatest difficulty in attracting adequately prepared faculty. A special survey of nursing education programs in the State will provide this information.

Nursing education in South Dakota is moving from hospitals into educational institutions at a fairly rapid rate. As part of long-range planning, the Council on Nursing Resources will need to consider the direction of nursing education programs in South Dakota in the next 5 to 10 years and the future direction of the work of teaching and administrative staff in these programs. All health professions are undergoing fundamental changes in the scope and definition of their roles and the educational patterns for preparing practitioners for these roles. Faculty will be required who are educationally prepared to develop nursing education programs and to implement new teaching and learning methods for effective patient care. Such

programs and teaching methods must be adapted to meet changing health care requirements.

Nursing Personnel in Public Health Work

Nurses practicing outside the hospital setting and associated with public health work of various types and sponsorship are becoming increasingly important. This is because of the contribution those nurses can make in coping with the growing problem of long-term illnesses and health maintenance, and the increasing financial support for these programs enabled by Federal legislation.

Both the National Inventory of Professional Registered Nurses and the Public Health Nurse Census provide data on nursing personnel in public health work. Census information is collected biennially by the directors of nursing in State health departments, and is compiled by the Division of Nursing, Public Health Service.

For the Nation, both the number and proportion of nurses employed in hospitals have steadily increased, whereas those in public health have decreased. According to inventory figures, public health dropped from the third largest field of practice in 1949 and 1951 to the fourth largest in 1957 and 1962. In South Dakota over these years, nurses in public health comprised the fifth largest field of practice.

The actual number of nurses who reported their field as public health in the United States was 28,487 in 1949 and 40,687 in 1962—an increase of 42.8 percent. In South Dakota, the corresponding number was 60 in 1949 and 118 in 1966—an increase of 96.6 percent.⁸¹ In percentage, 9.5 percent of the total supply of active registered nurses in the United States were in public health work in 1949 and 7.6 percent in 1962. In South Dakota, 6.1 percent of the supply of active registered nurses were in public health work in 1949 and 5.1 percent in 1962.

In 1966, registered nurses employed in public health in South Dakota constituted 5.7 percent of the active registered nurse supply. Public health in that year became the fourth largest field of practice in the State as the number and proportion of nurses in private duty declined.

Public health work in South Dakota has tended to attract the older married nurse. Almost three-fifths of the registered nurses who were school nurses in 1966 and more than three-fourths of all other nurses employed in public health work were over 40 years of

Table 48.—Percent of public health and school nurses, by age, in South Dakota; 1966

Age in years	Total	Public health nurses	School nurses
Total	100.0	100.0	100.0
29 and under	16.9	10.3	26.0
30-39	15.3	13.2	18.0
40-49	27.2	27.9	26.0
50-59	28.0	35.4	18.0
60 and over	9.3	10.3	8.0
Not reported	3.3	2.9	4.0

Source: The 1966 Inventory of Registered Nurses, South Dakota; unpublished data.

age; only half of all active registered nurses were over 40. (See table 48.)

As to marital status, 78 percent of all nurses in public health work were married, compared with 70 percent of all employed nurses in South Dakota. Proportionately more of the school nurses were married than were nurses in other types of public health work. (See table 49.) The working hours associated with public health and school nursing may attract married nurses to this field.

Table 49.—Marital status of public health and school nurses, South Dakota, 1966

Marital status	Total	Public health nurses	School nurses
Total	100.0	100.0	100.0
Single	21.2	23.5	18.0
Married	78.8	76.5	82.0

Source: The 1966 Inventory of Registered Nurses, South Dakota; unpublished data.

The January 1, 1966, Census of Public Health Nurses reports that 99 registered nurses and 6 licensed practical nurses were employed in South Dakota for public health work. Of the 105 total, 8.6 percent, or 9 registered nurses, at staff level worked part time. Sixty-four registered nurses were employed by the State and local official health units, the largest employer of nurses for public health work. Boards of education, the only other employer, engaged 35 registered nurses for school nursing services. At the time of the 1966 census, the State had no voluntary agency rendering community nursing services. Excepting Iowa, South Dakota's bordering States have tended to establish few voluntary agencies for this purpose.

⁸¹ See appendix table G-16.

Proportionately, the increase between 1947 and 1966 in the number of registered nurses working full time in public health was much greater in South Dakota than in the United States, as shown below:³²

	1947	1966	Percent increase
United States	20,867	36,893	76.8
South Dakota	37	90	141.5

Most of the national increases have been in the number of nurses employed by boards of education; their number tripled in the period 1947-66. In South Dakota, however, the proportion of nurses employed by boards of education in 1966 was only 1 percent more than in 1947. The proportion of staff nurses employed in local health units increased about 5 percent between 1947 and 1966. (See table 50.)

In 1966 in South Dakota, the ratio of public health staff nurses to population was 11.5 nurses per 100,000 population, or 1 staff nurse per 8,684 population. This ratio had increased from 5.5 in 1957. Although lower than the United States ratio, which was 14.9 in 1957 and 16.5 in 1966, South Dakota's ratio was not greatly different from that of most of the bordering States and it exceeded North Dakota's and Nebraska's ratios. The ratios, however, do not indicate the availability of public health nursing services for all areas of a State.

The 99 registered nurses employed in 1966 provided public health nursing services in 47 of South Dakota's 67 counties. This included nine counties with public health nursing services rendered as part of the Indian Health Program for reservation populations by Public Health Service employees who are included in the Public Health Nurses Census. In 14

counties, only school nurses were employed. Twenty of South Dakota's counties have no public health nursing personnel employed within their jurisdiction for direct services.

The use of technically prepared nurses, aides, and various auxiliary nursing personnel in community health services is of recent origin. In 1966, there was one licensed practical nurse employed in public health work for every 46 registered nurses in the Nation as a whole. Six licensed practical nurses were employed by South Dakota's local county health units in 1966. Home health aides are known to be utilized by one county health department. Definitive data on the use in South Dakota of specially trained workers, such as hearing and screening technicians and clinic and school health aides, are not available.

Preliminary data from the 1968 census show further growth in the number of nurses in public health work in South Dakota. Recently organized services—such as one Visiting Nurse Association employing six nurses, two hospital-based home care programs employing four nurses, and increases in the number of nurses employed by county health units—are largely responses to the medicare program. Enactment of the Elementary and Secondary Education Act of 1965, allowing for the development of school health services for areas with substantial numbers of economically deprived school-age children, has also influenced the employment of additional school nurses by boards of education.

In 1966, South Dakota had 11 registered nurses employed in administrative, consultant, and supervisory positions in public health, a ratio of about one administrator, consultant, and supervisor combined, to each 9.5 staff nursing personnel. The educational preparation of these nurses in supervisory positions

³² See appendix table G-77.

Table 50.—Number and proportion¹ of staff level nurses employed full time for public health work in local official and nonofficial agencies and boards of education; United States and South Dakota; 1947 and 1966

Area	Number				Proportion			
	Local agencies		Boards of education		Local agencies		Boards of education	
	1947	1966	1947	1966	1947	1966	1947	1966
United States	9,530	18,451	4,542	13,583	73	57	24	42
South Dakota	20	53	11	26	61	67	33	33

¹ Proportion of staff level nurses to total nurses employed full time in public health work. The proportion by State agencies is not shown in this table.

Sources: Appendix tables G-74, G-75, and G-76. Also Census of Public Health Nurses, 1947, Federal Security Agency, Public Health Service; unpublished data.

and above exceeded that of the U.S. average; a higher percentage held baccalaureate or higher degrees. Of South Dakota's registered nurses in staff positions in public health, a smaller percentage had baccalaureate or higher degrees than the U.S. average, but a higher percentage had completed 30 hours of credit approved for beginning positions in public health nursing.

Although reporting is incomplete, available data would indicate that administrative, consultant, supervisory, and staff nurses in local official agencies in South Dakota were better prepared educationally than those employed by boards of education. (See table 51.)

There is a growing awareness of the need for additional public health nursing services in South Dakota. Barriers to the development of effective community health nursing services in the State are not unlike those noted nationally. Because of personnel shortages, inadequate financing, and piecemeal approaches, the resources, quality, and coverage of services have been inadequate to reach the entire population. Public health nursing services are non-existent in many areas of the State. In fact, some counties have only one public health nurse to service the entire county. Many nursing personnel are inadequately prepared, and the supervision they receive is deficient. As part of a total program for the development of more adequate services to meet the most pertinent public health nursing needs, the activities of public health nursing personnel in various settings and new approaches to care might be considered.

Nurses in Physicians' and Dentists' Offices

Since 1957, office nurses have constituted the second largest employed group of nurses in South Dakota. Between 1949 and 1962, this field grew numerically, from 118 to 205, but in proportion to the total nurse supply this field decreased slightly—from 12.0 percent in 1949 to 10.8 percent in 1962. South Dakota's numerical increases were less than the Nation's—73.7 percent for South Dakota and 86.3 percent for the Nation. During those years (1949-62) the difference between the proportion of total nurses employed in this field in the United States and in South Dakota lessened. In 1949, the percentage of active registered nurses working in offices was 8.8 for the United States and 12.0 for South Dakota. In 1962, the percentage was 8.2 for the United States and 10.8 for South Dakota.³³

The principal mode of entry into the health care system for South Dakota's residents seeking medical care is believed to be through the physician. Nursing personnel in physicians' offices can play a significant role in coordinating care with the physician and other health agencies and services. Moreover, the nurses' frequent contacts with patients also provide unique opportunities for health promotion. In 1966, South Dakota's physicians employed 207 registered nurses, or 10.1 percent of the nurse supply.

Tabulations from the 1962 and 1966 inventories indicate that most office nurses in South Dakota, as in the Nation, were employed by physicians in general practice. (See table 52.) In 1962, 76 percent of South

³³ See appendix table G-18.

Table 51.—Highest level of educational preparation of registered nurses in public health work, by position level and type of employer, in South Dakota; 1966

Highest credential	Supervisors and above			Staff nurses		
	Total	State and local official agencies	Boards of education	Total	State and local official agencies	Boards of education
Total	6	4	2	79	53	26
Master's or above	2	1	1	2	2	—
Baccalaureate	2	2	—	24	¹ 19	² 2
Diploma or associate degree.....	2	1	1	53	³ 32	21

¹ Two had preparation not approved for public health nursing.

² Three had incomplete preparation or preparation not approved for public health nursing.

³ Seventeen had 30 or more credit hours approved for public health nursing.

Source: Appendix tables G-82, G-83, and G-84.

Table 52.—Number and percent of registered nurses employed in physicians' and dentists' offices, by area of clinical practice; South Dakota; 1962 and 1966

Area of clinical practice	1962		1966	
	Number	Percent	Number	Percent
Total	201	100.0	207	100.0
Medical	9	4.4	16	7.7
Surgical	12	6.0	9	4.4
Medical-surgical	7	3.5	4	1.9
Pediatrics	4	2.0	5	2.4
Obstetrics	6	3.0	5	2.4
Maternal-child health	—	—	2	1.0
Gynecologic	1	0.5	—	—
Psychiatric	1	0.5	—	—
Mental health	—	—	—	—
General practice	153	76.1	108	52.2
Other	8	4.0	3	1.4
Not reported	—	—	55	26.6

Source: Appendix tables G-59 through G-62.

Dakota's office nurses reported their clinical practice area as general practice; in 1966, 52 percent were in general practice. Medical and surgical specialties, although small in number, were the next largest areas reported.

As for marital status, in 1966, 80 percent of South Dakota's office nurses were married, compared with 70 percent for all of South Dakota's employed nurses. About 86 percent of office nurses had been married at one time, and only 12 percent were single.

Most office nurses in South Dakota are employed in staff level positions.⁸⁴ Also, most have been graduated from hospital schools and have little preparation beyond a diploma. (See table 53.) Ten of the nurses employed in physicians' and dentists' offices in 1966, however, had a baccalaureate and one had a doctorate in nursing. Twenty-seven nurses reported they were employed in head nurse, supervisory, or administrative positions.⁸⁵

Some health planners predict growth in clinical specialization in office nursing because of the changing nature of medical practice and the shortage of physicians. This trend would greatly increase the requirements for advanced preparation for office nurses.

Little or no information is available on other types of personnel employed by physicians in their offices, or on how specialization has affected the use

⁸⁴ See appendix table G-46.

⁸⁵ See appendix table G-46.

of and need for registered nurses. With the trend toward specialization and group practice, however, physicians are known to have different requirements for personnel and to use an increasing variety of health personnel in their offices. The major ones are: licensed practical nurses, nursing aides, medical assistants, receptionists, X-ray technologists, physical therapists, and laboratory technicians. Medical assistants are used in South Dakota, although their numbers are not known. A formal program for their education is being considered. Also under consideration is a special survey, in cooperation with the State Medical Society, to elicit information on the mix of personnel in physicians' offices, their utilization, and the estimated needs for additional personnel by type. The future demand for and nature of office nursing will be determined largely by the supply of physicians and the nature of their practice.

Private Duty Nursing

Over the past 10 years, the number and proportion of nurses employed in private duty in the active nurse supply have been steadily decreasing in the Nation, whereas those employed in hospitals have been steadily increasing. Yet private duty nursing is still the second largest field in the Nation. South Dakota, however, has had a smaller proportion of nurses engaged in private practice than the Nation has. The decrease in the number of private duty nurses in South Dakota began earlier than in the Nation, and by 1966 private duty nursing had dropped to the fifth

Table 53.—Highest educational preparation of registered nurses employed in physicians' and dentists' offices, South Dakota, 1962 and 1966

Highest educational preparation	1962		1966	
	Number	Percent	Number	Percent
Total	201	100.0	207	100.0
Diploma or associate degree	166	82.6	186	89.9
Baccalaureate	13	6.5	10	4.8
Master's in nursing	—	—	—	—
Master's in another field	—	—	—	—
Doctorate in nursing	—	—	1	0.5
Doctorate in another field	—	—	—	—
Not reported	22	10.9	10	4.8

Source: Appendix tables G-43 and G-44.

largest field. That year there were only 111 nurses in private practice in South Dakota.³⁶ They comprised 5.4 percent of all active registered nurses in the State.

In 1966, 15 percent of South Dakota's employed private duty nurses reporting age were under 30, and 50 percent were between 30 and 49 years. Only 32 percent were over 50 years of age.³⁷ In the United States as a whole, 8.8 percent of the employed private duty nurses reporting age were under 30, and 36.5 percent were between 30 and 49 years. It would seem that private practice attracted younger nurses in South Dakota than in the Nation as a whole. The proportion of married private duty nurses in South Dakota also appeared to exceed the national average. In 1966, the proportion of private duty nurses who were married or had been married at some time was 87 percent for South Dakota and 79 percent for the Nation.

For the Nation, some indication of the demands for and the availability of private duty nursing services is revealed in the activity reports of private duty nurse registries affiliated with or approved by State or district nurses' associations. These reports have indicated a downward trend since 1958 in the number of registrants, the number of calls received for private duty nurses, and the number and percent of calls filled. For South Dakota, the trends in the number of requests for private duty nurses and the ability to fill calls are not known. There are no registries sponsored by the South Dakota State Nurses' Association; such information would have to be obtained from individual hospitals that have their own arrangements for contacting nurses for private duty as they are needed.

As is true for all other nurses, the role of the private duty nurse is changing because of new developments in treatment and the increased specialization of nursing practice. Recovery rooms and intensive care units are, to some extent, reducing the demand for private duty nurses. Different levels of private nursing practice are beginning to be recognized as general and clinical specialty private practice. Some hospitals employ private duty nurse specialists in the recovery and intensive care units. Nonnursing personnel and assistants to nurses are beginning to be accepted for employment in a custodial capacity when licensed nursing personnel are not available.

Of the 111 registered nurses employed in private

practice in South Dakota in 1966, 64 indicated their area of clinical practice. Forty-one reported they were engaged in general practice, and seventeen specialized in or selected medical and/or surgical cases.³⁸ Three were in obstetrics, two in pediatrics, and one in psychiatric nursing.

As to educational preparation, 82 of the 111 private duty nurses reported that their highest level was a diploma or associate degree.³⁹ Seven nurses had a baccalaureate and one a master's degree. Twenty-one did not report their educational preparation. The educational preparation of South Dakota's private duty nurses has changed little since 1962, at which time it exceeded the level of preparation of private duty nurses included in the 15-State special inventory study of educational preparation.⁴⁰

The extent to which licensed practical nurses and unlicensed personnel are used for private duty in South Dakota has not been determined. Some "sitters" are believed to be used in hospitals in Sioux Falls, which may indicate a lack of availability of licensed nursing personnel. The greatest concerns in the use of sitters are: (1) the failure of hospital personnel, patients, and their families to differentiate between sitters and nursing personnel; and (2) the sitters' assumption of nursing care responsibilities.

To assure good patient care, there should be an assessment of practices related to the kind of private duty personnel used for the kind of nursing care needed, as well as the supervision that nonprofessional personnel receive. Many factors contribute to the availability of private duty nurses and to inequities in the utilization, case assignment, and nursing functions being performed by self-employed persons in nursing. Lack of opportunities for continuing education, which thus affects an individual's security in practice areas; the shifts of work required; the lack of fringe benefits and economic security—these are but a few of the factors suggested as contributing to the decreasing attraction of nurses to this field.

Occupational Health Nurses

As a predominantly agricultural State with slow industrial development, South Dakota has had few nurses employed in occupational health work. In 1949, five nurses were so employed. In 1966, there were six. It is believed that these nurses worked in the larger industries—Armour & Co., John Morrell & Co., Raven

³⁶ See appendix table G-16.

³⁷ Unpublished data from the 1966 Inventory of Registered Nurses, 1968.

³⁸ See appendix table G-61.

³⁹ See appendix table G-44.

⁴⁰ See appendix tables G-42 through G-44.

Industries, and the Homestake Mine. Of the six nurses, five were between the ages of 40 and 65 years of age, and one was under 30. Four were married. Their highest level of educational preparation was a diploma. A national study of occupational health nurses was conducted in 1964 and included South Dakota.⁴¹ However, because of the small number of nurses concerned and of those who responded, data were inconclusive regarding other characteristics of occupational health nurses and their work places.

South Dakota has a vigorous program to attract industry to the State, but little detailed information is available about the needs for occupational health nurses. Future needs will depend not only upon the rate of growth of industry but also upon the incentives for all employers to maintain in-plant and employee health programs. The Employment Security Department of South Dakota estimated that in 1965 there were 149,000 nonagricultural workers; of these, manufacturing establishments employed 13,000 and non-manufacturing establishments employed 136,000 (7). The South Dakota Industrial Development Expansion Agency has supplied information showing that, in towns of over 500 population, there were 908 known manufacturers and/or processors in 1965 (8). Most were thought to be small. When nursing needs and resources were surveyed in South Dakota in 1950, it was recommended that future goals include a plan for hourly nursing service for the State's many small working establishments. It was recognized that if workers were to be provided with occupational health services, public health nursing agencies would be required to provide these services as the supply of public health nurses became more adequate.

Career Incentives

Career incentives are increasingly being recognized as primary factors in recruiting and retaining nursing personnel. Many positions in nursing held by various categories of nursing personnel are terminal, do not recognize clinical knowledge and competence, and provide no means for career development. Registered nurses tend to be rewarded for increasing administrative responsibility rather than for education or clinical development. These conditions may contribute to turnover and job dissatisfaction and may enlarge the pool of inactive nursing personnel. On the other hand, the career ladder concept has been proposed to make it possible to advance proficiency and to move

to higher level positions. Clear avenues for career development of nursing personnel could reduce unnecessary attrition and attract more youth to careers in nursing.

Besides formal academic study beyond basic preparation to promote career development, inservice education programs are needed to continually update and expand knowledge and to keep skills and competence current. Employing agencies have responsibility for providing inservice education for their nursing personnel, and for supporting and supplementing other measures for developing nursing leaders, clinicians, and practitioners.

Little detailed information is available on the content, nature, effectiveness, or extent to which the health agencies and institutions in South Dakota offer inservice education programs for their staff. About one-half of the hospitals and two-thirds of the nursing homes are reported to need inservice education programs. Six of the larger hospitals have inservice education directors. These include Sioux Valley, McKennan, veterans' hospitals, Methodist, St. John's McNamara, and St. Luke's.

It is assumed that the State's small health facilities could neither afford nor utilize a full-time person for inservice education. And because of the work setting, the employers of private duty, office, and occupational health nurses perhaps offer few opportunities for inservice education. However, the State's institutions of higher education, professional associations, health agencies, and health-related organizations do sponsor and participate in educational meetings, workshops, institutes, and short-term courses for nursing personnel. The small hospitals and health facilities are said to actively avail themselves of these opportunities for providing learning experiences for their staff, and many of them pay the costs for personnel to attend these sessions. The need to travel long distances is not seen as a deterrent. The adequacy of these programs, however, and the extent to which they help meet specific job requirements and reach nursing personnel in need of these programs are not known.

Salaries and Fringe Benefits

No comprehensive, up-to-date information is available on salaries, increments, and fringe benefits offered by the employers of South Dakota's nursing personnel. Higher salaries in other States are reported to attract South Dakota's nursing personnel. However, turnover rates for the health services and the extent to which they are influenced by salary scales are not

⁴¹ See appendix tables G-89 and G-90.

known. It is believed that veterans' hospitals have few recruitment problems because of their relatively higher pay. The State Nurses' Association is known to be actively working to raise the minimum salary of beginning nurses, although it is not considered feasible for South Dakota to attain the national minimum recommended by the American Nurses' Association.

Data available on the salaries of public health nurses in 1966 showed that, while starting salaries tended to be slightly lower, the salary range for staff nurses compared favorably with the U.S. average and with that of South Dakota's bordering States. (See table 54.) Differentials by position level were also comparable. Lack of financial resources, however, has been previously cited as limiting the employment of additional public health nurses. Whether or not burdensome workloads cause job dissatisfaction is only a conjecture.

South Dakota has only recently enacted a retirement program for its official government employees. The merit employment system had previously included sick leave, vacations, and a voluntary group insurance program for employees. The lack of a retirement program in the past was considered a deterrent to

attracting and retaining personnel for the State government's health system.

Devising measures to equate the demands for nurses and to improve the quality of nursing care will require thorough study of these factors: Interrelationships of opportunities for career development, utilization of nursing personnel, working conditions, job satisfaction, employer-employee relationships, fringe benefits, and economic security.

Table 54.—Average monthly salary range for public health staff nurses; United States, South Dakota, and bordering States; 1966

State	Monthly salary range
United States	\$442-568
South Dakota	380-575
Bordering States:	
North Dakota	365-595
Iowa	400-550
Minnesota	450-547
Nebraska	400-540
Montana .....	...
Wyoming .....	...

Sources: "Salaries Paid by Public Health Nursing Services—1966." In *Nursing Outlook*, Dec. 1966, p. 60. Also, unpublished data supplied by Public Health Service Regional Office, Kansas City, Mo.

Chapter 9

Nursing Education

Initial Programs for Preparing Registered Nurses

The development and trends in nursing education in South Dakota closely parallel those for the Nation as a whole. There was a gradual increase in the number of programs of initial education for registered nurses from 1907, when the first school opened, until 1931; then a gradual decline to 1960, followed by an upturn. The accelerated movement of nursing education programs into institutions of higher education began in 1960.

On October 15, 1966, there were 11 State-approved programs of initial education for registered nurses in South Dakota.¹ Three were baccalaureate programs, two were associate degree programs, and six were hospital-based diploma programs. All were preparing students to become eligible for licensure as registered nurses. Since 1960, one diploma program has closed and two diploma programs admitted their last class in 1965, leaving only four diploma programs that admitted students in the academic year 1966-67. The two associate degree programs and two of the baccalaureate programs opened between September 1961 and September 1966.

The State has no public junior college system. The State university system is considered more than adequate for higher education needs. New nursing programs are being placed in privately supported junior colleges and public and privately supported senior colleges and universities.

As to distribution of initial programs of education for registered nurses, their availability in different areas of the State corresponded fairly well with population concentrations. Ten of the schools were located in seven cities in the eastern half of the State, which comprised over 82 percent of the population. The heavily populated Sioux Falls metropolitan area had three of the 10 schools. The 11th school was in Rapid City, in the far western part of the State. There was

no initial nursing program for registered nurses in the sparsely settled central area, which comprised about 3.6 percent of the total population of the State. In that area is located the State capital, Pierre, with slightly more than 10,000 residents.

Admissions, Enrollments, and Graduations

Of greater importance than the number of programs are the numbers of individuals admitted to, enrolled in, and graduated from programs of nursing. South Dakota's admissions, enrollments, and graduations reflect the movement of nursing education into the general system of education. Although the number of schools has remained essentially the same, the number of admissions, enrollments, and graduations has fluctuated as schools opened and closed. In general, however, in the past 10 years the number of admissions increased 87 percent—from 251 in 1957 to 471 in 1966. (See table 55.)

Because of the smaller number of schools in South Dakota and the bordering States (except Minnesota), the movement of nursing education into institutions of higher education has been more rapid there than in the Nation as a whole. As shown in figure 9, in the academic year 1965-66, for the United States, 64 percent of the admissions were to diploma programs, almost 22 percent to baccalaureate programs, and

Table 55.—Number of admissions to schools of nursing for registered nurses; South Dakota; 1957-58, 1960-61, and 1965-66

Academic year	Admissions			
	Total	Diploma	Associate degree	Baccalaureate
1957-58	251	174	0	77
1960-61	299	244	0	55
1965-66	471	228	43	200

Source: Appendix table H-4.

¹ See appendix tables H-1 and H-2.

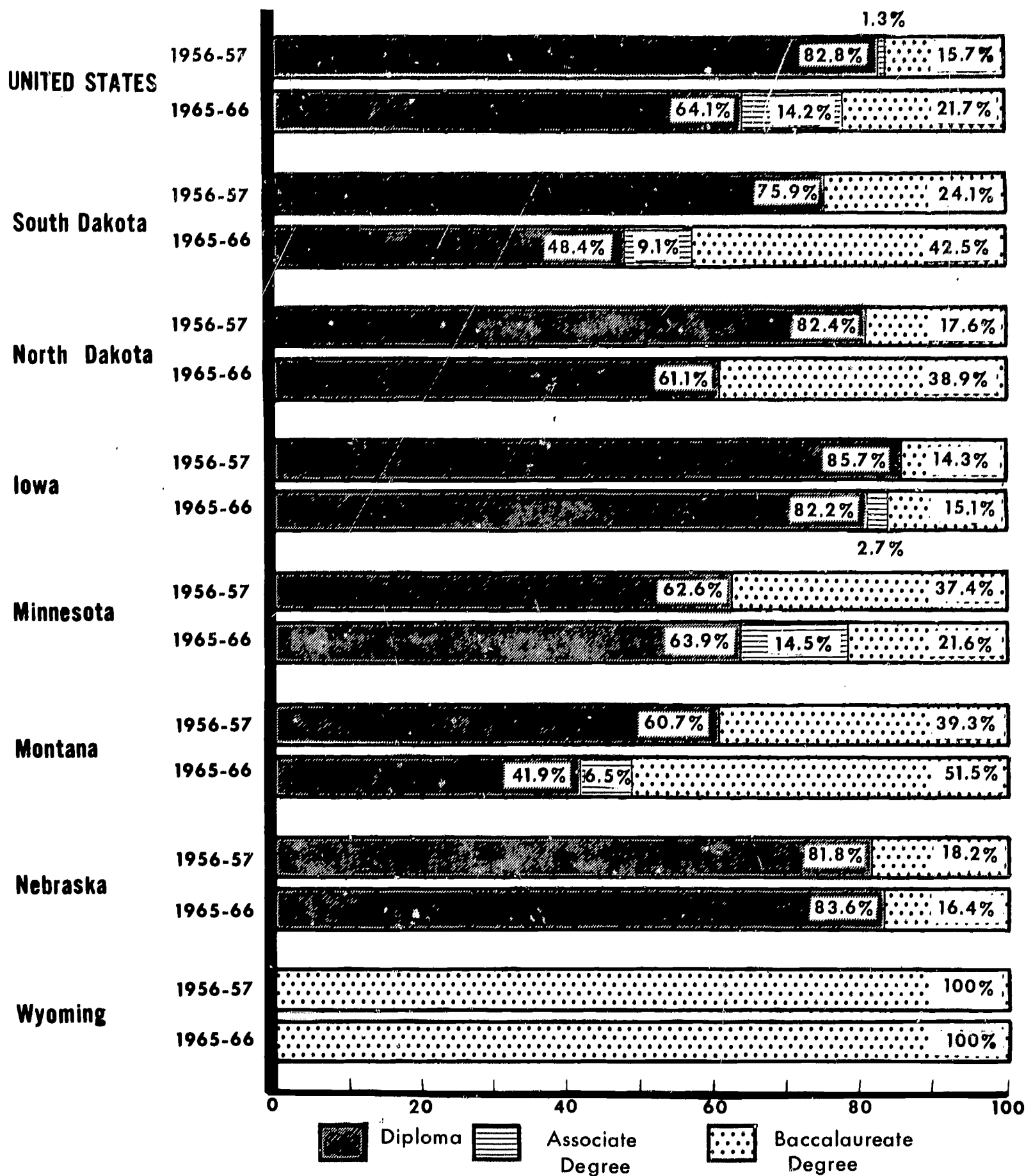


Figure 9.—Admissions to programs of initial education for registered nurses, by type of program; United States, South Dakota, and bordering States; 1956-57 and 1965-66

over 14 percent to associate degree programs. In the same year, for South Dakota, the corresponding figures were over 48 percent to diploma programs, about 43 percent to baccalaureate programs, and 9 percent to associate degree programs. These proportions of admissions to degree programs have undoubtedly in-

creased further since 1965-66 because two of the diploma programs admitted no students after 1966.

Total enrollments of students in the 9-year period, 1957-66, showed a gain of 26 percent, or 210 students. Diploma programs had yearly losses in enrollment for most years after 1960—down from 684 in 1960 to 445

Table 56.—Number of enrollments in schools of nursing for registered nurses; South Dakota; 1957-58, 1960-61, and 1965-66

Academic year	Enrollments ¹			
	Total	Diploma	Associate degree	Baccalaureate
1957-58	789	598	0	191
1960-61	871	684	0	187
1965-66	999	445	105	449

¹ As of October 15 of year stated.

Source: Appendix table H-4.

in 1965. (See table 56.) Offsetting this decline somewhat were increases in the number of enrollments in associate degree and baccalaureate programs. Associate degree enrollments multiplied more than five times since the first programs opened in 1961. Baccalaureate enrollments increased almost one and one-half times from 1960 to 1966.

Although admissions and enrollments *increased* between 1957 and 1966, the number of graduations—which are the actual potential recruits for employment in nursing services in South Dakota—*decreased* 22 percent. Diploma programs, historically and still in 1966, supplied the majority of registered nurses. Almost two-thirds of the graduates in 1966 were from diploma programs. (See table 57.) The number of students completing baccalaureate and associate degree programs had increased very little since 1957. The decrease in total graduations should begin to be offset in the years immediately ahead as the new degree programs graduate their first classes, provided these programs can reduce their attrition rates.

Table 57.—Number of graduations from schools of nursing for registered nurses; South Dakota; 1957-58, 1960-61, and 1965-66

Academic year	Graduations			
	Total	Diploma	Associate degree	Baccalaureate
1957-58	231	182	0	49
1960-61	194	171	0	23
1965-66	188	122	11	55

Source: Appendix table H-4.

Attrition From Schools of Nursing

The number of graduates from South Dakota's nursing schools is seriously affected by a high attrition

rate for baccalaureate and associate degree programs. For the Nation as a whole, about one-third of the students who enter nursing schools do not complete the program. This proportion has remained about the same for 20 years. The attrition rate in 1965-66 for diploma programs was 30 percent; for associate degree programs, 37 percent; for baccalaureate programs, 41 percent.

The attrition rate for nursing students admitted to South Dakota's baccalaureate and associate degree programs has been over 50 percent since 1960, with little evidence of a declining trend. In these programs, some students change their career plans and remain in the same college or university, with a minimum loss of time and credit. Except for the academic year 1961-62, below-average rates of attrition from diploma programs have prevented more serious losses in the total number of nursing graduates. For the years 1960 to 1966, diploma programs had an average attrition rate of 18.2 percent.

The South Dakota Board of Nursing collects data on the reasons for student withdrawals from nursing programs. For the years 1964-65 and 1965-66, the primary reasons given were change in baccalaureate major, marriage, health, change of school, inability to adjust to nursing, entering a convent, and other (1). Of interest is the fact that academic failure has not been given as a reason; yet that is frequently reported with high priority in other jurisdictions.

Further study of the circumstances that contribute to the higher attrition rates in South Dakota's degree programs seems indicated. Ways should be found to retain more students. An evaluation might include considering the relationship of attrition to admission criteria, counseling and recruitment activities, selection and qualifications of applicants, their career aspirations, cost of clinical practice and distance from clinical practice areas, and the abilities and attitudes required for completing programs.

Accreditation of Educational Programs

The nursing profession places a high value on professional accreditation of programs to meet the demand for increasing numbers of nurses and to assure that nursing services are of high quality. Programs in nursing that are nationally accredited attract, retain, and graduate the largest number of students (2, pp. 8-14). According to the National League for Nursing, a higher proportion of graduates of nationally accredited programs pass the State licensing examination and are admitted to practice. Accredited programs have better prepared faculty. In addition, as

the total enrollment in diploma programs increased, the annual cost per student to the institution offering the program decreased and the greater the likelihood was that the program was accredited (3, pp. 9-11, 17, 27, 28).

As of January 1, 1967, six of South Dakota's 11 initial nursing education programs were accredited by the National League for Nursing.² One baccalaureate program and one associate degree program had not been in existence long enough to graduate their first class, which is a requirement for attaining accreditation. The baccalaureate program, however, had reasonable assurance of accreditation. The one diploma program not accredited also had reasonable assurance of accreditation. One baccalaureate program and one associate degree program were not accredited.

In the academic year 1965-66, programs in the Nation accredited by the National League for Nursing admitted 73.4 percent of all students entering programs of initial education for registered nurses. During the same period, accredited programs in South Dakota admitted 349 students, or 74.1 percent of the State's total admissions.

South Dakota had a smaller proportion of students admitted to accredited programs than did any of her bordering States.³ The rate of transition in nursing education will affect these proportions. Data reported above exclude those admissions to programs not yet accreditable and those with reasonable assurance of accreditation, as well as those which have not applied and those denied accreditation.

From September 1965 to August 1966, about 74 percent of the students graduating from schools of nursing in the Nation were from accredited programs. South Dakota's comparable proportion was 68.6 percent (4, pp. 85 and 86). This figure excludes one accredited diploma program that did not report its number of graduates. According to the South Dakota Board of Nursing, students from programs not yet accredited tend to perform well on licensing examinations. Data from the Board indicate that a high percentage of all students who complete programs in South Dakota and take the licensing examination in the State pass on first examination. Since 1958, this proportion has tended to average in the 90th percentile.

For several years, 100 percent of the students in South Dakota completing degree programs passed on first examination. Since 1963, however, this propor-

tion has declined, and in 1966 it more closely approximated the U.S. average of 86 percent for all types of programs (5, p. 57). The proportion of graduates from South Dakota's diploma programs passing first-time licensing examinations has also tended to be higher than the national average but has fluctuated since 1962.

South Dakota uses, for licensure, examinations prepared and scored by the Evaluation Service of the National League for Nursing. Information from the Board of Nursing gives further indication of the standards for quality of the education of graduates of South Dakota's nursing schools. The average mean scores attained by all South Dakota candidates who wrote the first-time examination during the years 1964, 1965, and 1966 ranked well above the national average in all parts of the examination except medical nursing (1, p. 14).

Admission Requirements and Educational Criteria

The application of appropriate criteria to attract, hold, and adequately train nursing students is necessary if schools of nursing are to effect a difference in the registered nurse supply. The admission policies of South Dakota's schools have changed considerably since 1950, when four of seven schools did not admit men or married women. In 1966, seven of the nine schools admitting students admitted men, and all of the nine schools admitted married women.

Diploma programs are reported to select their students from the upper third or half of their respective high school classes. They use the pre-nursing tests prepared and scored by the Evaluation and Guidance Service, National League for Nursing, as one means of selecting applicants.

Students entering baccalaureate programs must be eligible to matriculate in the college or university. Some degree programs in South Dakota report that they are getting more qualified applicants than they can accept, reflecting the increasing number of high school graduates who are college bound. With increased occupational choices and career opportunities for women, some schools report that applicants are fewer in number and poorer in quality or that it takes longer to fill enrollment goals in terms of quality of students. Diploma schools are not, it is believed, filling their classes, and there is concern that some diploma schools may have lowered their requirements in order to maintain enrollments.

Little comprehensive information is available regarding the actual capacity of the State's nursing schools in terms of total spaces, the schools' ability

² See appendix table H-13 and H-14.

³ See appendix table H-15.

to utilize them, the deterrents to quality education, or the schools' potentials for improvement and expansion.

South Dakota has been able to maintain an average of one instructor for 10 students, but suffers from a shortage of prepared faculty members in all types of programs. The qualifications of faculty currently teaching and of faculty required for vacant positions need to be ascertained. Improvement in the quality and quantity of educational programs depends greatly on an adequate supply of qualified educators.

The need for, availability of, and use of a variety of health facilities for educational experience for students are important considerations, constituting some of the critical factors affecting the quality of education and the ability of programs to expand. In South Dakota, health facilities offering selected services for student experience and those having an adequate daily patient census for instruction for all students are limited in number. For example, only two hospitals in the State have an adequate census to offer experience in pediatrics. Most diploma programs affiliate with other schools for use of clinical facilities, and secure theoretical instruction in science courses in nearby colleges. Yankton State Hospital is used by schools for laboratory experience in psychiatric nursing; one school, however, uses facilities in Missouri.

All collegiate programs seek opportunities for laboratory experience for their students in distant communities or out of State, and faculty members responsible for clinical subjects are required to accompany students to each agency. Veterans' hospitals are used for experience in long-term care. Tuberculosis nursing is available through the Indian Health Service. Out-of-State affiliations for clinical instruction in medical-surgical nursing, outpatient services, pediatrics, and public health nursing are provided in Colorado, Minnesota, Nebraska, and Wisconsin. Clinical facilities for public health nursing are being developed within the State through several special projects employing techniques for coordinating resources for educational experience in comprehensive family- and patient-centered public health nursing services. The need for clinical experience facilities that are proximal to educational institutions or agencies and the need for adequately prepared faculty are major concerns confronting nursing education in South Dakota.

Recruitment Potential for Nursing Education

Nursing continues to be predominantly a woman's occupation. The number of female high school graduates has been steadily increasing in the Nation, but

competition from a variety of occupations and professions for these graduates has also increased. Each year a higher percentage of female high school graduates seek higher education. Between 1955 and 1965, the number of female enrollments in institutions of higher education in the United States increased over one and one-third times.⁴ However, programs in initial education for registered nurses, in general, have realized little of these gains. Although enrollments in all types of these nursing programs increased 15 percent, this proportion—in relation to population growth and the rise in the number of high school graduates—is viewed as a loss in nursing's attraction as a career. In the academic year 1964-65, an estimated 5 percent of the previous year's female high school graduates entered nursing programs—a decline from 6.7 percent in 1952.

South Dakota has experienced a similar situation, with steady increases in the number of female high school graduates and of female enrollments in institutions of higher education (136 percent between 1955 and 1965). However, South Dakota has only a 12 percent increase in enrollments in programs of initial education for registered nurses, a slight difference from that of the United States in general. (See figure 10.) The proportion of female high school graduates admitted to programs of initial education for registered nurses in 1964-65 was 9.7 percent, a ratio above that of the U.S. average but one that had changed little since 1960. Nursing can no longer comfortably recruit enough young people. Therefore, recruitment efforts and practices should be investigated and analyzed so that emphasis can be placed on recruitment in relation to the number of nurses needed.

Nursing schools in South Dakota carry out recruitment activities as part of their school programs. Such activities include summer aide programs and "candy strippers" (high school students who volunteer their services in hospitals). The extent and nature of these activities seem to depend upon the particular nursing school's enrollment experiences and the rate at which applicants are being received for the entering class. There are some Future Nurse Clubs in the State. These clubs are linked with medical auxiliaries in their endeavors in nursing recruitment. The Tuberculosis and Health Association has had a long-standing interest in recruitment for health careers, including nursing. That association provides funds for career pamphlets and films for Future Nurse Club activities. The South Dakota League for Nursing has a Career

⁴ See appendix table H-19.

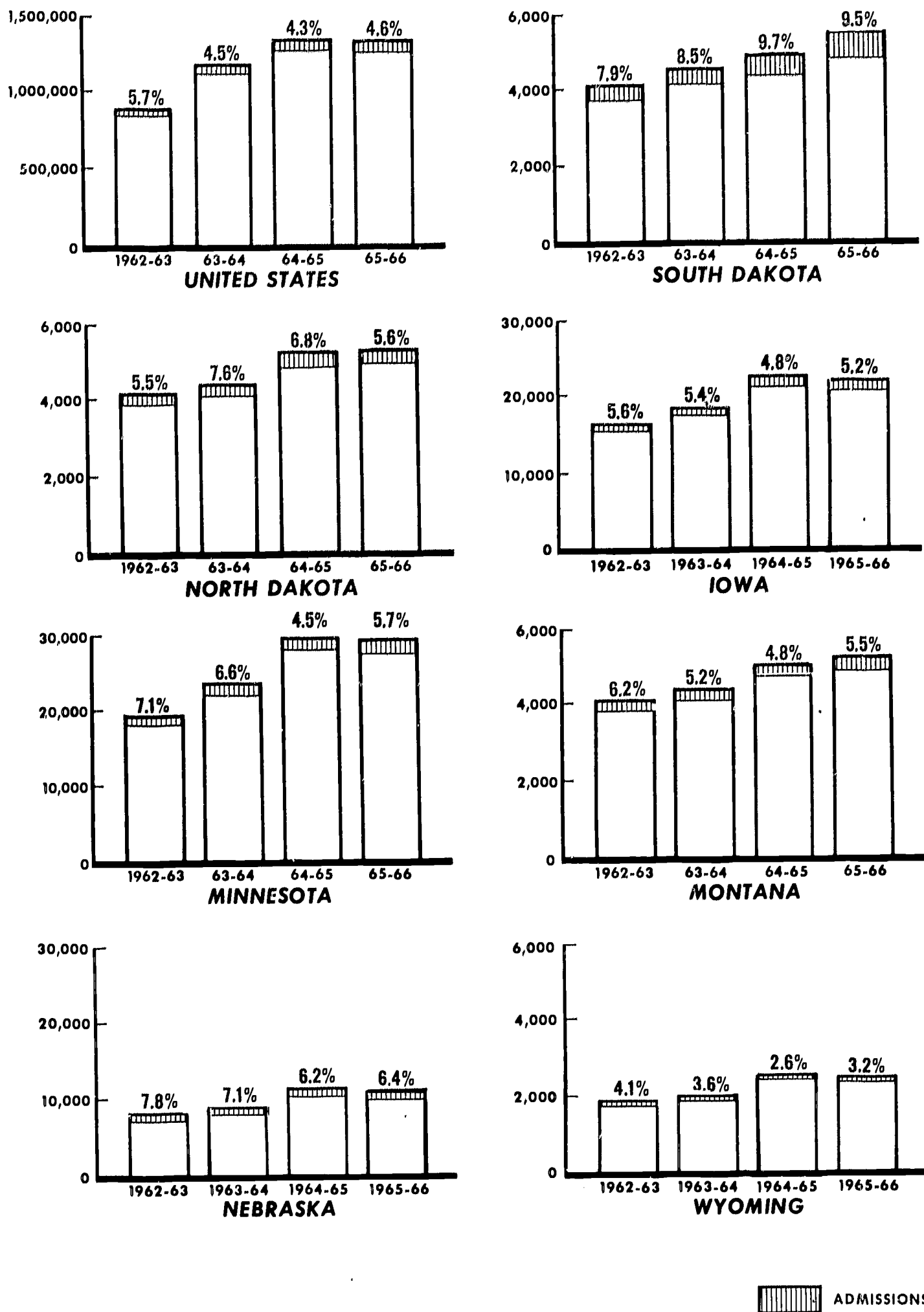


Figure 10.—Estimated number of female high school graduates and number and proportion admitted to initial nursing education programs for registered nurses; United States, South Dakota, and bordering States; 1962-66

Committee. It works closely with the State Student Nurses' Association, develops and prepares recruitment materials, and maintains an exhibit at the State Fair.

The extent to which coordinated recruitment programs exist with local high schools and colleges is not known, but beliefs that prevail in many areas of the country have been expressed as relating also to South Dakota. High school counselors are said to need a better orientation to nursing as a career. Because of a lack of understanding and knowledge about types of nursing education programs, the abilities needed, and the academic requirements for entering the various nursing programs, counselors may be turning girls away or discouraging them from going into nursing. A need is seen for a coordinated recruitment program that would reduce confusion about types of nursing education programs. Such a recruitment program would also refer interested applicants to the level of nursing education programs for which they are best prepared academically. This might help to decrease attrition in schools of nursing.

The contribution that current recruitment activity is making in reaching possible candidates and interesting them in careers in nursing cannot be assessed. Nursing leaders in South Dakota suggest that new approaches in recruitment are needed, and that some should be aimed at men and minority groups. As schools of nursing move out of hospitals and into higher educational institutions, it is conceivable that more men might be attracted into nursing schools. The number of men being admitted to nursing schools in South Dakota is not known. For the Nation as a whole, the ratio of men in initial nursing education programs was 1.8 percent of admissions and 1.7 percent of graduations (5, p. 109). Few men enter diploma programs, but a trend toward proportionately higher numbers of men entering associate degree programs is being noticed.

The Indian population is a recruitment pool for nursing personnel. However, barriers exist for young people on reservations in choosing careers and furthering their education. Some of these barriers were revealed during interviews held in South Dakota. Most of the Indians on reservations have little or no concept of career opportunities. It is difficult for them to meet the educational requirements for admission to post-high school educational programs. When tested, they have the inherent ability required for advancing their education but they are not equipped to use this ability. Also, adjustment to life off the reservation further inhibits their educational endeavors.

Indian girls have difficulty meeting the educational requirements for admission to schools of nursing. Yet Indian youth 18 to 35 years of age are eligible for scholarship support for education under Public Law 84-949, the Indian Employment On-or-Near Reservations Act. Benefits include tuition, books, and all related educational costs for a 24-month period, subsistence and clothing allowances, health insurance coverage, travel enroute to educational facilities, support for 1 month following graduation, and 3 months' health protection coverage.

Vocational guidance and counseling services are also covered under the law. To qualify for nursing education under the program, applicants have to pass the general aptitude tests and the National League for Nursing qualifying examination, the admission criteria of schools. A number of South Dakota Indian practical nurses have been trained at the Los Angeles General Hospital, but only two Indian girls are known to have received education for registered nurses under the program.

Special recruitment and developmental, experimental, or pilot programs have been designed to meet the educational needs of the disadvantaged in order to prepare them to enter nurses' training. These programs are being carried out in several areas of the country. They have been funded through private and Federal grants. Such programs, if made available to the Indians, might encourage more young people to enter nursing at some level, and also might fit them into the particular program that best uses their abilities.

The extent to which South Dakota's youth are attracted to other States for education is of concern because of the potential loss of educated manpower in those who do not return to work in the State. Information gathered by the Office of Education in 1963 shows that about 3,650 South Dakota residents were working toward degrees in educational institutions in other States. About one-fourth of all South Dakota residents enrolled in institutions of higher education were in colleges and universities out of State.⁵ The number of out-of-State students, however, enrolled in South Dakota's institutions of higher education was greater than the number of South Dakota residents enrolled in like institutions in other States. Comparable figures on nursing student migration are not available.

No information is routinely collected on the home residence of students in nursing schools and the numbers who are educated in their own State or elsewhere.

⁵ See appendix table H-21.

Such data would have to be obtained through special studies and from the schools, since most State boards of nursing no longer maintain lists of admissions to schools of nursing by name and residence. Two studies conducted in South Dakota have information on this subject pertinent for planning. One study, initiated in 1958, concerned "The Patterns of Nursing Education in South Dakota" (6, p. 18); the other is a followup of students after graduation (7, pp. 18, 19). These studies contain important trend data, and the Council on Planning for Nursing Resources is considering updating such information, since the factors and geographic areas attracting students to particular schools of nursing may be changing.

Costs and Funds for Education of Registered Nurses

In the past 15 years, the student of nursing has assumed an increasing share of and responsibility for the cost of nursing education. The inflationary nature of the economy, changes in health care and new demands on nursing, the continuing and growing awareness of the nurse shortage, and the different types of developing educational programs for preparation of nurses—all of these factors have influenced the financing of nursing education. The need for financial aid for students in nursing education programs may affect recruitment as well as attrition after admission to schools of nursing. Some States report the greatest financial need is in preparing graduate nurses for leadership positions. In a State where the median family income in 1959 was \$4,251 a year, all types of aid and funds available for students should be considered, also the adequacy of those funds.

Tuition and Fees

From data computed for 456 accredited diploma programs, in 1966 the average mean cost of tuition and fees for completing the program was \$1,163. The average mean cost for 146 accredited baccalaureate programs was \$2,887.⁶ The cost of required tuition and fees for the 3-year diploma education in three schools in South Dakota in 1966 ranged from \$979 to \$1,685 (8, p. 37). This did not include the cost of room and board, transportation, or supplies. The like cost of the baccalaureate student's education at the South Dakota State University in Brookings in 1967 was \$1,548 for a State resident and \$3,664 for a nonresident (9, p. 14).

For the private college, tuition and fees in 1967 for the 4-year baccalaureate program at Mount Marty amounted to \$2,600 (10, pp. 21, 22); at Augustana College, \$6,000 (11, p. 43). Room rent for all schools ranged from \$130 to \$300 a year, and board averaged \$425. Uniforms needed before clinical laboratory practice cost approximately \$85. Travel to and from clinical institutions is borne by students in South Dakota schools, and can be quite costly since many of the institutions are located out of State.

Scholarships for Nursing Education

Most schools have some kind of funds available for their students. The South Dakota University at Brookings lists eight sources of scholarships and awards open in nursing, granted through the University. Augustana has special scholarships for financial aid to student nurses. Other scholarships for nursing education in South Dakota are sponsored by veterans' organizations, the Knights of Columbus, and other service clubs. The Sioux Falls Altrusa and Rotary Clubs offer student loans. Some of the small rural hospitals grant a scholarship of \$250 a year for a commitment to work for 2 years after graduation.

During fiscal years 1965 and 1966, about \$1.5 million went to South Dakota students and schools under the Nurse Training Act of 1964. In 1966, all eight schools eligible to participate in the student loan program on the basis of being accredited or having been given reasonable assurance of accreditation did so (12). (See table 58.) In 1965, only seven of nine eligible schools had participated. Over \$80,000 was provided in loans for 46 student borrowers in 1965 and 154 in 1966. The number of borrowers in the two eligible baccalaureate programs participating both years increased almost five times between 1965 and 1966, and in the later year almost equaled the number in six participating diploma programs. About 16.8 percent of the total students enrolled in accredited programs and programs with reasonable assurance of accreditation had loans under the Nurse Training Act in 1966.

To widen the base from which young men and women are recruited into nursing, the Allied Health Professions Personnel Training Act of 1966 established a new 3-year program of opportunity grants for nursing students who had exceptional financial needs and who would otherwise be unable to pursue a course in nursing. That Act authorized contracts to develop means of encouraging young people to enter the nursing profession. In the first year, no appropria-

⁶ Computed by the Manpower Analysis and Resources Branch, Division of Nursing, from school catalog data collected by the National League for Nursing.

Table 58.—Distribution of student loan funds under the Nurse Training Act, South Dakota, fiscal years¹ 1965 and 1966

Type of program	Number of schools				Number of borrowers			Amount of loans	
	Eligible		Participated		Total	1965	1966	1965	1966
	1965	1966	1965	1966					
Total	9	8	7	8	200	46	154	\$16,010	\$70,968
Diploma	7	6	5	6	108	30	78	8,625	37,602
Associate degree	0	0	0	0	0	0	0	0	0
Baccalaureate	2	2	2	2	92	16	76	7,385	33,366

¹ Fiscal year July 1 through June 30.

Source: U.S. Dept. of Health, Education, and Welfare. *Nurse Training Act of 1964, Program Review Report*, PHS Pub. 1740, issued Dec. 1967.

tions were awarded to nursing schools in South Dakota to participate in the program.

Other Financial Aid for Nursing Education

Over the years, schools of nursing have required considerable financial assistance in establishing, expanding, and improving their facilities. Funds for construction costs have not been available completely from their own resources. Assistance has been provided to diploma programs in South Dakota under the Hill-Burton program and through loans under the Federal Housing Authority for residences for nursing students. Four construction grants, authorized under the Nurse Training Act of 1964, have been awarded to South Dakota schools since July 1, 1965. The Federal grant share was \$1.3 million. The construction will increase the capacity of schools of nursing by 205 first-year places, and will maintain enrollment places in improved and expanded facilities for 516 students.

To defray costs incurred because of increased enrollments, five diploma programs received Federal funds in fiscal years 1965 and 1966. These funds amounted to \$39,750. (See table 59.)

South Dakota has had two project grants under the Nurse Training Act aimed particularly at developing and strengthening clinical facilities within the State. Augustana College and the South Dakota State University were awarded these grants in the areas of public health and psychiatric nursing, respectively.

For registered nurses in its baccalaureate program, the South Dakota State University provides traineeships under the Nurse Training Act and the Public Health Traineeship Program for positions in supervision, administration, teaching, and public health nursing. These traineeships cover the last 12 months

of full-time study toward completion of the baccalaureate. Additional financial assistance to cover a longer period of training would permit more graduate nurses to enter and complete programs for upgrading preparation for present positions and advancing their education for filling leadership positions.

Education for the Graduate Nurse

South Dakota has a priority need to increase the opportunities for registered nurses to become prepared at the baccalaureate level to engage in professional practice and to provide candidates for graduate education. Today's concepts of nursing practice and nursing education hold that the baccalaureate is the first professional degree and the mode of entry into professional nursing practice. The baccalaureate broadly prepares nurses to give direct care in settings where care is complex, and to plan, implement, direct, and evaluate nursing care. Nurses so prepared have roles in improving nursing practice and in coordinating nursing and other health care.

Table 59.—Payments to diploma schools, and conditions of participation; South Dakota, fiscal years¹ 1965 and 1966

Participating conditions	1965	1966
Number of eligible programs	6	5
Number of programs receiving payment	4	5
Increase in enrollment	30	33
Federally sponsored students	29	67
Amount paid	\$14,750	\$25,000

¹ Fiscal year July 1 through June 30.

Source: Division of Nursing, Public Health Service; unpublished data.

Insufficient funds, home and family responsibilities of married nurses, and the inaccessibility of educational training facilities and programs are most commonly reported as hindrances in getting post-basic preparation. In 1966, only the South Dakota State University at Brookings admitted registered nurses for attainment of a baccalaureate. Since 1957 this program and the affiliated program at Augustana College, which was terminated in the spring of 1966, enrolled no more than 30 students a year. Graduations have numbered three to eight a year. Many registered nurses work while attending college, although the trend is for more to go to school full time. The majority of graduate nurse students enrolled in baccalaureate programs in South Dakota have attended full time.⁷ The larger percent of full-time students and fewer part-time students than the national average may be related to the accessibility of the program for nurses pursuing academic preparation.

Graduate Education for Leadership in Nursing

Following the acquisition of the baccalaureate, graduate education at the master's and doctorate levels includes specialization and the development of critical understanding for leadership positions. Graduate level programs prepare clinical specialists; administrators for institutional and community nursing services and schools of nursing; supervisors, consultants, and teachers for these programs; and nurses for research. South Dakota has no nursing education program above the level of the baccalaureate. The closest master's degree programs are in Minnesota, Iowa, and Montana. Nurses migrate to many States for educational preparation. Ways and means to provide graduate study for South Dakota's nurses need to be assessed if the State is to have an adequate number of nurse leaders to assure quality nursing services for the rapidly changing and expanding health care system.

Education of Practical Nurses

Practical nursing education in the Nation has been increasing at a rapid rate because of the growing need and desire for the services of practical nurses and the availability of Federal funds to assist in setting up programs and providing stipends for students while they study. Although large numbers of practical nurses are presently being prepared, the demand still exceeds the supply and probably will continue to do so.

⁷ See appendix table H-26

On October 15, 1966, South Dakota had three State-approved programs preparing students eligible to become licensed practical nurses. These schools were located in Sioux Falls, Mitchell, and Pierre. The possibility of a fourth program needed for the Rapid City area was being considered. Two programs are under the administrative control of vocational type schools and one is hospital-based. All three schools receive funds under the Vocational Education Act. The hospital-based program operates under a contract with the local public school system.

Admissions and graduations to practical nursing programs from 1954 to 1966 showed a phenomenal growth; admissions rose from 45 to 127; graduations from 32 to 106, more than tripling. (See table 60.) In 1966, South Dakota admitted and graduated slightly more than 100 practical nurses for a gradual gain of 82 admissions and 74 graduations in 1966 over those in 1954.

Table 60.—Practical nursing: Number of admissions and graduations in schools of practical nursing; South Dakota; 1954-55, 1960-61, and 1965-66

Academic year	Admissions	Graduations
1954-55	45	32
1960-61	100	136
1965-66	127	106

Source: See appendix tables H-29 and H-30.

All three practical nurse programs are accredited by the National Association for Practical Nurse Education and Service. Accreditation of practical nursing programs by the National League for Nursing is so new that there were no data to report as of July 1968.

Practical nursing programs do not conduct recruitment activities; in fact, they reject qualified applicants for lack of spaces. The Sioux Falls program turned away 50 applicants in 1 year. Practical nursing education programs retain a higher proportion of students than do programs of initial education for registered nurses (1, p. 30). The attrition rates in practical nursing between 1964 and 1966 ranged from 7 to 14 percent. Over the years in South Dakota, 99 to 100 percent of the graduates of practical nursing programs who took the first-time licensing examination in the State passed. The mean score and attainment ability scores of candidates are reported to be considerably higher than the national averages.

To make Indian nursing personnel available for health services on reservations, the Indian Health

Service operates a school of practical nursing in Albuquerque, New Mexico. All educational subsistence costs for the 1-year program are borne by the Service. About 80 students are admitted each year from various reservations. Successful completion of the course qualifies students to take examinations for licensure as practical nurses.

For Indian practical nurses who are employed in the Indian Health Service for 1 year and who have potential for advancement, two post-basic courses are offered. The Public Health Service Hospital in Rapid City has a 3-month course for advanced clinical preparation. A program to prepare practical nurses to assist public health nurses is conducted at Shiprock, New Mexico. The number of practical nurses trained and made available for South Dakota's health services through these programs is not known.

Some of the same data indicated as being needed for programs for registered nurses are also needed for programs for practical nurses. These data might well be gathered as part of a comprehensive assessment of the education of all nursing personnel in South Dakota. Data on curriculum, faculty, and needs for clinical facilities for expanding programs are among the areas that merit attention for planners.

Preparation of Assistants to Nurses

The education of assistants to nurses is an increasingly important part of the education of personnel for health care. Proportionately, assistants to nurses—including workers presently known as nursing aides, orderlies, and attendants—form a large share of nursing personnel. Under supervision, they are being given increasing responsibility for segments of care affecting the amount and quality of available nursing services.

Most agencies prepare their own assistants through inservice education programs and on-the-job training. This training varies in quantity and quality from agency to agency, and is expensive because of the number of programs and the turnover in such staff from one agency to another, one community to another, and even out of State.

In conversations with some South Dakotans, it was stated that the majority of aides employed in hospitals are poorly trained and that nurses lack "know how" in the use of auxiliary nursing personnel. Most States have a common need to assure that nursing assistants perform nonnursing supportive functions and assist nurses in carrying out nursing functions, with activities being selected and supervised by technical or professional nurses. Educational programs

can help to fulfill this need and overcome any present misuse of nursing assistants.

South Dakota has had several coordinated efforts to train assistants to nurses. Manpower Development and Training funds have been used for training nursing aides. A 6-week course of 240 hours included 80 hours of theory and 160 hours of supervised practice. The course was sponsored by the Nursing Home Association and the Hospital Association. Of 250 aides trained in 1966, 153 were employed in nursing homes and 81 in hospitals; 16 were not employed. Yankton State Hospital and Redfield each have a Federal mental health 5-year traineeship grant for \$25,000 for training and inservice education programs for psychiatric aides.

For some years, training and supervision of aides for public health work on Indian reservations has been the responsibility of public health nurses. Using resources provided by the Economic Opportunity Act, Indian reservations have, since 1965, expanded health aide training programs. In 1966, 21 community health aides were trained for the Pine Ridge Reservation (13, p. 4). Training consisted of 12 weeks of classroom study under professional health personnel of the Division of Indian Health and 16 weeks of supervised field experience. These health aides now work in teams under the direct supervision of Public Health Service nurses. Similar training projects were being developed for the Sioux Indians in the Vermillion and Yankton areas.

Within the expanding technical-vocational education programs in South Dakota there is considerable interest in and possibility for the centralized training of nursing assistants. The State Department of Vocational Education is actively seeking the cooperation of other community groups in determining needs and establishing vocational and adult educational pre-service courses in the health disciplines. Assistants to nurses and other health professionals are needed wherever health services are provided. Planning for an adequately prepared supply of nursing assistants should assure that potential employers serve as advisors in determining overall objectives and course content. Employers should also be prepared to offer orientation and on-the-job training to specific tasks to which workers would be assigned.

Additional Data Requirements for Assessing Nursing Education

A special survey of nursing education programs will be conducted in South Dakota to obtain further

information required for a full assessment of nursing education in the State. From this assessment, recommendations and plans for action programs to improve the quantity and quality of the nurse supply will be developed. An interview schedule and questionnaire will be designed to determine the capacity of schools, and their applicant and enrollment experience. It is hoped to gain insight into the underlying causes of attrition from programs of initial education for registered nurses and of the decline in graduations. Some questions will be directed toward needs for financial assistance, the educational preparation of faculty, and factors inhibiting expansion of schools. The future hopes, goals, and plans of schools will be solicited. A study of the socioeconomic environment of students choosing nursing in South Dakota is being considered. Attention would be focused on motivation of the students in choosing this profession. Since it is recognized that graduate nurse morale is an important factor in attracting young women into the field of nursing, a job-satisfaction study directed toward the

hospital staff nurse is being discussed. An analysis of these data should provide information significant for planning.

Demands for nursing service will continue to increase, and a variety of types of nursing personnel will be required to meet these needs. Patterns of education will be influenced both by need and by trends in our educational system and culture. However, educational programs offered in a community, county, or region of a State will be determined in large measure by the availability and appropriateness of educational and clinical experience facilities, as well as the ability to recruit and retain faculty. Moreover, the recruitment potential for students and the means for financing programs and students' education will influence the development of programs more than the needs for personnel will. Planning for the improvement and expansion of nursing education should assess all these factors as part of a community's potential for offering nursing education.

Chapter 10

Assessing Future Nurse Manpower Requirements

Methods for estimating nurse manpower requirements for some future date are essentially extensions of methods for estimating current requirements. However, in estimating future needs, there is the added difficulty of attempting to predict conditions that might affect the needs for nursing personnel.

Three methods of projecting nurse manpower requirements are explained in this chapter. The first is that used by the Surgeon General's Consultant Group on Nursing in 1962, to estimate national needs for 1970. (See projection 1 below.) The second method starts with current supply, adds the estimated annual graduations, and subtracts estimated losses—to obtain net additions each year (projection 2). That method was developed by the National League for Nursing in 1957 (1, pp. 24-27). A third method for estimating numbers of nurses needed is to set quantitative goals in terms of nurse-to-population ratios to meet specific requirements, and then apply the ratios to the expected population of the State (projections 3-7).

Seven levels of projections of nurse manpower requirements for South Dakota in 1970, 1975, and 1980, together with the assumption on which each projection is based, follow. They are summarized in table 61, page 89.

Projection 1.—Based on Criteria of Surgeon General's Consultant Group on Nursing

In 1962, the Surgeon General's Consultant Group on Nursing assessed current nurse manpower supply and predicted future changes in patterns of nursing care (2, pp. 15-19). The Group developed criteria, based on these value judgments, for staffing and for the educational preparation that should be required for the various nursing positions in each field of nursing employment. By applying these criteria and staffing patterns to the appropriate hospital population expected, the projected number of nursing homes, the general population, and the number of students, it is possible to estimate the number of registered nurses

required for each field. The projected total of registered nurses required for all fields to meet these criteria in South Dakota is 3,700 in 1975 and 4,000 in 1980, as shown below:

Field	1975	1980
Hospitals	2,400	2,600
Nursing homes	100	150
Public health and school	300	350
Nursing education	200	200
All other fields	700	700
Total	<u>3,700</u>	<u>4,000</u>

Projection 2.—Feasibility Projection

The feasibility projection can be considered as a measure of requirements conditioned by the expected nurse manpower resources. It forecasts future outputs of schools of nursing and estimates what the attrition rate from the supply will be. (See table 61.) If current trends continue, graduations from South Dakota schools will fluctuate in future years but will show an overall increase of 60 percent from 1966 to 1979. Over the 9-year period from 1957 to 1966, the annual net attrition rate from the supply was 9 percent. This represents: (1) annual losses to the profession resulting from retirements, resignations, deaths, inactive status, and transfers out of the State; and (2) gains due to the return to practice of nurses formerly inactive, the licensure endorsement of nurses trained outside the United States, and transfers from other States. As shown below, estimates of graduations and net losses indicate that 3,300 nurses will be needed by 1980 to maintain growth and to compensate for losses to the profession:

Feasibility projection — assumptions:

- (a) The number of graduates of basic nursing programs preparing students for licensure as registered nurses will reflect current trends, with an overall increase of about 60 percent over the 1965-66 figure by 1979.
- (b) Annual attrition rate from the supply will

remain at 0.09 (Rate computed for the 9-year period 1957-66.)

Year	Projected number of RN's	RN's/100,000 population
1970	2,342	339
1975	2,872	407
1980	3,300	440

The following five projections extrapolate various demand or requirement levels to the future by computing the registered nurse/population ratio for each level of demand or requirement and projecting it in terms of future population estimates. Assumptions made for these projections follow.

Projection 3.—Crude Ratio Projection

If current (1967) overall needs were filled, the country would have 389 active registered nurses per 100,000 population at present.¹ To reach and maintain this goal by 1980, South Dakota would need over 2,900 registered nurses that year, as shown below:

Crude ratio projection — assumptions:

- The 1967 need for registered nurses for the Nation (775,000) expressed in terms of ratio/100,000 population (389) can be applied to a State; and
- demands above current need will not increase in terms of the registered nurse/population ratio.

Year	Projected number of RN's	RN's/100,000 population
1970	2,684	389
1975	2,774	389
1980	2,918	389

Projection 4.—Crude Ratio Projection To Eliminate Current Shortage

If the 1967 national shortage of 135,000 registered nurses is distributed among the States in the same proportion as the State supply was to the national supply in 1966, South Dakota would be short 452 nurses, or 67 per 100,000 population. Assuming that the demand for nurses will remain relatively constant—i.e., the only factor that will affect the demand

¹ RN/population ratios computed on the following population estimates:

1966 . . . 679,000 (U.S. Bureau of Census, *Current Population Est.*, P-25, No. 384).

1967 . . . 674,000 (U.S. Bureau of Census, *Current Population Est.*, P-25, No. 384).

1970 . . . 690,000. (See table 1, p. 7.)

1975 . . . 713,000. (See table 1, p. 7.)

1980 . . . 750,000. (See table 1, p. 7.)

will be population growth—then the State will need less than 2,800 registered nurses by 1980 to maintain its current ratio and eliminate its estimated current shortage, as shown below:

Crude ratio projection to eliminate current shortage — assumptions:

- The national shortage of 135,000 registered nurses in 1967 can be distributed to States in the same proportion as the 1966 supply; $135,000 \times .00335 = 452$ estimated 1967 shortage in South Dakota.
- The South Dakota shortage ratio 67/100,000 in 1967 will not increase.
- Current ratio + shortage ratio = ratio required to eliminate shortage.

Year	Projected number of RN's	RN's/100,000 population
1970	2,553	370
1975	2,638	370
1980	2,775	370

Projection 5.—Refined Ratio Projection

This level is, in essence, the sum of the demand ratios for the various fields of nursing computed from the 1970 national estimated total of the Surgeon General's Consultant Group on Nursing (2, p. 19). The total figure in terms of the registered nurse/population ratio, applied to expected populations, projects the need for over 3,300 nurses in South Dakota by 1980, as shown below:

Refined ratio projection — assumptions:

- The need for nurses in a State will equal the ratio of 447 nurses per 100,000 population by 1970, and maintain this ratio through 1980.
- Distribution by field may be adjusted to the known needs of the State.

Year	Projected number of RN's	RN's/100,000 population
1970	3,084	447
1975	3,187	447
1980	3,353	447

Projection 6.—Refined Ratio Projection Based on Optimum Ratio

This level is an extension of the crude ratio projection (projection 3). Instead of projecting present demand ratios, a current optimum ratio is selected, usually one that has been attained in one or more areas. For example, in 1962, the New England States as a group reached the ratio of 470 registered nurses

per 100,000 population. If this ratio is projected to the State population expected in 1980, more than 3,500 nurses will be required in South Dakota. Obviously, this method is not sensitive to new conditions that can affect requirements for nursing personnel in the future.

The refined ratio projection based on optimum ratio is as follows:

Year	Projected number of RN's	RN's/100,000 population
1970	3,243	470
1975	3,351	470
1980	3,525	470

Projection 7.—Current Level Ratio Projection

This is not a projection of need or demand, but a continuation of the *status quo*, dependent only on pop-

ulation growth. If South Dakota maintains its 1966 ratio of 303 registered nurses per 100,000 population, its active supply in 1980 will be less than 2,300 nurses, as shown below:

Current level ratio projection — assumption:
South Dakota will maintain its 1960 nurse/population ratio.

Year	Projected number of RN's	RN's/100,000 population
1970	2,090	303
1975	2,160	303
1980	2,272	303

Estimates of the supply of registered nurses in South Dakota for each year from 1966 to 1980 are presented in table 62. They are based on the assumptions that current trends in graduations continue and the attrition rate remains 9 percent.

Table 61.—Summary of estimates of future requirements for registered nurses in South Dakota

Projection number, basis for projection, and year	Total RN's needed	RN's/100,000 population
1. Criteria of Surgeon General's Consultant Group on Nursing:		
1970	(¹)	(¹)
1975	3,700	518
1980	4,000	533
2. Feasibility projection:		
1970	2,342	339
1975	2,872	407
1980	3,800	440
3. Crude ratio projection:		
1970	2,684	389
1975	2,774	389
1980	2,918	389
4. Crude ratio projection to eliminate 1967 shortage:		
1970	2,553	370
1975	2,638	370
1980	2,775	370
5. Refined ratio projection:		
1970	3,084	447
1975	3,187	447
1980	3,353	447
6. Refined ratio projection based on optimum ratio:		
1970	3,243	470
1975	3,351	470
1980	3,525	470
7. Current level ratio projection:		
1970	2,090	303
1975	2,160	303
1980	2,272	303

¹ Not computed.

Table 62.—Estimated supply of registered nurses in South Dakota if current trends in graduations continue and attrition from the supply is 9 percent,¹ 1966–80

Year	Supply	Graduates		Attrition 9 percent	Net additions
		Year of graduation	Number		
1966	2,055	1965-66	217	185	32
1967	2,087	1966-67	240	188	52
1968	2,139	1967-68	275	192	83
1969	2,222	1968-69	320	200	120
1970	2,342	1969-70	328	210	118
1971	2,460	1970-71	328	223	107
1972	2,567	1971-72	333	231	102
1973	2,669	1972-73	349	240	109
1974	2,778	1973-74	344	250	94
1975	2,872	1974-75	360	258	102
1976	2,974	1975-76	358	267	91
1977	3,065	1976-77	365	276	89
1978	3,154	1977-78	373	283	90
1979	3,244	1978-79	348	292	56
1980	3,300				

¹ Attrition rate from supply during the period 1957-66 was 9 percent annually.

References Cited

Introduction

- (1) U.S. Department of Health, Education, and Welfare. May 1967. *Community Planning for Nursing in the District of Columbia Metropolitan Area*. Division of Nursing, Bureau of Health Manpower. Public Health Service Pub. 1676. Washington, U.S. Government Printing Office. 143 pp.

Chapter 1

- (1) U.S. Department of the Interior. 1966. *Indians of the Dakotas*. Bureau of Indian Affairs. Unnumbered publication. Washington, U.S. Government Printing Office. 20 pp.

Chapter 2

- (1) U.S. Department of Commerce. March 1966. *Americans at Mid-Decade*. Bureau of the Census. Series P-23, No. 16, Revised. Washington, U.S. Government Printing Office. 30 pp.
- (2) Office of Economic Opportunity. Oct. 1965. *Dimensions of Poverty in 1964*. Revised Dec. 1965. 22 pp. plus supplements 1, 2, and 3.
- (3) U.S. Department of Commerce. 1967. *Pocket Data Book, U.S.A., 1967*. Bureau of the Census. Washington, U.S. Government Printing Office. 368 pp.
- (4) U.S. Department of Commerce. Feb. 7, 1966. *Current Population Reports, Population Estimates. Illustrative Projections of the Population of States, 1970 to 1985*. Bureau of the Census Series P-25, No. 326. Washington, U.S. Government Printing Office. 106 pp.

Chapter 3

- (1) U.S. Department of Health, Education, and Welfare. May 1967. *Vital and Health Statistics. Data From the National Health Survey. Current Estimates From the Health Interview Survey, United States, July 1965—June 1966*. National Center for Health Statistics. Public Health Service Pub. 1000—Series 10—No. 37. Washington, U.S. Government Printing Office. 47 pp.
- (2) U.S. Department of Health, Education, and Welfare. 1967. *Vital Statistics of the United States, 1965. Volume I—Nativity*. Public Health Service, National Center for Health Statistics. Washington, U.S. Government Printing Office. 239 pp.
- (3) South Dakota Department of Health. 1966. *South Dakota Public Health Statistics, 1965. Annual Statistical Report*. Division of Public Health Statistics, Pierre, S. Dak. 89 pp.

- (4) Hunt, Eleanor P., and Huyck, Earl E. 1965. "Mortality of White and Nonwhite Infants in Major U.S. Cities." In *State Data and State Rankings in Health, Education, Welfare*. Part 2 of 1965 Edition of *Health, Education, and Welfare Trends*. U.S. Department of Health, Education, and Welfare. Washington, U.S. Government Printing Office. pp. 1-19.
- (5) South Dakota Department of Health. 1965. *South Dakota Public Health Statistics, 1964. Annual Statistical Report*. Division of Public Health Statistics, Pierre, S. Dak. 75 pp.
- (6) U.S. Department of Health, Education, and Welfare. 1966. *Basic Statistics and the Venereal Disease Problem in the United States*. Communicable Disease Center. VD Fact Sheet, 22d rev. Public Health Service Pub. 341, revised 1966.
- (7) U.S. Department of Health, Education, and Welfare. 1965. *The Future of Tuberculosis Control. A Report to the Surgeon General of the Public Health Service by a Task Force on Tuberculosis Control in the United States*. Public Health Service Pub. 1119. Washington, U.S. Government Printing Office. 20 pp.
- (8) U. S. Department of Health, Education, and Welfare. May 1963. *Tuberculosis in the United States. Status of the Disease in the Early Sixties*. Communicable Disease Center. Public Health Service Pub. 1036. Washington, U.S. Government Printing Office. 27 pp.
- (9) The President's Panel on Mental Retardation. 1963. *Report to the President. A Proposed Program for National Action To Combat Mental Retardation, October 1962*. Washington, U.S. Government Printing Office. 201 pp.
- (10) U.S. Department of Health, Education, and Welfare. 1965. *National Trends*. Part I of 1965 Edition of *Health, Education, and Welfare Trends*. Washington, U.S. Government Printing Office. 163 pp.
- (11) South Dakota Department of Health. 1963. *South Dakota Department of Health—Public Health Statistics, 1962. Annual Report*. Pierre, S. Dak. 71 pp.
- (12) U.S. Department of Health, Education, and Welfare. August 1964. *Illness Among Indians, 1963*. Division of Indian Health, Bureau of Health Services, Public Health Service. Unnumbered publication. Washington, U.S. Government Printing Office. 25 pp.

Chapter 4

- (1) South Dakota State Department of Health. 1964. *Regulations for the Licensure of Nursing Homes, Homes for the Aged, and Related Facilities*. Pierre, S. Dak. 62 pp.
- (2) State Department of Health. July 1965. *The South Dakota Report on Mental Health*

References Cited—Continued

- Planning*. Mental Health Section, Pierre, S. Dak. 230 pp.
- (3) South Dakota State Board of Medical and Osteopathic Examiners.
Sept. 1966. *Directory of Physicians and Physical Therapists Licensed in South Dakota*. The Board, 711 North Lake Ave., Sioux Falls, S. Dak. 32 pp.
- (4) South Dakota State Department of Health.
1960. *24th Biennial Report, 1958-1960*. Pierre, S. Dak. 34 pp.
- (5) South Dakota State Department of Health.
1962. *25th Biennial Report, 1960-1962*. Pierre, S. Dak. 36 pp.
- (6) South Dakota State Department of Health.
1964. *26th Biennial Report, 1962-1964*. Pierre, S. Dak. 48 pp.
- (2) State Department of Health.
July 1965. *The South Dakota Report on Mental Health Planning*. Mental Health Section, Pierre, S. Dak. 230 pp.
- (3) U.S. Department of Health, Education, and Welfare.
1966. *The Indian Health Program of the U.S. Public Health Service*. Public Health Service Pub. 1026, Revised 1966. Washington, U.S. Government Printing Office. 35 pp.
- (4) U.S. Department of Health, Education, and Welfare.
1965. *National Trends*. Part I of 1965 Edition of *Health, Education, and Welfare Trends*. Washington, U.S. Government Printing Office. 163 pp.
- (5) U.S. Department of Health, Education, and Welfare.
1966. *State Data and State Rankings in Health, Education, and Welfare*. Part 2 of 1965 Edition of *Health, Education, and Welfare Trends*. Washington, U.S. Government Printing Office. 92 pp.
- (6) South Dakota State Department of Health.
1964. *26th Biennial Report, 1962-1964*. Pierre, S. Dak. 48 pp.
- (7) Rice, Dorothy P.
Nov. 20, 1967. "Current Data From the Medicare Program." In *RS Health Insurance Statistics*. Office of Research and Statistics, Social Security Administration, U.S. Department of Health, Education, and Welfare. pp. 1-10.

Chapter 5

- (1) Hanft, Ruth S.
Feb. 1967. "National Health Expenditures, 1950-65." U.S. Department of Health, Education, and Welfare, Social Security Administration. *Social Security Bulletin*, 30(2):3-13.
- (2) U.S. Department of Commerce.
1967. *Pocket Data Book, U.S.A., 1967*. Bureau of the Census. Washington, U.S. Government Printing Office. 368 pp.
- (3) Reed, Louis S.
Nov. 1966. "Private Health Insurance: Coverage and Financial Experience, 1965." U.S. Department of Health, Education, and Welfare, Social Security Administration. *Social Security Bulletin*, 29(11):3-19.
- (4) U.S. Department of Health, Education, and Welfare.
1964. *Vital and Health Statistics. Data from the National Health Survey. Health Insurance Coverage, United States, July 1962-June 1963*. National Center for Health Statistics. Public Health Service Pub. 1000—Series 10—No. 11. Washington, U.S. Government Printing Office. 37 pp.
- (5) U.S. Department of Health, Education, and Welfare.
Mar. 1967. Table 1.—Health insurance for the aged: Enrollment for hospital and medical insurance, by type of entitlement, geographic division, and State, as of July 1, 1966. Social Security Administration. *Social Security Bulletin*, 30(3):22.

Chapter 6

- (1) U.S. Department of Health, Education, and Welfare.
June 1965. *Vital and Health Statistics. Data From the National Health Survey. Volume of Physician Visits, by Place of Visit and Type of Service, United States, July 1963-June 1964*. National Center for Health Statistics. Public Health Service Pub. 1000—Series 10—No. 18. Washington, U.S. Government Printing Office. 43 pp.

Chapter 7

- (1) U.S. Department of Health, Education, and Welfare.
1967. *Health Manpower, Perspective: 1967*. Bureau of Health Manpower. Public Health Service Pub. 1667. Washington, U.S. Government Printing Office. 81 pp.
- (2) Pennell, Maryland Y., and Baker, Kathryn I.
1965. *Health Manpower Source Book. Section 19, Location of Manpower in 8 Occupations*. U.S. Department of Health, Education, and Welfare. Public Health Service Pub. 263. (Sec. 19.) Washington, U.S. Government Printing Office. 167 pp.
- (3) Hill Family Foundation, Louis W. and Maud.
June 1966. *Health Manpower for the Upper Midwest. A Study of the Needs for Physicians and Dentists in Minnesota, North Dakota, South Dakota, and Montana*. Health Manpower Study Commission. St. Paul, Minn. 135 pp.
- (4) U.S. Department of Health, Education, and Welfare.
1966. *Health Resources Statistics. Health Manpower, 1965*. National Center for Health Statistics. Public Health Service Pub. 1509. Washington, U.S. Government Printing Office. 182 pp.
- (5) Mirengoff, William
Nov. 1966. "Health Manpower—An Emerging Challenge." U.S. Department of Labor, Manpower Administration, Bureau of Employment Security. *Employment Service Review*, Vol. 3, No. 11, p. 7.

References Cited—Continued

- (6) American Hospital Association.
1967. *Manpower Resources in Hospitals—1966. Summary Report of a Survey Conducted by the Bureau of Health Manpower, Public Health Service, Department of Health, Education, and Welfare, and the American Hospital Association.* Chicago, The Association. 75 pp.

Chapter 8

- (1) U.S. Department of Labor.
May 1967. "Technology and Manpower in the Health Service Industry, 1965-75." *Manpower Administration. Manpower Research Bulletin.* No. 14, p. 13.
- (2) South Dakota State University.
Dec. 4, 1967. *Survey of Inactive Nurses.* Department of Continuing Education, College of Nursing, Brookings, S. Dak. (Processed) 3 pp.
- (3) Testoff, Arthur; Levine, Eugene; and Siegel, Stanley E.
Jan. 1964. "The Part-Time Nurse." In *The American Journal of Nursing.* Vol. 64, No. 1, pp. 88-89.
- (4) American Hospital Association.
1967. *Manpower Resources in Hospitals—1966. Summary Report of a Survey Conducted by the Bureau of Health Manpower, Public Health Service, Department of Health, Education, and Welfare, and the American Hospital Association.* Chicago, The Association. 75 pp.
- (5) American Nurses' Association.
1967. *Facts About Nursing. A Statistical Summary. 1967 Edition.* New York, The Association. 256 pp.
- (6) U.S. Department of Health, Education, and Welfare.
1966. *Health Resources Statistics, 1965.* National Center for Health Statistics. Public Health Service Pub. 1509. Washington, U.S. Government Printing Office. 182 pp.
- (7) Industrial Development Expansion Agency, South Dakota.
1967. *Human Resources. "A New Look at Opportunity."* Pierre, S. Dak. 4 pp.
- (8) Industrial Development Expansion Agency, South Dakota.
1967. *Community Facts. "A New Look at Opportunity."* Pierre, S. Dak. 4 pp.
- (9) National League for Nursing.
1964. *Study on Cost of Nursing Education. Part I. Cost of Basic Diploma Programs.* New York, The League. 101 pp.
- (10) National League for Nursing.
1967. *State-Approved Schools of Nursing—R.N., 1967.* New York, The League. 107 pp.
- (11) American Nurses' Association.
1967. *Facts About Nursing, A Statistical Summary, 1967 Edition.* New York, The Association. 256 pp.
- (12) South Dakota Nurses' Association.
1960. "Survey of the Patterns of Nursing Education in South Dakota Progresses." In *The South Dakota Nurse.* Vol. 4, No. 2, March-April 1960.
- (13) South Dakota Nurses' Association.
1963. "Why Nurses Move from State to State." In *The South Dakota Nurse,* Vol. 7, No. 4, July-August, 1963
- (14) National League for Nursing.
1966. *Education for Nursing the Diploma Way.* Department of Diploma Programs. New York, The League. 42 pp.
- (15) National League for Nursing.
1967. *College Education: Key to a Professional Career in Nursing.* Department of Baccalaureate and Higher Degree Programs. New York, The League. 15 pp.
- (16) Mount Marty College.
1967. *Bulletin 1967-69.* Yankton, S. Dak. 102 pp.
- (17) Augustana College Association.
1967. *Bulletin of Augustana College, General Catalog Edition, 1967-68.* Sioux Falls, The Association.
- (18) U.S. Department of Health, Education, and Welfare.
Dec. 1967. *Nurse Training Act of 1964. Program Review Report.* Public Health Service Pub. 1740. Washington, U.S. Government Printing Office. 78 pp.
- (19) Office of Economic Opportunity.
Jan. 1967. "Oglala Sioux Health Aides Take To Health Care of Tribe." In *Rural Opportunities,* Vol. 2, No. 1, p. 4.

Chapter 10

- (1) South Dakota Board of Nursing.
1966. *Report of the South Dakota Board of Nursing for the Biennial Period Ending June 30, 1966.* Mitchell, S. Dak. 32 pp.
- (2) National League for Nursing.
[n.d.] *Statement of Lois M. Austin, R.N., Ph.D. President, to Subcommittee on Health, Senate Committee on Labor and Public Welfare, on S. 595 (H.R. 3141), Health Professions Educational Assistance Amendments of 1965.* New York, The League. 25 pp. (processed).
- (3) Meyer, Burton.
June 1957. "Development of a Method for Determining Estimates of Professional Nurse Needs." In *Nursing Research,* Vol. 6, No. 1, pp. 24-28. June 1957.
- (4) U.S. Department of Health, Education, and Welfare.
1963. *Toward Quality in Nursing: Needs and Goals. Report of the Surgeon General's Consultant Group on Nursing.* Public Health Service Pub. 992. Washington, U.S. Government Printing Office. 73 pp.

Appendix A

Population Characteristics

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Table A-1.—Population trends in the United States, in South Dakota, and in bordering States; 1950-80

State	1950	1960	Estimated ²			
			1965	1970	1975	1980
United States	151,326	179,323	193,795	206,345	222,805	242,311
South Dakota	653	681	686	690	713	750
Bordering States:						
North Dakota	620	632	652	662	688	725
Iowa	2,621	2,758	2,758	2,761	2,839	2,975
Minnesota	2,982	3,414	3,562	3,693	3,926	4,241
Montana	591	675	703	728	771	829
Nebraska	1,326	1,411	1,459	1,491	1,552	1,634
Wyoming	291	330	330	336	356	387

¹ In thousands.

² Estimates based on the assumptions that the fertility rate will have a moderate decline from the 1960 levels and that there is a convergence of 1955-60 gross migration rates during the projection period.

Sources: U. S. Department of Commerce, Bureau of the Census. *Statistical Abstract of the United States: 1966* (87th edition), p. 12. Washington, U. S. Government Printing Office, 1966. U.S. Department of Commerce, Bureau of the Census. *Current Population Reports, Series P-25, No. 362, p. 4.* Washington, U.S. Government Printing Office, Mar. 7, 1967.

Table A-2.—Age, by sex and color, for South Dakota; 1950

Age	All populations			White		Nonwhite ¹	
	Total	Male	Female	Male	Female	Male	Female
All ages (years)	652,740	337,251	315,489	324,885	303,619	12,366	11,870
Under 5	76,713	39,265	37,448	37,446	35,623	1,819	1,825
5-9	60,572	30,831	29,741	29,230	28,147	1,601	1,594
10-14	53,090	26,945	26,145	25,337	24,579	1,608	1,566
15-19	51,179	25,731	25,448	24,430	24,063	1,301	1,385
20-24	49,961	25,854	24,107	24,955	23,165	899	942
25-29	48,937	25,534	23,403	24,735	22,634	799	769
30-34	45,014	23,266	21,748	22,523	21,121	743	627
35-39	42,142	21,621	20,521	20,966	19,917	655	604
40-44	38,495	19,782	18,713	19,294	18,211	488	502
45-49	36,033	18,545	17,488	18,024	17,013	521	475
50-54	34,864	18,426	16,438	17,969	16,035	457	403
55-59	32,112	17,030	15,082	16,624	14,766	406	316
60-64	28,332	15,204	13,128	14,863	12,879	341	249
65-69	22,239	11,903	10,336	11,587	10,057	316	279
70-74	15,333	8,223	7,110	8,021	6,955	202	155
75 and older	17,724	9,091	8,633	8,881	8,454	210	179
Median age	28.6	28.9	28.2	29.3	28.3	19.4	18.4
U.S. median age	30.2	29.9	30.5	30.4	31.1	25.9	26.2

¹ 23,344 of the 24,236 nonwhite population are Indians.

Sources: U.S. Department of Commerce, Bureau of the Census. *Census of Population, 1950*. Final Report, PC (1) 43B, *General Population Characteristics, South Dakota*, pp. 36-37. Washington, U.S. Government Printing Office, 1960.

U.S. Department of Commerce, Bureau of the Census. *Statistical Abstract of the United States: 1965* (86th edition), p. 23. Washington, U.S. Government Printing Office, 1965.

Table A-3.—Age, by sex and color, for South Dakota; 1960

Age	All populations			White		Nonwhite ¹	
	Total	Male	Female	Male	Female	Male	Female
All ages (years)	680,814	344,271	336,543	330,434	322,664	13,837	13,579
Under 5	83,427	42,328	41,099	39,992	38,864	2,336	2,235
5-9	77,911	39,721	38,190	37,799	36,153	1,922	2,037
10-14	67,444	34,284	33,160	32,654	31,450	1,630	1,710
15-19	52,065	26,098	25,967	24,659	24,540	1,439	1,427
20-24	39,165	19,564	19,601	18,422	18,645	1,142	956
25-29	37,823	18,778	19,045	17,947	18,101	831	944
30-34	40,578	20,497	20,081	19,781	19,290	716	791
35-39	40,842	20,917	19,925	20,222	19,252	695	673
40-44	39,414	20,045	19,369	19,468	18,800	577	569
45-49	36,883	18,720	18,163	18,169	17,674	551	489
50-54	33,701	17,027	16,674	16,628	16,242	399	432
55-59	31,220	15,918	15,302	15,491	14,916	427	386
60-64	28,828	14,772	14,056	14,394	13,784	378	272
65-69	26,091	13,155	12,936	12,865	12,682	290	254
70-74	21,020	10,597	10,423	10,362	10,257	235	166
75-79	13,443	6,631	6,812	6,483	6,681	148	131
80-84	6,912	3,380	3,532	3,320	3,481	60	51
85 and older	4,047	1,839	2,208	1,778	2,152	61	56
Median age	27.7	26.2	27.7	28.3	28.3	18.6	17.8
U.S. median age	29.5	28.7	30.3	29.4	31.1	22.7	24.3

¹ 25,794 of the 27,416 nonwhite population are Indians.

Sources: U.S. Department of Commerce, Bureau of the Census. *Census of Population, 1960*. Final Report PC (1) 43B, *General Population Characteristics, South Dakota*, p. 36. Washington, U.S. Government Printing Office, 1961.

U.S. Department of Commerce, Bureau of the Census. *Statistical Abstract of the United States: 1965* (86th edition), p. 23. Washington, U.S. Government Printing Office, 1965.

Table A-4.—Population, by country of origin, by nativity, and by sex, for South Dakota; 1960

Area and country of origin	Total foreign stock	Foreign born			Native of foreign or mixed parentage		
		Total	Male	Female	Total	Male	Female
All countries	141,845	18,577	9,586	8,991	123,268	61,613	61,655
Europe:							
Great Britain ¹	6,142	993	424	569	5,149	2,460	2,689
Ireland ²	2,960	233	97	136	2,727	1,385	1,342
Scandinavia ³	46,008	6,133	3,494	2,639	39,875	19,940	19,935
Other northwestern ⁴	9,648	1,471	857	614	8,177	4,134	4,043
Germany	36,493	3,342	1,615	1,727	33,151	16,613	16,538
Poland	1,532	216	124	92	1,316	647	369
Other central ⁵	7,419	1,081	514	567	6,338	3,204	3,134
USSR and Baltic States ⁶	20,788	2,884	1,413	1,471	17,904	8,952	8,952
Other eastern ⁷	469	151	78	73	318	150	168
Italy	885	174	75	99	711	371	340
Other southern ⁸	530	207	143	164	323	134	189
Asia (excluding USSR)	1,040	412	175	237	628	324	304
Canada	6,767	1,050	458	592	5,717	2,320	2,847
All North and Central America	364	90	54	36	274	144	130
South America	94	33	9	24	61	30	31
All other	260	88	28	60	172	82	90
Countries not specified	673	70	49	21	603	270	333

¹ Includes England, Scotland, Wales.

² Includes Northern Ireland, Ireland (Eire).

³ Includes Norway, Sweden, Denmark, Iceland.

⁴ Includes Netherlands, Belgium, Luxemburg, Switzerland, France.

⁵ Includes Czechoslovakia (since 1920), Yugoslavia (since 1920), Hungary (since 1861), Austria.

⁶ Includes USSR, Latvia, Estonia, Lithuania, Finland.

⁷ Includes Rumania, Bulgaria, Turkey, Albania.

⁸ Includes Spain, Portugal, Greece, and other European countries not elsewhere classified.

Source: U.S. Department of Commerce, Bureau of the Census. *United States Census of Population, 1960. South Dakota: Detailed Characteristics, PC (1) 48D, p. 229.* Washington, U.S. Government Printing Office, 1962.

Table A-5.—Population,¹ urban and rural; United States, South Dakota, and bordering States; 1950 and 1960

State	1950				1960			
	Urban		Rural		Urban		Rural	
	Number	Percent	Nonfarm	Farm	Number	Percent	Nonfarm	Farm
United States	96,847	64.0	² 31,431	² 23,048	125,284	69.9	40,567	13,474
South Dakota	217	33.2	182	254	267	39.3	208	206
Bordering States:								
North Dakota	165	26.6	200	254	223	35.2	205	204
Iowa	1,251	47.7	587	783	1,463	53.1	632	662
Minnesota	1,625	54.5	618	740	2,121	62.1	705	588
Montana	258	43.7	197	136	338	50.2	231	106
Nebraska	622	46.9	312	391	766	54.3	337	309
Wyoming	145	49.8	89	57	188	56.8	99	43

¹ In thousands; 1960 based on sample.

² Farm included with nonfarm for Alaska and Hawaii.

Source: U.S. Department of Commerce, Bureau of the Census. *Statistical Abstract of the United States: 1965* (87th edition), p. 16. Washington, U.S. Government Printing Office, 1965.

Table A-6.—Number and percent of population, by color and by urban and rural residence; South Dakota; 1950 and 1960

Area	Total population				Total white				Total nonwhite			
	1950		1960		1950		1960		1950		1960	
	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent
State total	652,740	100.0	680,514	100.0	628,504	96.3	653,098	96.0	¹ 24,236	3.7	² 27,416	4.0
Urban	216,710	33.2	267,180	39.3	213,542	32.7	261,888	38.5	3,168	0.5	5,292	0.8
Urbanized areas	553	0.1	67,318	9.9	552	0.1	66,727	9.8	1	(³)	591	0.1
Central cities	...	...	65,466	9.6	...	...	64,882	9.5	...	...	584	0.1
Urban fringe	553	0.1	1,852	0.3	552	0.1	1,845	0.3	1	(³)	7	(³)
Other urban	216,157	33.1	199,862	29.4	212,990	32.6	195,161	28.7	3,167	0.5	4,701	0.7
Rural	436,030	66.8	413,334	60.7	414,962	63.6	391,210	57.5	21,068	3.2	22,124	3.2

¹ 23,344 of 24,236 nonwhite are Indian.² 25,794 of 27,416 nonwhite are Indian.³ Less than 0.1 percent.Source: U.S. Department of Commerce, Bureau of the Census. *U.S. Census of Population, 1960*. Final Report PC (1)—43B, *General Population Characteristics, South Dakota*, pp. 30 and 31. Washington, U.S. Government Printing Office, 1962.**Table A-7.—Mobility status of the population 5 years old and older, by place of residence; South Dakota and bordering States; 1960**

State	Total population 5 years old and older	Same house (non-movers)	Different house in the United States					Abroad in 1955	Moved; place of residence in 1955 not reported
			Total	Same county	Same State	Different State			
						Contiguous	Non-contiguous		
South Dakota:									
Number	597,383	328,817	261,251	144,405	64,062	27,225	25,559	3,771	3,544
Percent	100.0	55.1	43.7	24.1	10.7	4.6	4.3	0.6	0.6
North Dakota:									
Number	552,877	318,561	227,301	131,284	53,923	20,929	21,165	3,659	3,356
Percent	100.0	57.6	41.1	23.7	9.8	3.8	3.8	0.7	0.6
Iowa:									
Number	2,450,313	1,353,557	1,061,746	672,926	239,850	82,550	66,420	10,820	24,190
Percent	100.0	55.3	43.3	27.4	9.8	3.4	2.7	0.4	1.0
Minnesota:									
Number	2,997,845	1,650,516	1,298,952	789,300	311,031	85,857	112,764	19,074	29,303
Percent	100.0	55.1	43.3	26.3	10.4	2.9	3.7	0.6	1.0
Montana:									
Number	591,730	281,722	300,327	163,726	68,630	18,120	49,851	5,747	3,934
Percent	100.0	47.6	50.8	27.7	11.6	3.1	8.4	1.0	0.6
Nebraska:									
Number	1,251,113	662,202	565,621	333,233	121,030	49,039	62,319	11,027	12,263
Percent	100.0	52.9	45.2	26.6	9.7	3.9	5.0	0.9	1.0
Wyoming:									
Number	289,450	120,835	163,315	81,916	25,325	24,642	31,432	2,925	2,375
Percent	100.0	41.8	56.4	28.3	8.7	8.5	10.9	1.0	0.8

Source: U.S. Department of Commerce, Bureau of the Census. *U.S. Census of Population, 1960*. Final Report PC (2)—2B, *Mobility for States and State Economic Areas*, pp. 50-52, 58, and 59. Washington, U.S. Government Printing Office, 1963.

Table A-8.—Movement of persons, by age groups 5 years old and older, in South Dakota; 1955-60

Age (years)	Total population 5 years old and older in 1960		Same house in 1960 as in 1955		Total movers	
	Number	Percent	Number	Percent	Number	Percent
Total	597,383	100.0	328,817	55.1	286,566	44.9
5-14	145,709	100.0	78,151	53.6	67,558	46.4
15-24	91,539	100.0	36,220	39.6	55,319	60.4
25-34	78,832	100.0	25,491	32.3	53,341	67.7
35-44	79,521	100.0	44,431	55.9	35,090	44.1
45-54	72,494	100.0	49,561	68.4	22,933	31.6
55-64	60,188	100.0	44,136	73.3	16,052	26.7
65 and older	69,100	100.0	50,827	73.6	18,273	26.4

Source: U.S. Department of Commerce, Bureau of the Census. *U.S. Census of Population: 1960. Detailed Characteristics of Population, South Dakota.* Final Report PC (1) 43D, p. 230. Washington, U.S. Government Printing Office, 1962.

Table A-9.—Change of residence of movers 5 years old and older, by age groups, in South Dakota; 1955-60

Age (years)	Total population 5 years old and older in 1960	Total movers		Different house						Abroad		Moved but 1955 residence not reported	
				Same county		Same State		Different State					
		Number	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber ¹	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent
Total	597,383	268,566	44.9	144,405	24.2	64,062	10.7	52,784	8.8	3,771	0.6	3,544	0.6
5-14	145,709	67,558	46.4	39,281	27.0	15,003	10.3	12,356	8.5	548	0.4	370	0.2
15-24	91,539	55,319	60.4	22,525	24.6	17,792	19.4	13,324	14.5	798	0.9	880	1.0
25-34	78,832	53,341	67.7	25,953	33.0	11,906	15.1	12,855	16.3	1,684	2.1	943	1.2
35-44	79,521	35,090	44.1	20,346	25.6	7,166	9.0	6,806	8.5	477	0.6	295	0.4
45-54	72,494	22,933	31.6	14,141	19.5	4,984	6.9	3,375	4.6	179	0.2	254	0.4
55-64	60,188	16,052	26.7	10,520	17.5	3,191	5.3	1,964	3.3	74	0.1	303	0.5
65 and older	69,100	18,273	26.4	11,639	16.9	4,020	5.8	2,104	3.0	11	(¹)	499	0.7

¹ Less than 0.1 percent.

Source: U.S. Department of Commerce, Bureau of the Census. *U.S. Census of Population: 1960. Detailed Characteristics, South Dakota.* Final Report PC (1) 43-D, p. 230. Washington, U.S. Government Printing Office, 1962.

Table A-10.—Change of residence of population 5 years old and older, by age groups, in South Dakota; 1955-60

Age (years)	Total population 5 years old and older in 1960		Same house in 1960 as in 1955		Different house				Different State		Abroad		Moved but place of residence in 1955 not reported			
	Num-ber	Per-cent	Num-ber	Per-cent	Same county		Same State		Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent
					Num-ber	Per-cent	Num-ber	Per-cent								
Total	597,383	100.0	328,817	55.1	144,405	24.2	64,062	10.7	52,784	8.8	3,771	0.6	3,544	0.6		
5-14	145,709	100.0	78,151	53.6	39,281	27.0	15,003	10.3	12,356	8.5	548	0.4	370	0.2		
15-24	91,539	100.0	36,220	39.6	22,525	24.6	17,792	19.4	13,324	14.5	798	0.9	880	1.0		
25-34	78,832	100.0	25,491	32.3	25,953	33.0	11,906	15.1	12,855	16.3	1,684	2.1	943	1.2		
35-44	79,521	100.0	44,431	55.9	20,346	25.6	7,166	9.0	6,806	8.5	477	0.6	295	0.4		
45-54	72,494	100.0	49,561	68.4	14,141	19.5	4,984	6.9	3,375	4.6	179	0.2	254	0.4		
55-64	60,188	100.0	44,136	73.3	10,520	17.5	3,191	5.3	1,964	3.3	74	0.1	303	0.5		
65 and older	69,100	100.0	50,827	73.6	11,639	16.9	4,020	5.8	2,104	3.0	11	(¹)	499	0.7		

¹ Less than 0.1 percent.
 Source: U.S. Department of Commerce, Bureau of the Census. U.S. Census of Population: 1960. Detailed Characteristics, South Dakota. Final Report PC (1) 48-D, p. 230. Washington, U.S. Government Printing Office, 1962.



Table A-11.—Net migration,¹ in thousands, by color, in the United States, in South Dakota, and in bordering States; 1940 to 1950 and 1950 to 1960

State	White				Nonwhite			
	1940 to 1950		1950 to 1960		1940 to 1950		1950 to 1960	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
United States	+1,522	+1.3	+2,685	+2.0	-160	-1.2	-25	-0.2
South Dakota	-74	-11.9	-90	-14.3	-5	-21.2	-5	-19.4
Bordering States:								
North Dakota	-119	-18.8	-103	-16.9	-2	-16.5	-2	-18.3
Iowa	-198	-7.9	-236	-9.1	+3	+14.3	+3	+12.3
Minnesota	-175	-6.3	-101	-3.4	+2	+8.5	+4	+13.8
Montana	-36	-6.7	-23	-4.0	-4	-22.4	-2	-11.4
Nebraska	-139	-10.7	-121	-9.3	+4	+19.9	+4	+17.5
Wyoming	-2	-0.9	-19	-6.5	+1	+26.6	-1	-18.4

¹ Net population increases and losses due to migration are indicated; net migration comprises both net immigration from abroad and net interstate migration for areas shown; also includes movement of people in armed forces.

Source: U.S. Department of Commerce, Bureau of the Census. *Statistical Abstract of the United States: 1966* (87th edition), p. 34. Washington, U.S. Government Printing Office, 1966.

Table A-12.—Population per square mile in 1965, and population¹ change in rank order from 1960 to 1965; United States, South Dakota, and bordering States

State	Population (in thousands) in 1965		Square miles, in 1960		Population per square mile in 1965		Population change, 1960 to 1965	
	Number	Rank	Number	Rank	Number	Rank	Percent	Rank
United States	193,818	—	3,548,974	—	54.6	—	+8.1	—
South Dakota	703	43	76,378	16	9.2	45	+3.1	43
Bordering States:								
North Dakota	652	46	69,457	17	9.4	44	+2.0	48
Iowa	2,760	25	56,032	23	49.3	29	+0.1	50
Minnesota	3,554	18	80,009	14	44.4	32	+4.1	40
Montana	706	42	145,736	4	4.8	48	+4.2	39
Nebraska	1,477	35	76,612	15	19.3	40	+4.5	37
Wyoming	340	50	97,411	9	3.5	50	+2.4	46

¹ Identical rank orders were assigned to all States having the same value for the particular population characteristic. In all cases the ranking goes from high to low.

Sources: U.S. Department of Commerce, Bureau of the Census.

Population Estimates, Series P-25, No. 317, Aug. 27, 1965, p. 2. Washington, U.S. Government Printing Office, 1965.

U.S. Department of Commerce, Bureau of the Census. *County and City Data Book, 1962 (A Statistical Supplement)*, p. 2. Washington, U.S. Government Printing Office, 1962.

Table A-13.—Farms: Number, acreage, and value, in the United States, in South Dakota, and in bordering States; 1954 and 1959

State	Number of farms (in thousands)		All land in farms (1,000 acres)		Average acreage per farm		Total value ¹ (million dollars)		Average value per farm ² (dollars)	
	1954	1959	1954	1959	1954	1959	1954	1959	1954	1959
United States	4,782	3,711	1,158,192	1,123,508	242	303	97,583	129,005	20,405	34,826
South Dakota	63	56	44,949	44,851	719	805	1,767	2,277	28,263	40,852
Bordering States:										
North Dakota	62	55	41,877	41,466	676	755	1,493	2,141	24,110	38,978
Iowa	193	175	34,045	33,831	177	194	6,770	8,587	35,090	49,150
Minnesota	165	146	32,285	30,796	195	211	3,478	4,749	21,051	32,605
Montana	33	29	61,469	64,081	1,859	2,213	1,476	2,223	44,653	76,761
Nebraska	101	90	47,487	47,756	471	528	3,400	4,234	33,713	46,796
Wyoming	11	10	34,989	36,200	3,069	3,715	535	794	46,935	79,447

¹ Based on average value per acre for farms in sample for which value of land and buildings was reported.

² Average for farms reporting value of land and buildings.

Source: U.S. Department of Commerce, Bureau of the Census. *Statistical Abstract of the United States: 1966* (87th edition), p. 617. Washington, U.S. Government Printing Office, 1966.

Table A-14.—Personal income and major sources; United States, South Dakota, and bordering States; 1964

State	Personal income, total (million dollars)	Farm income ¹ (million dollars)	Government income disbursements ² (million dollars)	Private nonfarm income (million dollars)
United States	491,004	14,543	97,430	379,031
South Dakota	1,343	220	333	790
Bordering States :				
North Dakota	1,376	288	321	767
Iowa	6,548	830	1,163	4,555
Minnesota	8,364	420	1,548	6,396
Montana	1,587	179	391	1,017
Nebraska	3,477	416	733	2,328
Wyoming	837	54	201	582

¹ Net income of farm proprietors, farm wages, and farm "other" labor income, less personal contributions under the Old Age, Survivors and Disability Insurance program.

² Income disbursed directly to persons by Federal, State, and local governments. Comprises wages and salaries (net of employee con-

tributions for social insurance), other labor income, interest, and transfer payments.

Source: U.S. Department of Commerce, Bureau of the Census, *Statistical Abstract of the United States: 1966* (87th edition), pp. 328 and 329. Washington, U.S. Government Printing Office, 1966.

Table A-15.—Number and percent distribution of population and employment status, by color, sex, and age; South Dakota; 1960

Color, sex, and age	Total number	Total percent	Not in labor force	In labor force					
				Armed forces	Civilians employed				
					Full time	Part time	Not at work	Unemployed	
Total white and nonwhite:									
Male:									
14 years and older	233,402	100.0	22.30	2.20	60.63	9.90	1.90	3.10	
14-24	52,285	100.0	39.92	4.87	28.74	20.26	1.23	5.00	
25-64	146,946	100.0	6.36	1.76	81.16	6.53	1.85	2.44	
65 and older	34,171	100.0	63.30	—	21.14	11.50	3.00	1.41	
Female:									
14 years and older	229,673	100.0	68.54	0.008	18.25	10.59	1.31	1.30	
14-24	50,655	100.0	66.22	0.023	15.84	14.00	1.35	2.65	
25-64	144,089	100.0	64.75	0.005	22.06	11.00	1.40	1.02	
65 and older	34,929	100.0	87.54	—	6.01	5.08	0.86	1.38	
Total nonwhite:									
Male:									
14 years and older	8,489	100.0	50.25	3.92	23.00	7.35	2.82	12.72	
14-24	3,163	100.0	68.71	5.12	7.30	4.61	2.08	12.17	
25-64	4,496	100.0	31.73	4.02	36.03	9.87	3.78	14.76	
65 and older	830	100.0	80.13	—	11.56	4.09	0.48	3.73	
Female:									
14 years and older	7,965	100.0	78.90	—	12.29	3.45	2.20	3.11	
14-24	2,637	100.0	84.75	—	6.10	3.33	2.00	3.79	
25-64	4,673	100.0	73.90	—	17.03	4.00	2.52	3.16	
65 and older	655	100.0	95.87	—	3.00	—	1.22	—	

Source: U.S. Department of Commerce, Bureau of the Census. *U.S. Census of Population: 1960. Detailed Characteristics, South Dakota*. Final Report PC (1)-43D, pp. 43-268 and 43-269. Washington, U.S. Government Printing Office, 1962.

Table A-16.—Changes in personal income and per capita income; United States, South Dakota, and bordering States: 1950, 1960, and 1965

State	Total personal income ¹					Per capita personal income ²				
	Percent of United States			Percent increase		Percent of United States			Percent increase	
	1950	1960	1965	1950-60	1960-65	1950	1960	1965	1950-60	1960-65
United States	100.00	100.00	100.00	76	32	100	100	100	48	23
South Dakota	0.36	0.31	0.27	50	19	83	80	75	43	15
Bordering States:										
North Dakota	0.35	0.27	0.28	39	38	84	78	85	36	34
Iowa	1.74	1.37	1.36	40	31	100	90	95	33	31
Minnesota	1.87	1.82	1.77	71	29	94	95	96	50	24
Montana	0.43	0.35	0.32	44	23	108	92	88	26	18
Nebraska	0.87	0.75	0.72	51	27	100	95	94	42	22
Wyoming	0.21	0.19	0.16	55	13	111	102	91	35	10

¹ Personal income is the current income received by individuals, by unincorporated businesses, and by nonprofit institutions from all sources net of personal contributions for social insurance.

² Per capita personal income represents personal income per unit of population.

Source: U.S. Department of Commerce, Bureau of the Census. *Statistical Abstract of the United States: 1966* (87th edition), p. 331. Washington, U.S. Government Printing Office, 1966.

Table A-17.—Personal income, per capita, in dollars, 1950 to 1965, and rank order, 1965; United States, South Dakota, and bordering States

State	Per capita						
	1950	1955	1960	1963	1964	1965	
						Income	Rank
United States	\$1,496	\$1,876	\$2,215	\$2,451	\$2,574	\$2,724	—
South Dakota	1,242	1,292	1,782	1,911	1,881	2,055	42 ¹
Bordering States:							
North Dakota	1,264	1,379	1,718	2,014	2,122	2,304	36
Iowa	1,496	1,616	1,988	2,304	2,356	2,595	24
Minnesota	1,410	1,727	2,115	2,370	2,432	2,625	23
Montana	1,622	1,851	2,039	2,263	2,295	2,409	29
Nebraska	1,490	1,594	2,110	2,280	2,361	2,573	25
Wyoming	1,668	1,854	2,260	2,413	2,444	2,479	27

¹ States ranking lower are: Kentucky, North Carolina, West Virginia, Tennessee, Alabama, South Carolina, Arkansas, and Mississippi.

Source: U.S. Department of Commerce, Bureau of the Census. *Statistical Abstract of the United States: 1966* (87th edition), p. 330. Washington, U.S. Government Printing Office, 1966.

Table A-18.—Annual median family income, Indian and all races; United States, South Dakota, and bordering States; 1959

State	Median family income		
	All races		Indian reservation States ¹
	Urban and rural nonfarm	Rural farm	
United States	\$5,660	\$3,228	\$1,900
South Dakota	4,251	2,860	1,794
Bordering States:			
North Dakota	4,530	3,432	2,138
Iowa	5,069	3,352	—
Minnesota	5,573	3,099	2,599
Montana	5,403	4,289	2,774
Nebraska	4,862	3,243	1,833
Wyoming	5,877	4,340	2,801

¹ The following 15 States have counties with a nonwhite population of at least 1,000, and 90 percent or more of this nonwhite population was Indian in 1960: Arizona, North Carolina, New Mexico, South Dakota, Nebraska, Utah, Oklahoma, North Dakota, Minnesota, Montana, Wisconsin, Wyoming, California, Washington, and Oregon.

Source: U.S. Dept. of Health, Education, and Welfare, Public Health Service, Bureau of Medical Services, Division of Indian Health. *Indian Health Highlights*, 1966 edition, p. 5. Washington, U.S. Government Printing Office, June 1966.

APPENDIX A. POPULATION CHARACTERISTICS

Table A-19.—Family, by type, members in the labor force, and education, age, color, and own children under 18, of family head; South Dakota; 1960

Subject	Total number	Percentage of family heads with education of—					Percentage by number of members in labor force					
		Primary and secondary schools		College			0	1	2	3 or more	Head only in labor force	Head and wife in labor force
		0-8 years	9-11 years	12 years	1-3 years	4 or more years						
Total, all families	167,071	45.9	14.4	23.8	8.8	7.1	10.5	53.8	28.7	7.0	49.1	23.2
With own children under 18	98,594	36.7	15.2	30.1	9.6	8.4	4.4	59.5	27.2	8.9	57.7	23.6
Husband-wife	151,446	45.0	14.4	24.4	8.8	7.4	9.4	54.6	28.9	7.1	51.3	25.6
Head under 35	39,223	22.3	17.1	37.8	12.1	10.7	5.0	69.4	24.6	1.0	67.0	23.7
With own children under 18	33,465	23.1	17.3	38.0	11.1	10.5	4.8	74.0	20.2	1.0	72.4	19.1
Head 35-64	89,859	48.0	14.2	22.7	8.1	7.0	2.7	52.1	34.4	10.8	50.3	30.5
With own children under 18	59,644	43.8	13.7	26.2	8.5	7.8	1.8	52.9	32.0	13.3	51.5	28.5
Other male head	5,120	67.4	10.8	14.2	4.0	3.6	12.7	47.0	32.6	7.6	37.0	...
With own children under 18	925	55.0	15.6	17.5	3.8	8.1	10.0	61.1	19.3	9.6	57.2	...
Female head	10,505	48.0	16.5	20.3	11.2	4.0	25.1	44.7	24.0	6.2	23.6	...
With own children under 18	4,560	31.9	21.3	28.8	14.6	3.4	29.7	44.9	17.8	7.6	38.0	...
Nonwhite:												
Total all families	4,276	59.0	24.3	11.6	3.4	1.7	28.3	44.7	19.6	7.4	34.2	13.4
With own children under 18	2,789	52.6	27.4	13.5	4.2	2.3	25.3	47.8	19.7	7.2	41.4	14.7
Husband-wife	3,156	58.3	24.0	11.6	3.7	2.4	23.7	48.2	20.9	7.2	40.1	18.1
Head under 35	820	37.3	32.7	22.0	6.2	1.8	27.6	53.2	17.1	2.1	49.3	17.7
With own children under 18	718	40.4	32.0	19.7	6.5	1.4	28.5	54.3	14.8	2.4	50.9	15.5
Head 35-64	1,859	60.6	24.4	9.1	3.0	2.9	13.0	50.2	26.0	10.8	42.3	22.4
With own children under 18	1,415	58.3	25.2	9.5	3.2	3.8	12.4	51.2	25.7	10.7	44.7	22.1
Other male head	269	66.2	20.4	13.4	...	...	23.0	41.3	27.5	8.2	26.0	...
With own children under 18	103	61.2	21.4	17.4	...	...	29.1	49.5	21.4	...	43.7	...
Female head	851	58.0	27.0	11.3	3.7	...	47.1	32.9	12.2	7.8	15.0	...
With own children under 18	553	46.1	32.2	16.6	5.1	...	51.0	30.0	11.8	7.2	20.1	...

Source: U.S. Department of Commerce, Bureau of the Census. U.S. Census of Population: 1960. Detailed Characteristics of Population—South Dakota. Final Report PC (1) 43D, pp. 43-261. Washington, U.S. Government Printing Office, 1961.

Table A-20.—Number of families, percent of families on farms, family income in 1960, and effective buying income per capita in 1962, in rank order; United States, South Dakota, and bordering States

State	Families in 1960 (in thousands)		Percent of families on farms in 1960		Percent of families with income less than \$3,000 in 1960		1962 effective buying income per capita	
	Number	Rank	Percent	Rank	Percent	Rank	Amount	Rank
United States	45,128	—	7.4	—	21.4	—	2,059	—
South Dakota	167	41	30.3	2	33.5	10	1,644	40
Bordering States:								
North Dakota	150	45	31.3	1	28.8	13	1,513	44
Iowa	712	24	24.0	3	25.3	19	1,910	29
Minnesota	837	18	16.7	9	21.4	24	1,939	26
Montana	166	42	15.6	12	20.2	21	1,816	31
Nebraska	366	34	22.2	5	26.1	18	1,984	24
Wyoming	84	49	12.8	17	16.5	35	2,046	19

Sources: U.S. Department of Commerce, Bureau of the Census. *1960 Census of Population Supplementary Reports*, February 24, 1964, PC (SI)—43, pp. 9, 19, 23, 24, 25, 28, and 32.

Mary Y. Pennell and Kathryn I. Baker. *Health Manpower Source Book, Section 19, Location of Manpower in 8 Health Occupations, 1962*, p. 27. U.S. Dept. of Health, Education, and Welfare; Public Health Service. Washington, U.S. Government Printing Office, 1965.

Table A-21.—Education characteristics of the population from public schools; United States, South Dakota, and bordering States; 1956-66

Education characteristics	United States	South Dakota	Bordering States					Wyoming
			North Dakota	Iowa	Minnesota	Montana	Nebraska	
Estimated percent of illiteracy in population over 14 years of age, 1960	2.4	0.9	1.4	0.7	1.0	1.0	0.9	0.9
Pupil-teacher ratio in public schools, fall 1965	24.6	19.7	20.5	21.5	23.4	21.8	20.7	20.3
Median school years completed by persons 25 years old and older, 1960:								
Total	10.6	10.4	9.3	11.3	10.8	11.6	11.6	12.1
White	10.9	10.5	9.3	11.3	10.8	11.7	11.7	12.1
Nonwhite	8.2	8.6	8.4	9.5	9.1	8.7	9.6	9.3
Estimated current expenditure per pupil in average daily attendance in public schools, 1956-66	\$532	\$507	\$460	\$549	\$577	\$567	\$419	\$551
High school dropouts (percent of 1961-62 9th-graders not graduating in 1964-65)	25.1	18.7	18.6	16.8	12.1	15.7	18.1	25.3
Average annual salaries of classroom teachers in public schools, 1965-66	\$6,500	\$4,650	\$5,120	\$6,050	\$6,641	\$5,800	\$5,225	\$6,119
Armed forces mental test failures of 18-year-olds; June 1964-Dec. 1965 (percent):								
Total	25.3	12.6	14.1	7.7	6.9	8.3	12.1	7.5
White	18.8	12.6	14.1	7.7	6.9	8.3	10.9	7.6
Nonwhite	67.5	(¹)	(¹)	—	² 37.4	—	54.7	(¹)

¹ Numbers too small to compute a meaningful percentage.

² Based on small size sample.

Source: Richard de Neufville and Caryl Conner, "How Good Are Our Schools?" *American Education*, Vol. 2, No. 9, pp. 8 and 9, October 1966. U.S. Department of Health, Education, and Welfare; Office of Education. Washington, U.S. Government Printing Office, 1966.

Table A-22.—Years of school completed by persons 14 years of age and older, by sex and age; South Dakota; 1950

Sex and age	Number	Percent with primary and secondary education of—				Percent with college education of—		Number not reported	Median school years completed
		None	6 or fewer years	7-9 years	10-12 years	1-2 years	3 or more years		
Male:									
14 years and older ..	239,435	0.86	10.81	47.12	27.82	5.91	5.59	4,520	8.9
14-24	56,935	0.66	4.77	42.34	41.36	6.52	3.00	770	10.2
25-64	153,790	0.62	9.62	48.67	26.16	6.09	6.92	2,910	8.8
65 and older	28,710	2.58	29.15	48.26	9.79	3.73	3.57	840	
Female:									
14 years and older ..	229,305	0.87	8.36	37.62	35.21	10.97	5.39	3,651	10.3
14-24	55,355	0.58	3.12	33.37	49.90	9.02	2.70	725	11.1
25-64	147,359	0.59	7.33	37.46	33.62	12.74	6.81	2,140	9.8
65 and older	26,590	3.05	24.95	47.39	13.48	5.21	3.10	750	

Source: U.S. Department of Commerce, Bureau of the Census, *U.S. Census of Population, 1960*. Final Report PC (1)-43D, *Detailed Characteristics, South Dakota*, pp. 43-242. Washington, U.S. Government Printing Office, 1962.

Table A-23.—Years of school completed by persons 14 years of age and older, by color, sex and age; South Dakota; 1960

Sex and age	Number	Percent with primary and secondary education				Percent with college education		Median school years completed
		None	6 years and fewer	7-9 years	10-12 years	1-2 years	3 or more years	
Total white and nonwhite:								
Male:								
14 years and older	233,402	0.62	7.92	43.48	33.69	6.92	7.37	9.7
14-24	52,285	0.57	2.67	38.12	45.80	8.51	4.33	10.7
25-64	146,946	0.42	5.57	43.33	34.43	6.96	9.29	9.0
65 and older	34,171	1.54	26.03	52.35	11.95	4.34	3.79	
Female:								
14 years and older	229,673	0.64	6.06	34.00	41.18	12.03	6.07	11.3
14-24	50,655	0.52	1.55	33.01	52.19	9.64	3.09	11.1
25-64	144,089	0.38	3.97	30.80	43.16	14.14	7.55	11.5
65 and older	34,929	1.88	21.19	48.57	17.28	6.82	4.26	
Total nonwhite:								
Male:								
14 years and older	8,489	1.39	22.32	43.76	26.91	3.19	2.43	8.7
14-24	3,163	0.54	14.67	47.86	31.84	3.48	1.61	9.1
25-64	4,496	1.49	20.73	44.15	27.16	3.34	3.13	8.5
65 and older	830	4.10	60.12	26.02	6.75	1.32	1.69	
Female:								
14 years and older	7,965	1.81	19.25	42.20	31.70	3.50	1.54	9.0
14-24	2,637	0.87	9.22	51.95	34.43	2.81	0.72	9.4
25-64	4,673	1.43	21.16	38.11	33.30	3.98	2.01	8.7
65 and older	655	8.24	45.95	32.06	9.31	2.90	1.53	

Source: U.S. Department of Commerce, Bureau of the Census, *U.S. Census of Population, 1960*. Final Report PC (1)-43D, *Detailed Characteristics, South Dakota*, pp. 43-241. Washington, U.S. Government Printing Office, 1962.

Table A-24.—Median years of school completed and percent finishing grade school, Indian and all races; South Dakota and bordering States; 1959

State	Median school years completed		Percent finishing grade school	
	Indian	All races	Indian	All races
South Dakota	8.4	10.4	57	86
Bordering States:			<i>Percent</i>	<i>Percent</i>
North Dakota	8.0	9.3	50	82
Iowa .....	...	...	...	...
Minnesota	8.4	10.8	60	85
Montana	8.5	11.6	61	87
Nebraska	8.5	11.6	59	88
Wyoming	8.7	12.1	72	89

Source: U.S. Department of Health, Education and Welfare; Public Health Service; Bureau of Medical Services; Division of Indian Health. *Indian Health Highlights*, 1966 edition, p. 6. Washington, Division of Indian Health, June 1966.

Table A-25.—Number of public and nonpublic high school graduates, by sex,¹ in South Dakota; 1955-65

Year	Total	Estimated number of male high school graduates	Estimated number of female high school graduates
Public:			
1955-56	6,734	3,293	3,441
1956-57	6,702	3,277	3,425
1957-58	6,911	3,379	3,532
1958-59	7,128	3,486	3,642
1959-60	7,582	3,772	3,810
1960-61	8,278	4,163	4,115
1961-62	8,186	4,117	4,069
1962-63	8,174	4,103	4,071
1963-64	9,086	4,605	4,481
1964-65	9,898	5,052	4,846
Nonpublic:			
1962-63	603	275	328
1963-64	698	306	392
1964-65	847	366	481

¹ Distribution by sex estimated by the State.

Sources: Data on public high school graduates: U.S. Dept. of Health, Education, and Welfare; Office of Education; unpublished data.

Data on nonpublic high school graduates: State Department of Public Instruction, South Dakota School Districts, 1962-63, p. 10; 1963-64, p. 10; 1964-65, p. 10; unpublished data.

Table A-26.—Number of first-time fall admissions of degree-credit students to all institutions, by sex; United States, South Dakota, and bordering States; 1959, 1963, and 1965

State	1959			1963			1965		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
United States	826,969	490,622	336,347	1,055,146	608,562	446,584	1,452,926	834,594	618,332
South Dakota	4,114	2,418	1,696	5,086	2,998	2,088	7,099	4,202	2,897
Bordering States:									
North Dakota	3,995	2,423	1,572	4,557	2,775	1,782	7,090	4,332	2,758
Iowa	14,384	8,368	6,016	18,010	10,497	7,513	24,416	14,082	10,334
Minnesota	16,894	9,555	7,339	24,703	14,063	10,640	32,709	18,174	14,535
Montana	3,734	2,370	1,364	4,463	2,768	1,695	6,336	3,827	2,509
Nebraska	7,831	4,433	3,398	10,394	6,057	4,337	14,042	7,902	6,140
Wyoming	1,841	1,078	763	2,226	1,361	865	3,363	2,008	1,355

Source: U.S. Department of Health, Education, and Welfare; Office of Education. *Opening Fall Enrollment in Higher Education*, 1959, 1963, 1965, Superintendent of Documents Catalogue No. FS 5.254: 54003-59; FS 5.254: 54003-63; FS 5.254: 54003-65. Washington, U.S. Government Printing Office, 1959, 1963, 1965.

APPENDIX A. POPULATION CHARACTERISTICS

Table A-27.—Expenditures for vocational programs, and proportion of Federal support; United States, South Dakota, and bordering States; 1964

[In thousands of dollars, except for italic numbers in parentheses, which indicate percent]

State	All programs		Agriculture		Trade and industry		Home economics		Distributive occupation		Practical nursing ¹		Technical education ²	
	Total funds	Federal funds	Total funds	Federal funds	Total funds	Federal funds	Total funds	Federal funds	Total funds	Federal funds	Total funds	Federal funds	Total funds	Federal funds
United States	332,785 (100.0)	55,027 (16.6)	77,474 (23.3)	13,719 (4.1)	103,192 (31.0)	11,496 (3.5)	89,872 (27.0)	8,874 (2.7)	14,883 (4.5)	2,580 (0.8)	12,457 (3.7)	4,761 (1.4)	34,907 (10.5)	13,597 (4.1)
South Dakota	1,227 (100.0)	369 (30.0)	435 (35.5)	174 (14.2)	173 (14.1)	53 (4.3)	456 (37.2)	63 (5.1)	35 (2.9)	15 (1.3)	68 (5.5)	34 (2.8)	60 (4.8)	30 (2.4)
Bordering States: North Dakota	1,878 (100.0)	479 (25.5)	465 (24.8)	172 (9.2)	272 (14.5)	52 (2.8)	715 (38.1)	65 (3.5)	61 (3.2)	15 (0.8)	94 (5.0)	44 (2.3)	271 (14.4)	131 (6.9)
Iowa	5,261 (100.0)	1,520 (28.8)	1,756 (33.4)	553 (10.5)	740 (14.1)	132 (2.5)	1,344 (25.5)	200 (3.8)	210 (4.0)	38 (0.7)	258 (4.9)	121 (2.3)	953 (18.1)	476 (9.0)
Minnesota	8,270 (100.0)	1,418 (17.1)	2,757 (33.3)	500 (6.0)	1,946 (23.5)	193 (2.3)	2,202 (26.6)	193 (2.3)	353 (4.3)	48 (0.6)	322 (4.0)	148 (1.8)	690 (8.3)	336 (4.1)
Montana	1,034 (100.0)	272 (26.4)	359 (34.7)	99 (9.6)	179 (17.3)	50 (4.8)	337 (32.7)	55 (5.3)	52 (5.0)	15 (1.5)	28 (2.7)	14 (1.4)	79 (7.6)	39 (3.8)
Nebraska	2,184 (100.0)	645 (29.4)	786 (36.0)	261 (11.9)	197 (9.0)	70 (3.2)	729 (33.4)	101 (4.6)	85 (4.0)	20 (0.9)	89 (4.0)	44 (2.0)	298 (13.6)	149 (6.8)
Wyoming	837 (100.0)	184 (22.0)	354 (42.4)	53 (6.3)	109 (13.0)	52 (6.2)	288 (34.4)	44 (5.3)	48 (5.7)	15 (1.8)	17 (2.0)	9 (1.1)	21 (2.5)	11 (1.3)

¹ Program initiated in 1956.

² Program initiated in 1958.

Source: U.S. Department of Commerce, Bureau of the Census. *Statistical Abstract of the United States: 1966* (37th edition), p. 141. Washington, U.S. Government Printing Office, 1966.

Table A-28.—Index of crime, number of offenses, and crime rate per 100,000 inhabitants; United States, South Dakota, and bordering States; 1964 and 1965

[Italic numbers in parentheses indicate percent increase from 1964 to 1965]

State	Year	Population	Total offenses		Murder and non-negligent manslaughter		Forcible rape	
			Number	Rate	Number	Rate	Number	Rate
United States	1964	191,334,000	2,614,223	1,366.3	9,249	4.8	20,551	10.7
	1965	193,818,000	2,780,015 (+6.3)	1,434.3 (+5.0)	9,850 (+6.5)	5.1 (+6.3)	22,467 (+9.3)	11.6 (+8.4)
South Dakota	1964	715,000	4,624	646.7	9	1.3	39	5.5
	1965	703,000	4,445	632.4	11	1.6	48	6.8
Bordering States: North Dakota	1964	645,000	3,567	553.0	6	0.9	45	7.0
	1965	652,000	3,271	501.7	6	0.9	33	5.1
Iowa	1964	2,756,000	17,924	650.4	35	1.3	137	5.0
	1965	2,760,000	19,498	706.5	36	1.3	123	4.5
Minnesota	1964	3,521,000	39,027	1,108.4	51	1.4	157	4.5
	1965	3,554,000	40,881	1,150.3	50	1.4	186	5.2
Montana	1964	705,000	7,845	1,112.8	19	2.7	53	7.5
	1965	706,000	7,643	1,082.7	12	1.7	55	7.8
Nebraska	1964	1,480,000	11,008	743.8	34	2.3	85	5.7
	1965	1,477,000	12,576	851.5	36	2.4	76	5.1
Wyoming	1964	343,000	3,341	974.1	19	5.5	35	10.2
	1965	340,000	3,405	1,001.6	10	2.9	39	11.5

Continued

APPENDIX A. POPULATION CHARACTERISTICS

Table A-28. Continued

State	Year	Robbery		Aggravated assault		Burglary		Larceny \$50 and over		Auto theft	
		Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
United States	1964	111,753	58.4	194,705	101.8	1,110,458	580.4	704,536	368.2	462,971	242.0
	1965	118,916 (+6.4)	61.4 (+5.1)	206,661 (+6.1)	106.6 (+4.7)	1,173,201 (+5.7)	605.3 (+4.3)	762,352 (+8.2)	393.3 (+6.8)	486,568 (+5.1)	251.0 (+3.7)
South Dakota	1964	59	8.3	301	42.1	1,870	261.5	1,743	243.8	603	84.3
	1965	65	9.2	291	41.4	1,858	264.3	1,654	235.3	518	73.7
Bordering States:											
North Dakota	1964	56	8.7	122	18.9	1,546	239.7	1,208	187.3	584	90.5
	1965	30	4.6	154	23.6	1,348	206.8	1,199	183.9	501	76.8
Iowa	1964	310	11.2	525	19.0	8,004	290.4	6,274	227.6	2,639	95.8
	1965	354	12.8	554	20.1	8,398	304.3	7,144	258.8	2,889	104.7
Minnesota	1964	1,285	36.5	1,108	31.5	18,833	534.9	11,209	315.3	6,384	181.3
	1965	1,433	40.3	1,405	39.5	18,853	530.5	11,789	331.7	7,165	201.6
Montana	1964	110	15.6	382	54.2	3,328	472.1	2,537	359.9	1,416	200.9
	1965	112	15.9	335	47.5	3,197	452.9	2,534	359.0	1,398	198.0
Nebraska	1964	306	20.7	351	23.7	4,832	326.5	3,198	216.1	2,202	148.8
	1965	324	21.9	416	28.2	5,684	384.8	3,636	246.2	2,404	162.8
Wyoming	1964	46	13.4	135	53.9	1,301	379.3	1,346	392.4	409	119.2
	1965	61	17.9	147	43.2	1,235	363.3	1,450	426.5	463	136.2

Source: U.S. Department of Justice, Federal Bureau of Investigation. *Crime In The United States: Uniform Crime Reports—1965*, pp. 52 and 54. Washington, U.S. Government Printing Office, July 28, 1966.

Table A-29.—School population,¹ by educational age groups; United States, South Dakota, and bordering States; 1965-75

State	Educational age groups								
	Age 5-13			Age 14-17			Age 18-21		
	1965	1970	1975	1965	1970	1975	1965	1970	1975
United States	35,735	37,293	38,633	14,045	15,664	16,589	11,830	14,027	15,764
South Dakota	142	143	142	56	60	61	45	53	55
Bordering States:									
North Dakota	130	126	124	50	54	54	43	47	50
Iowa	509	493	488	206	213	217	155	185	195
Minnesota	702	710	724	267	298	320	203	252	283
Montana	143	144	146	55	60	63	44	52	57
Nebraska	272	276	275	108	116	119	89	105	111
Wyoming	69	69	72	27	29	30	21	25	28

¹ Population in thousands for July 1, 1965, 1970, and 1975. The population is the total resident population in these age groups and includes armed forces stationed in each State but excludes those abroad.

Figures used are from Project on Series IB which assumes that recent trends will continue: (a) Births at a very moderate decline

from 1964-65 level; and (b) gross migration rates and interstate movements of the 1955-60 period will continue through 1975.

Source: U.S. Department of Commerce, Bureau of the Census. *Current Population Reports, Series P-25, No. 326, "Illustrative Projections of the Population of States: 1970 to 1985,"* pp. 101, 103, 104. Washington, U.S. Government Printing Office, 1965.

Table A-30.—Rural road mileage in the United States, in South Dakota, and in bordering States; 1963

State	Total	Under State control	Under local control	Under Federal control
United States	3,145,505	677,575	2,346,508	121,422
South Dakota	86,504	7,803	77,078	1,623
Bordering States:				
North Dakota	101,588	6,117	94,921	550
Iowa	99,585	8,971	90,614	...
Minnesota	109,886	11,303	97,167	1,416
Montana	72,219	11,298	53,369	7,552
Nebraska	96,814	9,205	87,323	286
Wyoming	67,417	5,368	58,252	3,797

Source: New York World-Telegram and The Sun. *The World Almanac, 1966, and book of facts* (Eighty-first year of issue), p. 783. New York, 1966.

Table A-31.—Number of auto registrations and car drivers, and amount of motor fuel consumption,¹ in the United States, in South Dakota, and in bordering States; 1964

State	Registered automobiles, buses, and trucks ²	Car drivers	Motor fuel consumption		
			Total	Highway	Non-highway
United States	86,297,133	95,462,446	72,096,844	67,900,779	4,196,065
South Dakota	390,173	401,786	393,591	284,250	109,341
Bordering States:					
North Dakota	384,862	380,812	367,311	241,434	125,877
Iowa	1,486,268	1,498,703	1,337,091	1,092,426	244,665
Minnesota	1,788,675	1,893,463	1,516,616	1,316,891	199,725
Montana	426,133	380,949	351,095	308,438	42,657
Nebraska	832,261	893,869	697,064	605,088	91,916
Wyoming	223,404	224,944	223,915	198,135	25,780

¹ Total motor fuel consumed includes (in gallons) for private and commercial use, 70,455,892,000; for public use, 1,640,951,000.

² Registrations include: Automobiles—private and commercial (including taxicabs) 71,635,686; publicly owned 314,512. Buses—private and commercial 151,179; publicly owned 154,311. Trucks—pri-

vate and commercial 13,319,402; publicly owned 722,043. Grand total—private and commercial 85,106,267; publicly owned 1,190,866.

Source: New York World-Telegram and The Sun. *The World Almanac, 1966*, and book of facts (Eighty-first year of issue), pp. 779 and 784. New York, 1966.

Table A-32.—Projections of the population, by age groups, in South Dakota, 1970 to 1985, and the percent change since 1960

Age group	Series 11-B ¹ Population ²					Percent change: April 1, 1960 to each date			
	April 1960	1970	1975	1980	1985	1970	1975	1980	1985
All ages	681	755	791	839	895	11.0	16.3	23.3	31.5
Under 18 years	262	293	305	325	351	11.7	16.2	23.8	33.7
18 to 44 years	216	249	272	320	332	15.3	25.9	39.7	53.4
45 to 64 years	131	137	137	133	130	4.5	4.9	1.7	0.8
65 years and older	72	76	77	80	83	6.8	8.3	11.7	16.0
5 to 17 years	179	205	208	220	241	14.7	16.3	22.7	34.6
18 to 24 years	58	90	97	101	103	55.7	68.6	75.6	78.1

¹ Population indicators based on the assumption that interstate gross migration rates of the 1955-60 period will converge during the projection period and the assumption that the national fertility will have a very moderate decline from present levels.

² Numbers in thousands as of July 1, except as noted.

Source: U.S. Department of Commerce, Bureau of the Census. *Current Population Reports, Series P-25, No. 326, "Illustrative Projections of the Population of States: 1970 to 1985,"* p. 34. Washington, U.S. Government Printing Office, 1965.

Appendix B

Health in South Dakota

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Table B-1.—Birth rate per 1,000 population; United States, South Dakota, and bordering States; 1940, 1950, 1960, 1964, and 1965

State	1940	1950	1960	1964	1965 ¹
United States	19.4	24.1	23.7	21.0	19.4
South Dakota	19.6	27.7	25.9	21.8	19.5
Bordering States:					
North Dakota	21.6	27.7	26.3	22.4	20.4
Iowa	18.6	24.1	23.3	20.1	18.6
Minnesota	19.1	25.3	25.7	21.8	19.9
Montana	21.2	26.6	25.9	21.4	19.2
Nebraska	17.3	24.1	24.3	20.8	18.6
Wyoming	21.7	26.5	25.8	21.1	18.9

¹ Provisional. By place of occurrence. U.S. total based on receipts corrected for observed differences between provisional and final data. State data are not corrected in this manner.

Source: U.S. Department of Commerce, Bureau of the Census. *Statistical Abstract of the United States: 1966* (87th edition), p. 47. Washington, U.S. Government Printing Office, 1966.

Table B-2.—Number of live birth, by attendant and color; United States, South Dakota, and regions¹ within South Dakota; 1964

State, region, and color	Total births by place of occurrence	Births by place of residence			
		Total	Attendant		Attendant not in hospital and not specified
			Physician in hospital ²	Percent	
United States	4,027,490	4,027,490	3,924,826	97.5	102,664
White	3,369,160	3,369,160	3,338,708	99.1	30,452
Nonwhite	658,330	658,330	586,118	89.0	72,212
South Dakota	15,558	15,620	15,464	99.0	156
White	14,140	14,128	14,042	99.4	³ 86
Nonwhite	1,418	1,492	1,422	95.3	³ 70
Region I	3,438	3,426	3,412	99.6	14
White	3,438	3,426	3,412	99.6	14
Nonwhite	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
Region II	2,542	2,846	2,784	97.8	62
White	1,746	1,932	1,924	99.6	8
Nonwhite	796	914	860	94.1	54
Region III	3,352	2,376	2,358	99.2	18
White	3,352	2,376	2,358	99.2	18
Nonwhite	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)
Region IV	1,402	2,118	2,100	99.2	18
White	1,290	2,030	2,014	99.2	16
Nonwhite	112	88	86	97.7	2
Region V	2,698	2,644	2,608	98.6	36
White	2,616	2,598	2,564	98.7	34
Nonwhite	82	46	44	95.7	2
Region VI	2,572	2,210	2,202	99.6	8
White	2,572	2,210	2,202	99.6	8
Nonwhite	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)

¹ Regions used for Mental Health Planning in South Dakota, based in general upon trade and use of existing health services. For listing of counties in each region, see Explanatory Notes, p. X.

² Includes births attended by physicians, midwives, or other persons in hospitals or institutions and births attended by physicians in clinics.

³ 12 of the 70 were unaccounted for in publication.

⁴ Figures for nonwhite were tabulated separately where the 1960 population for nonwhite comprised 10 percent of the total county population or numbered 10,000 or more.

Source: U.S. Department of Health, Education, and Welfare; Public Health Service; National Center for Health Statistics. *Vital Statistics of the United States, 1964; Volume 1—Natality*. pp. 2-3, 2-48, and 2-49. Washington, U.S. Government Printing Office, 1964.

Table B-3.—Number of live births, by age of mother and race; South Dakota; 1964

Race	Total	Under 15 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years
Total	15,620	12	2,004	5,584	3,976	2,302	1,296	424	22
White	14,128	10	1,772	5,112	3,610	2,030	1,190	384	20
Nonwhite	1,492	2	232	472	366	272	106	40	2
Negro	86	0	20	26	20	18	0	0	2

Source: U.S. Department of Health, Education, and Welfare; Public Health Service, National Center for Health Statistics. *Vital Statistics of the United States, 1964, Volume 1—Natality*, p. 1-82. Washington, U.S. Government Printing Office, 1964.

Table B-4.—Number of illegitimate births, by size of community and by color and age of mother; South Dakota; 1964

Size of community and color of mother	Total ¹	Age of mother							
		Under 15 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years
Total, South Dakota	128	2	56	58	8	4	0	0	0
White	102	0	50	44	6	2	0	0	0
Nonwhite	26	2	6	14	2	2	0	0	0
Urban—50,000 population or more (Sioux Falls)	16	0	10	6	0	0	0	0	0
White	14	0	8	6	0	0	0	0	0
Nonwhite	2	0	2	0	0	0	0	0	0
Urban—10,000 to 50,000 population	42	0	20	16	4	2	0	0	0
White	42	0	20	16	4	2	0	0	0
Nonwhite	0	0	0	0	0	0	0	0	0
Under 10,000 population	70	2	26	36	4	2	0	0	0
White	48	0	22	22	4	0	0	0	0
Nonwhite	22	2	4	14	0	2	0	0	0

¹ Figures exclude an unknown number of illegitimate births because of erroneous filing of a substitute record which did not include the item on legitimacy status.

Source: U.S. Department of Health, Education, and Welfare; Public Health Service, National Center for Health Statistics. *Vital Statistics of the United States, 1964; Volume 1, Natalty*, p. 1-185. Washington, U.S. Government Printing Office, 1966.

Table B-5.—Death rates per 1,000 live births of all infants under 1 year of age; United States, South Dakota, and bordering States; total rates, 1940 and 1950; rates by color, 1960 and 1964

State	1940	1950	1960		1964	
	All infants	All infants	White	Nonwhite	White	Nonwhite
United States	47.0	29.2	22.9	43.2	21.6	41.1
South Dakota	38.7	26.6	24.2	76.0	21.0	36.2
Bordering States:						
North Dakota	45.1	26.6	24.1	43.3	22.3	38.3
Iowa	36.5	24.8	21.7	35.2	20.7	45.9
Minnesota	33.2	25.1	21.6	22.6	20.2	30.4
Montana	46.5	28.2	24.2	34.5	24.5	50.1
Nebraska	36.0	25.0	21.3	34.3	22.0	35.2
Wyoming	44.7	32.5	27.5	48.6	28.5	39.6

Source: U.S. Department of Commerce, Bureau of the Census, *Statistical Abstract of the United States: 1966* (87th edition), p. 60. Washington, U.S. Government Printing Office, 1966.

Table B-6.—Number of neonatal and infant deaths, and death rates per 1,000 live births, by color, for the United States and for South Dakota; 1964

Age at death, and color	United States		South Dakota	
	Number	Death rate	Number	Death rate
Under 28 days of age:				
Total	72,026	17.9	236	15.1
White	54,593	16.2	210	14.9
Nonwhite	17,433	26.5	26	17.4
Under 1 year of age:				
Total	99,783	24.8	351	22.5
White	72,728	21.6	297	21.0
Nonwhite	27,055	41.1	54	36.2

Source: U.S. Department of Health, Education, and Welfare; Public Health Service, National Center for Health Statistics. *Vital Statistics of the United States, 1964; Volume II—Mortality, Part B*, pp. 7-61 and 7-74. Washington, U.S. Government Printing Office, 1966.

Table B-7.—Number of reported cases of selected reportable diseases among the population of South Dakota, 1960-65

Reportable disease	Total 1960-65	1960	1961	1962	1963	1964	1965
Total, all cases	9,052	1,199	1,404	1,625	1,884	1,729	1,211
Aseptic meningitis	19	0	0	0	5	10	4
Brucellosis	104	26	18	15	12	22	11
Chancroid	3	1	3	...	...	...	...
Diphtheria	62	10	5	22	14	3	8
Encephalitis, primary	41	0	0	0	16	11	14
Gonorrhea	6,294	817	1,006	1,227	1,338	1,144	762
Hepatitis, infectious and serum	309	...	...	...	150	135	24
Meningococcal infections	13	...	...	...	4	5	4
Poliomyelitis	14	7	4	2	1	0	0
Salmonellosis	128	8	20	22	26	36	16
Shigellosis	325	19	57	75	88	49	37
Syphilis	938	178	165	141	128	165	161
Tetanus	4	...	...	...	2	2	...
Tuberculosis	766	129	124	120	96	131	166
Tularemia	22	...	...	...	3	15	4
Typhoid fever	10	4	3	1	1	1	0

Source: South Dakota Department of Health, Division of Public Health Statistics. *South Dakota Public Health Statistics, Annual Statistical Report: 1960*, p. 45; *1961*, p. 45; *1962*, p. 60; *1963*, p. 77; *1964*, p. 75; *1965*, p. 89. Pierre, South Dakota. May 10 of 1961, 1962, 1963, 1964, 1965, and 1966.

Table B-8.—Number of reported cases of selected reportable diseases, by age groups, in South Dakota; composite 1960-65

Reportable disease	All ages	Under 1 year	1-4 years	5-9 years	10-14 years	15-19 years	20-24 years	25-34 years	35-44 years	45-54 years	55 and older	Age not stated
Total, all cases	9,052	124	326	206	159	1,236	2,084	2,123	928	459	677	730
Aseptic meningitis	19	4	5	...	1	...	1	1	1	2	3	1
Brucellosis	104	...	1	1	1	1	10	22	27	15	11	15
Chancroid	3	...	...	...	...	1	...	...	1	...	...	1
Diphtheria	62	...	11	14	6	5	...	6	2	2	12	4
Encephalitis, primary	41	5	3	7	4	4	...	4	4	1	8	1
Gonorrhea	6,294	6	8	11	28	1,068	1,869	1,764	658	219	105	558
Hepatitis, infectious and serum	309	...	31	63	44	32	22	41	17	16	18	25
Meningococcal infections	13	5	4	...	1	1	...	...	...	1	1	...
Poliomyelitis	14	...	3	1	1	1	3	3	1	...	...	1
Salmonellosis	128	19	39	14	6	4	3	6	9	9	9	10
Shigellosis	325	62	153	24	9	7	3	13	4	8	24	18
Syphilis	938	19	1	...	3	62	112	162	111	114	265	89
Tetanus	4	...	...	1	1	...	...	...	...	...	2	...
Tuberculosis	766	4	64	60	46	48	59	101	91	71	219	4
Tularemia	22	...	3	9	5	2	1	...	...	...	...	1
Typhoid fever	10	...	...	1	3	...	1	...	2	1	...	2

Source: South Dakota Department of Health, Division of Public Health Statistics. *South Dakota Public Health Statistics, Annual Statistical Report: 1960, p. 45; 1961, p. 45; 1962, p. 60; 1963, p. 77; 1964, p. 75; 1965, p. 89. Pierre, South Dakota. May 10 of 1961, 1962, 1963, 1964, 1965, and 1966.*

Table B-9.—Percent distribution of reported cases of selected reportable diseases, by age groups, in South Dakota; composite 1960-65

Reportable disease	All ages	Under 1 year	1-4 years	5-9 years	10-14 years	15-19 years	20-24 years	25-34 years	35-44 years	45-54 years	55 and older	Age not stated
Total, all cases	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Aseptic meningitis	0.2	3.2	1.6	...	0.6	...	0.0	0.1	0.1	0.4	0.4	0.1
Brucellosis	1.2	...	0.3	0.5	0.6	0.1	0.5	1.0	2.9	3.3	1.6	2.1
Chancroid	0.0	...	...	...	...	0.1	...	...	0.1	...	...	0.1
Diphtheria	0.7	...	3.4	6.8	3.8	0.4	...	0.3	0.2	0.4	1.8	0.6
Encephalitis, primary	0.5	4.1	0.9	3.4	2.5	0.3	...	0.2	0.4	0.2	1.2	0.1
Gonorrhea	69.5	4.8	2.5	5.3	17.6	86.4	89.8	83.1	70.9	47.7	15.5	76.4
Hepatitis, infectious and serum	3.4	...	9.5	30.6	27.7	2.6	1.1	1.9	1.9	3.5	2.7	3.4
Meningococcal infections	0.1	4.1	1.2	...	0.6	0.1	...	...	...	0.2	0.1	...
Poliomyelitis	0.2	...	0.9	0.5	0.6	0.1	0.1	0.1	0.1	...	...	0.1
Salmonellosis	1.4	15.3	12.0	6.8	3.8	0.3	0.1	0.3	1.0	2.0	1.3	1.4
Shigellosis	3.6	50.0	46.9	11.6	5.7	0.5	0.1	0.6	0.4	1.7	3.6	2.5
Syphilis	10.4	15.3	0.3	...	1.9	5.0	5.4	7.6	12.0	24.9	39.1	12.2
Tetanus	0.0	...	...	0.5	0.6	...	...	...	...	...	0.3	...
Tuberculosis	8.5	3.2	19.6	29.1	28.9	3.9	2.9	4.8	9.8	15.5	32.4	0.6
Tularemia	0.2	...	0.9	4.4	3.2	0.2	0.0	...	...	...	...	0.1
Typhoid fever	0.1	...	...	0.5	1.9	...	0.0	...	0.2	0.2	...	0.3

Source: South Dakota Department of Health, Division of Public Health Statistics. *South Dakota Public Health Statistics, Annual Statistical Report: 1960, p. 45; 1961, p. 45; 1962, p. 60; 1963, p. 77; 1964, p. 75; 1965, p. 89. Pierre, South Dakota. May 10 of 1961, 1962, 1963, 1964, 1965, and 1966.*

Table B-10.—Number of newly reported cases of venereal diseases¹ in the United States, in South Dakota, and in bordering States; 1965

State	Syphilis		Gonorrhea	Chancroid	Other ²
	All stages	Primary and secondary			
United States	112,842	23,338	324,925	982	1,033
South Dakota	161	39	671	...	...
Bordering States:					
North Dakota	19	2	496	...	...
Iowa	737	49	2,558	2	2
Minnesota	223	91	2,230	2	...
Montana	160	21	465	...	...
Nebraska	406	88	1,037	...	...
Wyoming	98	9	161	1	...

¹ Includes civilian cases only.² Granuloma inguinale and lymphogranuloma venereum.Source: U.S. Department of Health, Education, and Welfare; Public Health Service, Communicable Disease Center. *Morbidity and Mortality Annual Supplement Summary, 1965*, Vol. 14, No. 53, October 14, 1966, p. 13. Atlanta, Communicable Disease Center, 1966.**Table B-11.—Data on tuberculosis,¹ reported to and tabulated by Division of Tuberculosis and Communicable Disease Control, South Dakota Department of Health; 1960-65**

Year	Total number	Cases newly reported
1960	1,499	129
1961	1,547	124
1962	1,525	120
1963	1,494	96
1964	1,202	131
1965	(²)	³ 166

¹ Location, activity, and extent of disease not given.² Number not available.³ The highest number of cases for any year of the 1960's.Source: South Dakota Department of Health, Division of Public Health Statistics. *South Dakota Public Health Statistics, Annual Statistical Report, 1964*, p. 71; and *South Dakota Public Health Statistics, 1965*, p. 85. Pierre, South Dakota. May 10, 1965.

Table B-12.—Total estimated State population, by age, and estimated number of mentally retarded persons, in South Dakota; 1960, 1970, and 1980

Age	State population			Estimated mentally retarded					
				1960		1970		1980	
	1960	1970	1980	Number	Percent	Number	Percent	Number	Percent
Total, all ages	¹ 680,514	² 700,953	² 751,233	12,327	1.81	12,872	1.84	13,364	1.78
Under 5	83,127	76,473	92,609	416	0.5	382	0.5	463	0.5
5-9	77,911	73,350	80,774	1,714	2.2	1,614	2.2	1,777	2.2
10-19	119,509	141,644	133,109	3,585	3.0	4,249	3.0	3,993	3.0
20-54	268,406	264,453	283,185	5,386	2.0	5,289	2.0	5,664	2.0
55-59	31,220	33,509	35,335	468	1.5	503	1.5	530	1.5
60-69	54,919	55,386	61,227	549	1.0	554	1.0	612	1.0
70 and older	45,422	56,138	64,994	227	0.5	281	0.5	325	0.5

¹ 1960 Census figures.

² Population estimates from State Department of Health, Division of Public Health Statistics.

Note: Based on California study, which proposed that different age groups have different percentages of retarded, and adjusted to South Dakota age group estimates.

Source: State Department of Health, Mental Retardation Planning Office. *Space For The Mentally Retarded In South Dakota: Final Report and Recommendations of South Dakota Comprehensive Planning For Mental Retardation, 1965*, p. 72. Pierre, South Dakota, December 31, 1965.

Table B-13.—Death rate¹ for the United States, for South Dakota, and for bordering States; 1940, 1950, 1960, 1964, and 1965

State	1940	1950	1960	1964	1965 ²
United States	10.8	9.6	9.5	9.4	9.4
South Dakota	8.9	9.0	9.7	9.2	9.3
Bordering States:					
North Dakota	8.2	8.4	8.3	8.6	8.5
Iowa	10.4	10.3	10.4	10.6	10.7
Minnesota	9.4	9.4	9.3	9.4	9.2
Montana	10.3	9.9	9.7	9.8	9.3
Nebraska	9.6	9.5	10.0	10.0	10.1
Wyoming	8.6	8.0	8.5	8.3	8.2

¹ Deaths per 1,000 population. Based on total population residing in area, enumerated as of April 1, for 1940, 1950, and 1960, and estimated as of July 1, thereafter.

² Provisional, by place of occurrence. U.S. total based on receipts corrected for observed differences between provisional and final data. State data not corrected in this manner.

Source: U.S. Department of Commerce, Bureau of the Census. *Statistical Abstract of the United States: 1966* (86th edition), p. 56. Washington, U.S. Government Printing Office, 1966.

Table B-14.—Death rate per 100,000 population for the 10 leading causes of death in the United States in South Dakota, and in bordering States; 1964

State	Diseases of the heart	Malignant neoplasms ¹	Vascular lesions affecting the central nervous system	Accidents	Certain diseases of early infancy	Influenza and pneumonia ²	General arteriosclerosis	Diabetes mellitus	Other diseases of the circulatory system	Other bronchopulmonic diseases
United States	365.8	151.3	108.6	54.3	31.5	31.1	19.4	16.9	13.5	12.2
South Dakota	355.0	142.7	117.9	70.3	27.4	27.1	18.5	11.6	14.4	12.7
Bordering States:										
North Dakota	330.2	134.3	99.8	63.4	33.2	38.1	18.4	14.7	12.7	7.6
Iowa	420.5	170.6	142.5	58.8	25.7	35.2	31.0	18.4	14.2	14.3
Minnesota	354.7	154.9	126.2	57.1	27.7	34.5	23.3	15.5	14.9	10.5
Montana	334.9	139.1	99.0	95.5	33.3	36.7	23.0	20.3	12.8	17.2
Nebraska	385.0	160.7	128.1	64.5	30.6	37.0	23.4	20.2	11.9	12.0
Wyoming	274.6	118.1	83.7	90.1	42.6	30.3	16.0	12.2	15.2	17.2

¹ Includes neoplasms of lymphatic and hematopoietic tissues.

² Except pneumonia of newborn.

Source: U.S. Department of Commerce, Bureau of the Census. *Statistical Abstract of the United States: 1966* (87th edition) p. 59. Washington, U.S. Government Printing Office, 1966.

Table B-15.—Number and rate of deaths from selected causes, ranked according to frequency, by major classifications; South Dakota; 1964

Total deaths and classifications	Number	Rate per 100,000 population ¹
Total	6,612	924.8
Major cardiovascular-renal diseases	3,701	517.6
Malignant neoplasms	1,020	142.6
Accidents	503	70.3
Congenital malformations and certain diseases of early infancy	270	37.8
Influenza and pneumonia	194	27.1
Miscellaneous gastrointestinal and related diseases	111	15.5
Diabetes	83	11.6
Suicides and homicides	83	11.6
Senility	86	12.0
Infections and parasitic diseases	54	7.6
Complications of pregnancy	1	0.1
All other	506	70.8

¹ Based on 715,000 population.

Source: U.S. Department of Health, Education, and Welfare; Public Health Service, National Center for Health Statistics. *Vital Statistics of the United States, 1964. Volume II—Mortality, Part B*, pp. 7-528 and 7-529. Washington, U.S. Government Printing Office, 1966.

Table B-16.—Number of deaths, by age, color, and sex, in the United States and in South Dakota; 1964

State, color, and sex	Total	Under 1 year	1-4 years	5-14 years	15-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65-74 years	75-84 years	85 years and over	Not stated
United States	1,798,051	99,783	15,976	16,750	31,477	33,639	74,884	160,649	283,049	430,893	443,128	207,212	611
Male	1,017,778	57,348	8,878	10,236	22,398	21,546	45,815	102,389	183,854	256,774	224,428	83,749	363
Female	780,273	42,435	7,098	6,514	9,079	12,093	29,069	58,260	99,195	174,119	218,700	123,463	248
White	1,578,674	72,728	11,811	13,502	25,933	24,855	57,466	132,489	241,867	386,077	415,364	196,203	379
Male	895,518	42,211	6,629	8,238	18,689	16,303	35,912	86,385	160,599	231,645	209,853	78,780	224
Female	683,156	30,517	5,182	5,214	7,244	8,552	21,554	46,104	81,268	154,432	205,511	117,423	155
Nonwhite	219,377	27,055	4,165	3,248	5,544	8,784	17,418	28,160	41,182	44,816	27,764	11,009	232
Male	122,260	15,137	2,249	1,948	3,709	5,243	9,903	16,004	23,255	25,129	14,575	4,969	139
Female	97,117	11,918	1,916	1,300	1,835	3,541	7,515	12,156	17,927	19,687	13,189	6,040	93
South Dakota	6,612	351	72	56	161	123	207	409	853	1,583	1,899	896	2
Male	4,041	210	34	43	118	77	135	276	619	1,002	1,105	421	1
Female	2,571	141	38	13	43	46	72	133	234	581	794	475	1
White	6,256	297	56	52	132	97	181	385	805	1,523	1,852	875	1
Male	3,836	177	27	40	100	64	118	264	589	970	1,074	412	1
Female	2,420	120	29	12	32	33	63	121	216	553	778	463	...
Nonwhite	356	54	16	4	29	26	26	24	48	60	47	21	1
Male	205	33	7	3	18	13	17	12	30	32	31	9	...
Female	151	21	9	1	11	13	9	12	18	28	16	12	1

Source: U.S. Department of Health, Education, and Welfare; Public Health Service, National Center for Health Statistics. *Vital Statistics of the United States, 1964, Volume II—Mortality, Part B, pp. 7-78 and 7-91.* Washington, U.S. Government Printing Office, 1966.



Table B-17.—Number of reported cases of reportable diseases among Indian population,¹ 1960 through 1964

Disease	1960	1961	1962	1963	1964
Brucellosis	3	2	1	...	1
Chickenpox	1,232	1,194	1,416	1,652	1,922
Diarrhea of newborn	277	306	173	333	136
Diphtheria	19	13	15	13	12
Dysentery	2,238	2,244	2,181	2,470	2,064
Amebiasis	26	37	35	66	50
Bacillary	292	547	869	1,261	1,261
Other	1,920	1,660	1,277	1,143	753
Encephalitis	15	11	20	22	21
Gastroenteritis	7,861	12,769	15,412	20,850	19,452
Gonorrhea	2,158	2,275	2,463	2,585	2,595
Hepatitis	537	653	606	700	536
Influenza	2,731	2,114	3,533	12,429	3,065
Measles	3,343	2,991	4,382	5,262	2,397
Meningitis (aseptic)	59	67	111	73	110
Meningococcal infections	33	25	28	38	41
Mumps	1,655	561	600	978	1,115
Otitis media	...	4,006	12,383	17,052	21,267
Plague	...	...	...	1	...
Pneumonia	6,479	6,932	9,601	12,546	13,121
Pneumonia of newborn	65	79	127	168	142
Poliomyelitis	20	...	5	...	...
Puerperal sepsis	31	62	29	70	76
Rabies	...	...	...	2	...
Rheumatic fever	38	87	84	111	95
Rocky Mountain spotted fever	2	1	2	...	5
Salmonellosis	8	45	119	122	137
Strep sore throat	1,622	2,601	3,663	5,769	6,532
Syphilis, all forms	381	372	350	369	405
Tetanus	...	...	...	2	...
Trachoma	2,814	4,563	3,275	3,146	7,043
Trichinosis	2	6	5	1	9
Tuberculosis, total	877	880	814	753	691
New active cases	...	...	647	596	578
Tularemia	5	...	1	2	15
Typhoid fever	24	17	4	18	3
Whooping cough	239	77	241	507	119

¹ Includes all Indians who are potential beneficiaries of health services under the PHS Indian Health Program except Alaskan natives.

² Reported for last 6 months of 1961.

Source: U.S. Department of Health, Education, and Welfare; Public Health Service, Bureau of Medical Services, Division of Indian Health. *Indian Health Highlights*, 1966 edition, p. 37. Washington, Division of Indian Health, June 1966.

Table B-18.—Number of reported cases of reportable diseases among Indian population,¹ by age groups; 1964

Disease	Total all ages	Under 1	1-4	5-9	10-14	15-19	20-44	45-64	65+	Un-known
Brucellosis	1	...	...	...	1	...	...	...	...	...
Chickenpox	1,922	481	864	527	39	6	2	2	...	1
Diarrhea of newborn	136	136	...	...	...	...	...	...	...	...
Diphtheria	12	...	4	4	1	1	2	...	...	...
Dysentery	(2,064)	(617)	(818)	(184)	(48)	(28)	(202)	(94)	(69)	(4)
Amebiasis	50	4	15	11	3	3	6	5	3	...
Bacillary	1,261	340	528	119	34	17	126	55	42	...
Other	753	273	275	54	11	8	70	34	24	4
Encephalitis	21	3	1	4	2	1	8	1	1	...
Gastroenteritis	19,452	6,489	6,160	1,586	960	509	2,251	971	503	23
Gonorrhoea	2,595	6	11	11	26	360	2,012	155	12	2
Hepatitis	536	7	170	139	62	38	91	19	10	...
Influenza	3,065	225	424	451	419	334	731	332	147	2
Measles	2,397	447	1,067	632	198	38	13	1	...	1
Meningitis (aseptic)	110	62	28	9	6	1	4	...	...	...
Meningococcal infections	41	18	8	1	2	3	8	1	...	...
Mumps	1,115	45	265	539	169	30	56	9	1	1
Otitis media	21,267	6,068	7,865	3,225	1,436	645	1,486	403	125	14
Plague	...	...	...	...	...	...	...	...	...	...
Pneumonia	13,121	4,166	5,439	1,152	339	166	699	566	587	7
Pneumonia of newborn	142	142	...	...	...	...	...	...	...	...
Poliomyelitis	...	...	...	...	...	...	...	...	...	...
Puerperal sepsis	76	...	...	...	1	14	61	...	...	...
Rabies	...	...	...	...	...	...	...	...	...	...
Rheumatic fever	95	...	5	23	25	14	21	5	2	...
Rocky Mtn. spotted fever	5	...	...	2	...	...	...	3	...	...
Salmonellosis	137	43	36	12	4	5	26	9	2	...
Strep sore throat	6,532	400	1,038	1,425	1,074	722	1,450	350	70	3
Syphilis, all forms	405	9	1	3	2	37	253	61	36	3
Tetanus	...	...	...	...	...	...	...	...	...	...
Trachoma	7,043	44	423	2,242	1,981	1,389	646	246	69	3
Trichinosis	9	...	1	2	3	2	1	...	...	...
Tuberculosis, total	691	11	70	67	51	51	211	128	101	1
New active cases	578	10	61	60	42	43	178	102	81	1
Tularemia	15	2	2	3	2	2	2	2	...	...
Typhoid fever	3	...	1	...	1	...	1	...	...	...
Whooping cough	119	47	42	26	2	1	1	...	...	...

¹ Includes all Indians who are potential beneficiaries of health services under the PHS Indian Health Program except Alaskan natives.

Source: U.S. Department of Health, Education, and Welfare; Public Health Service, Division of Indian Health. *Indian Health Highlights*, 1966 ed., p. 41. Washington, Division of Indian Health, June 1966.

Table B-19.—Incidence rates¹ for specified reportable diseases among Indian population;² 1962, 1963, and 1964

Disease	1962	1963	1964
Brucellosis	(³)	...	(³)
Chickenpox	458.3	532.9	612.1
Diarrhea of newborn	56.0	107.4	43.3
Diphtheria	4.9	4.2	3.8
Dysentery	705.8	796.8	657.3
Amebiasis	11.3	21.3	15.9
Bacillary	281.2	406.8	401.6
Other	413.3	368.7	239.8
Encephalitis	6.5	7.1	6.7
Gastroenteritis	4,987.7	6,725.8	6,194.9
Gonorrhoea	797.1	833.9	826.4
Hepatitis	196.1	225.8	170.7
Influenza	1,148.4	4,009.4	976.1
Measles	1,418.1	1,697.4	763.4
Meningitis (aseptic)	35.9	23.5	35.0
Meningococcal infections	9.1	12.3	13.1
Mumps	194.2	315.5	355.1
Otitis media	4,007.4	5,500.6	6,772.9
Plague	...	(³)	...
Pneumonia	3,107.1	4,047.1	4,178.7
Pneumonia of newborn	41.1	54.2	45.2
Poliomyelitis	(³)	...	...
Puerperal sepsis	9.4	22.6	24.2
Rabies	...	(³)	...
Rheumatic fever	27.2	35.3	30.3
Rocky Mountain spotted fever	(³)	...	(³)
Salmonellosis ⁴	38.5	39.4	43.6
Strep sore throat	1,185.4	1,861.0	2,080.3
Syphilis, all forms	113.3	119.0	129.0
Tetanus	...	(³)	...
Trachoma	1,059.9	1,014.8	2,243.0
Trichinosis	(³)	(³)	2.9
Tuberculosis, total	263.4	242.9	220.1
New active cases	209.4	192.3	184.1
Tularemia	(³)	(³)	4.8
Typhoid fever	(³)	5.8	(³)
Whooping cough	78.0	163.5	37.9

¹ Rates per 100,000 population.

² Includes all Indians who are potential beneficiaries of health services under the PHS Indian Health Program except Alaskan natives.

³ Rate not computed for 5 cases or under.

⁴ Includes paratyphoid fever.

Source: U.S. Department of Health, Education, and Welfare; Public Health Service, Bureau of Medical Services, Division of Indian Health. *Indian Health Highlights*, 1966 edition, p. 35. Washington, Division of Indian Health, June 1966.

Table B-20.—Selected vital statistics of Indian, Alaskan native, and all races; United States; calendar year 1964

Selected vital statistics	Indians in 23 Federal Indian Reservation States	Alaskan native	All races
Birth rate—Registered live births per 1,000 population	43.1	45.7	21.0
Infant death rate—Deaths per 1,000 registered live births	35.9	54.8	24.8
Neonatal (under 28 days)	16.5	21.1	17.9
Post-neonatal (28 days to 11 months)	19.4	33.7	6.9
Percent of deaths occurring before 1 year of age	17.8	24.6	5.5
Average age at death years	43.8	34.3	63.6
Average age at death for those who survive first birthday years	53.2	45.3	67.3
Life expectancy at birth—Average number of years that an infant born in 1964 is expected to live	63.5	...	70.2
Median age of population years	17.3	16.3	29.5
Percent of population under 20 years	55.2	57.7	38.5

Source: U.S. Department of Health, Education, and Welfare; Public Health Service, Bureau of Medical Services, Division of Indian Health. *Indian Health Highlights*, 1966 edition, p. 7. Washington, U.S. Division of Indian Health, June 1966.

Table B-21.—Rates of live births¹ and infant deaths² among Indian population and all races for specified periods; in 23 States with Federal Indian Reservations, in South Dakota, and in bordering States; selected years, 1954 to 1963

State	Live birth rates					Infant death rates				
	Indian			All races		Indian			All races	
	1954-56	1959-61	1963	1960	1963	1958-60	1959-61	1963	1960	1963
23 States with Federal Indian Reservations³	36.5	41.9	42.4	24.4	21.7	50.0	45.6	42.9	25.8	25.2
South Dakota	31.8	48.5	50.6	25.9	22.7	71.8	65.2	47.4	28.1	24.7
Bordering States:										
North Dakota	34.4	47.9	46.7	26.3	24.0	52.6	47.4	49.1	24.8	24.6
Iowa	31.6	35.0	35.8	23.3	20.8	⁴ 48.8	⁴ 38.9	58.8	21.9	20.6
Minnesota	37.6	47.9	49.1	25.7	22.9	31.1	⁵ 32.7	30.5	21.6	20.8
Montana	44.2	53.3	50.7	25.9	22.5	44.9	45.3	43.4	25.0	24.2
Nebraska	29.9	41.8	41.0	24.3	22.4	68.7	63.2	63.0	21.9	21.6
Wyoming	36.6	42.6	43.3	25.8	22.6	53.8	50.4	37.6	28.2	28.5

¹ Live births per 1,000 population.
² Infant deaths per 1,000 live births.
³ Excludes Alaskan natives.
⁴ Rates calculated for a total of fewer than 10 deaths in 3-year periods.
⁵ Rates adjusted for a revision of Minnesota Indian deaths tabulated.
 Source: U.S. Department of Health, Education, and Welfare; Public Health Service, Bureau of Medical Services, Division of Indian Health. *Indian Health Highlights*, 1966 edition, pp. 8 and 9. Washington, Division of Indian Health, June 1966.

Table B-22.—Death rates¹ from five leading causes of death among Indians and all races, in States with Federal Indian Reservations² and in South Dakota, for specified years, 1950 to 1961

State and year	Indian ³					All races ⁴				
	Tuber- culosis, all forms	Motor vehicle acci- dents	Non- motor vehicle accidents	Diseases of heart	Gastritis, duodenitis, enteritis ⁵	Tuber- culosis, all forms	Motor vehicle acci- dents	Non- motor vehicle accidents	Diseases of heart	Gastritis, duodenitis, enteritis ⁵
States with Federal Indian Reservations:										
1950-52	112.8	67.5	79.7	147.3	64.2	...	...	...	...	...
1954-56	47.3	77.4	76.6	137.6	40.5	...	...	...	...	...
1955-57	40.0	77.9	78.5	135.9	35.9	...	...	...	...	...
1956-58	34.2	77.7	76.4	139.3	34.9	...	...	...	...	...
1957-59	31.5	76.2	76.0	143.4	34.1	6.5	21.5	30.7	363.4	4.4
1958-60	27.9	75.9	75.1	142.7	29.4	6.1	21.3	31.0	369.0	4.4
1959-61	25.1	79.0	76.8	141.6	26.5	5.4	20.8	29.6	362.6	4.3
South Dakota:										
1950-52	164.5	71.4	58.7	128.8	37.0	...	...	...	...	...
1954-56	75.1	79.8	73.9	159.6	32.9	...	...	...	...	...
1955-57	57.5	72.4	70.1	167.8	43.7	...	...	...	...	...
1956-58	69.8	82.7	81.4	191.2	54.3	...	...	...	...	...
1957-59	69.8	105.9	82.7	183.5	58.1	4.1	32.5	31.7	331.0	5.4
1958-60	59.4	133.1	84.0	182.2	49.1	4.1	34.7	33.7	356.1	4.6
1959-61	46.5	140.6	83.9	191.0	38.7	2.9	32.6	33.9	337.2	3.9

¹ Rates per 100,000 population.
² Including Alaskan natives.
³ Indian rates are 3-year moving averages.
⁴ All races are for single-year rates: 1959, 1960, 1961, respectively.
⁵ Except diarrhea of the newborn.
 Source: U.S. Department of Health, Education, and Welfare; Public Health Service; Bureau of Medical Services; Division of Indian Health. *Indian Health Highlights*, 1966 edition, pp. 25-30. Washington, Division of Indian Health, June 1966.

Appendix C

Health Facilities and Services

Tables

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Table C-1.—Number of hospitals and beds, by ownership; South Dakota; December 1966

Ownership	Number of hospitals	Beds	
		Number	Percent
Total	78	8,263	100.0
Federal	10	1,557	18.8
State	4	3,083	37.3
Local government	14	401	4.9
Proprietary	—	—	—
Voluntary	50	3,222	39.0

Sources: South Dakota Department of Health, Division of Medical Facilities.

American Hospital Association. *Hospitals, Guide Issue*, Part Two, August 1, 1966. Chicago, The Association, 1966.

The Modern Hospital. *The Modern Hospital Directory of Hospitals in the United States, U.S. Territories, and Canada*. A Dodge/McGraw Hill Publication, Chicago. January 1964 edition.

Table C-2.—Number and percent distribution of hospitals and beds, by type of service; South Dakota; December 1966

Type of service	Hospitals		Beds	
	Number	Percent	Number	Percent
Total	78	100.0	8,263	100.0
Short-term general ..	69	88.5	3,848	46.6
Short-term special:				
Mental	3	4.0	3,055	37.0
Tuberculosis	1	1.2	122	1.5
Long-term general ..	4	5.1	1,174	14.2
Long-term special ..	1	1.2	64	0.7

Sources: South Dakota Department of Health, Division of Medical Facilities.

American Hospital Association. *Hospitals, Guide Issue*, Part Two, August 1, 1966. Chicago, The Association, 1966.

The Modern Hospital. *The Modern Hospital Directory of Hospitals in the United States, U.S. Territories, and Canada*. A Dodge/McGraw Hill Publication, Chicago. January 1964 edition.

Table C-3.—Number and percent distribution of hospitals and beds, by type of service and population group served; South Dakota; December 1966

Type of service and population group served	Hospitals		Beds	
	Number	Percent	Number	Percent
Total	78	100.0	8,263	100.0
General population	66	84.6	6,514	78.8
Short-term general	63	80.8	3,459	41.9
Mental	3	3.8	3,055	36.9
Children	1	1.2	64	0.8
Long-term special (orthopedic)	1	1.3	64	0.8
Indians	6	7.7	426	5.2
Short-term general	5	6.4	304	3.7
Tuberculosis	1	1.3	122	1.5
U.S. military	1	1.3	85	1.0
Short-term general	1	1.3	85	1.0
Veterans	4	5.1	1,174	14.2
Federal	3	3.8	1,146	13.9
State	1	1.3	28	0.3

Sources: South Dakota Department of Health, Division of Medical Facilities.

American Hospital Association. *Hospitals, Guide Issue, Part Two*, August 1, 1966, pp. 199-201. Chicago, The Association, 1966.

The Modern Hospital. *The Modern Hospital Directory of Hospitals in the United States, U.S. Territories, and Canada*. A Dodge/McGraw Hill Publication, Chicago. January 1964 edition.

Table C-4.—Short-term general hospitals and beds, by ownership; South Dakota; December 1966

Ownership	Number of general hospitals	Beds	
		Number	Percent
Total	69	3,848	100.0
Voluntary	49	3,158	82.1
Church	24	1,974	51.3
Other	25	1,184	30.8
Proprietary	—	—	—
Government:			
Non-Federal	14	401	10.4
County	7	202	5.2
City	6	183	4.8
County-city	1	16	0.4
Federal	6	289	7.5

Sources: South Dakota Department of Health, Division of Medical Facilities.

American Hospital Association. *Hospitals, Guide Issue, Part Two*, August 1, 1966. Chicago, The Association, 1966.

The Modern Hospital. *The Modern Hospital Directory of Hospitals in the United States, U.S. Territories, and Canada*. A Dodge/McGraw Hill Publication, Chicago. January 1964 edition.

Table C-5.—Number and percent of licensed hospitals and beds, by size; South Dakota; 1966

Number of beds	Hospitals		Beds	
	Number	Percent	Number	Percent
Total	78	100.0	8,263	100.0
Under 25	20	25.7	379	4.5
25-49	29	37.2	962	11.6
50-99	12	15.4	799	9.7
100-199	7	8.9	912	11.0
200-299	7	8.9	1,765	21.4
300-399	—	—	—	—
400-499	—	—	—	—
500 and over	3	3.9	3,446	41.8

Source: South Dakota Department of Health, Division of Medical Facilities, Pierre, South Dakota. December 1966.

Table C-6.—Selected services provided and reported by 53 South Dakota hospitals, 1966

Selected services	Number of hospitals reporting service
Cobalt	2
Home care program	5
X-ray therapeutic	7
Psychiatric inpatient unit (general hospital)	8
Intensive care unit	9
Radium therapy	9
Organized outpatient department	20
Postoperative recovery room	21
Obstetrical delivery room	43
Emergency department	45
X-ray diagnostic	51

Source: American Hospital Association. *Hospitals, Guide Issue, Part 2*, Vol. 40, No. 15 (Aug. 1, 1966), pp. 199-201. The Association, Chicago, 1966.

Table C-7.—South Dakota general community hospitals with psychiatric units, May 1967

Name of hospital	Location		Number of beds in unit
	City	County	
St. Luke's	Aberdeen	Brown	20
St. John's	Huron	Beadle	8
McKenna	Sioux Falls	Minnehaha	38
Sacred Heart	Yankton	Yankton	8

Source: Department of Mental Health, State Department of Health, Pierre, South Dakota, telephone confirmation.

Table C-8.—Inventory of rehabilitation facilities, South Dakota, 1966

Facility ¹	Voluntary control	Average daily caseload		Number of people per year	Age group served	
		Inpatient	Outpatient		Under 16	Over 16
Crippled Children's Hospital and School	X	70	26	216	X	X
Memorial Hospital	X	...	...	...	X	X
Sacred Heart Hospital	X	...	...	...	X	X

¹ Represents all rehabilitation facilities providing (a) medical evaluation and services, and (b) psychological, social or vocational evaluation and services.

Source: South Dakota State Department of Health, Division of Hospital Facilities. *South Dakota State Plan for the Construction of Hospitals and Medical Facilities, 1967*, p. 222. Pierre, South Dakota, 1966.

Table C-9.—Hospital and health facilities existing and programed in South Dakota; December 31, 1965

Category	Total existing facilities ¹	Existing beds			Additional centers or beds programed	Total centers or beds programed ²
		Total ³	Acceptable			
			Number	Percent of total need		
General hospitals	66	3,345	1,926	57.6	246	3,334
Long-term facilities	126	3,099	2,078	67.1	1,740	4,732
Long-term units of hospitals	1	34	34	100.0	—	34
Mental beds ⁴	⁵ 5	1,709	1,709	100.0	1,946	3,655
Nursing homes	125	3,065	2,044	66.7	1,740	4,698
Diagnostic treatment centers	12	—	—	—	—	12
Tuberculosis hospital	—	—	—	—	—	—
Rehabilitation centers	3	...	...	...	10	13
Public health centers	1	—	—	—	10	11

¹ Represents the total number of civilian general hospital facilities reported in the State plans; includes facilities that have been approved and/or scheduled for construction.

² Includes unacceptable beds classified by those state agencies on the basis of fire and health hazards.

³ Based on bed needs as reported in the State plans.

⁴ From figures of January 1, 1965.

⁵ Includes unacceptable facilities classified by the State agencies on the basis of fire and health hazards; also includes, in some instances, the treatment units of facilities for the mentally retarded.

Source: South Dakota State Department of Health, Division of Hospital Facilities. *South Dakota State Plan for the Construction of Hospitals and Medical Facilities, 1967, State Summary*. Pierre, South Dakota, 1966.

Table C-10.—Number and percent of licensed nursing homes, homes for the aged, and beds, by type of care, in South Dakota; November 1966

Type of care	Homes		Beds	
	Number	Percent	Number	Percent
Total	136	100.0	4,727	100.0
Intensive care	10	7.3	497	10.5
Nursing care	7	5.1	553	11.7
Intermediate care	69	51.1	2,964	62.7
Supervised living	48	35.0	636	13.5
Supervised living and Intermediate care	2	1.5	77	1.6

Source: South Dakota Department of Health, Division of Medical Facilities, Pierre, South Dakota, November 3, 1966.

Note:

1. The terms "skilled nursing homes" and "extended care facilities" are not used in South Dakota for classification of homes.

2. Classification of facilities for licensure in South Dakota are as follows:

a. *Intensive care:* Provides care for persons not acutely ill but requiring nursing care and related medical services. Has nursing services under the supervision of a registered nurse and a registered nurse on duty at all times, working under the direction of a physician. Minimum of 2.0 hours of nursing care required per resident for each 24 hours.

b. *Nursing care:* Provides care for persons not acutely ill but requiring nursing care and related medical services. Has nursing services under the supervision of a registered nurse with at least one registered nurse or licensed practical nurse on duty at all times, working under the direction of a physician. Minimum of 1.6 hours of nursing care required per resident for each 24 hours.

c. *Intermediate care:* Provides care for persons not acutely ill but who require nursing care and related medical services. Has nursing services under the supervision of a registered nurse or a licensed practical nurse working under the direction of a physician. Minimum of 1.2 hours of nursing care required per resident for each 24 hours.

d. *Supervised living care:* Provides personal care for aged and infirm who are dependent upon the services of others for normal daily activities but do not require nursing care. Services of a registered or licensed practical nurse not required. Minimum of 0.8 hours of nursing care required per resident for each 24 hours.

Table C-11.—Number and percent distribution of licensed nursing homes and homes for the aged, by bed size, in South Dakota; 1966

Number of beds	Total			
	Homes		Beds	
	Number	Percent	Number	Percent
Total	136	100.0	4,727	100.0
Under 10	39	28.7	245	5.2
10-24	15	11.0	252	5.3
25-49	42	30.9	1,560	33.0
50-99	37	27.2	2,311	48.9
100-249	3	2.2	359	7.6
250 and over	0	0.0	0	0.0

Source: South Dakota Department of Health, Division of Medical Facilities, Pierre, South Dakota, December 1966.

Table C-12.—Number and percent distribution of licensed nursing homes and homes for the aged, by bed size and classification of home, in South Dakota; 1966

Number of beds	Intensive care				Nursing care				Intermediate care				Supervised living			
	Homes		Beds		Homes		Beds		Homes		Beds		Homes		Beds	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	10	100.0	497	100.0	7	100.0	553	100.0	71	100.0	3,041	100.0	48	100.0	636	100.0
Under 10	—	—	—	—	—	—	—	—	7	9.9	53	1.7	32	66.6	192	30.2
10-24	—	—	—	—	—	—	—	—	7	9.9	125	4.1	8	16.7	127	20.0
25-49	5	50.0	183	36.8	—	—	—	—	31	43.6	1,175	38.6	6	12.5	202	31.7
50-99	5	50.0	314	63.2	5	71.4	342	61.8	25	35.2	1,540	50.7	2	4.2	115	18.1
100-249	—	—	—	—	2	28.6	211	38.2	1	1.4	143	4.9	—	—	—	—
250 and over	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Source: South Dakota Department of Health, Division of Medical Facilities, Pierre, South Dakota, December 1966.

Appendix D

Health Expenditures in South Dakota

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Table D-1.—Average hospital expense per patient-day, by type of service and by Federal and non-Federal control; United States and South Dakota; 1956 to 1965

Classification	Average hospital expense per patient-day									
	1956	1957 ¹	1958	1959	1960	1961	1962	1963	1964	1965
United State, total	\$12.16	—	\$14.74	\$15.69	\$16.46	\$18.46	\$19.73	\$21.00	\$23.20	\$25.29
South Dakota, total	—	—	14.66	13.01	13.91	15.05	16.05	20.97	21.29	23.87
Federal, total	10.51	—	18.84	18.18	19.11	20.59	22.47	25.52	25.78	30.11
Non-Federal, total	—	—	13.15	11.59	12.47	13.51	14.23	19.33	19.71	21.85
Psychiatric	2.92	\$ 2.77	3.22	2.95	3.27	3.51	3.81	5.31	5.12	5.81
Tuberculosis	12.64	16.97	16.03	16.02	29.33	29.20	16.24	13.30	—	—
Other long-term	13.36	8.33	11.71	11.42	11.67	12.74	12.04	15.40	15.89	17.23
Short-term	—	19.80	21.77	23.70	24.73	27.32	28.08	30.61	31.56	35.28
Voluntary nonprofit	19.61	19.92	22.12	24.04	24.97	28.13	28.23	30.92	31.81	35.51
Proprietary	—	20.56	19.07	18.18	—	—	—	—	—	—
State and local government	15.70	17.54	16.41	18.47	20.39	22.37	23.49	25.28	28.06	31.85

¹ Federal hospitals did not report expenses for 1957.

Source: American Hospital Association. *Hospitals, Guide Issue, Part Two*. Chicago, The Association. Annual editions: 1957, Vol. 31, p. 390; 1958, Vol. 32, p. 390; 1959, Vol. 33, p. 403; 1960, Vol. 34, p. 381; 1961, Vol. 35, p. 413; 1962, Vol. 36, p. 433; 1963, Vol. 37, p. 467; 1964, Vol. 38, p. 501; 1965, Vol. 39, p. 467; 1966, Vol. 40, p. 459.

Table D-2.—Number of hospital beds, average daily census, number of personnel, amount of expenses and revenue, by service and control; South Dakota; 1965

Service and control	Hospitals	Beds	Average daily census	Full-time personnel ¹		Expenses and revenue (in thousands of dollars)			
				Number	Per 100 patients	Payroll expenses	Total expense	Patient revenue	Total revenue
Total	61	6,432	4,975	6,958	140	27,790	43,338	—	—
Federal, total	10	1,557	1,219	1,553	127	10,559	13,401	—	—
Non-Federal, total	51	4,875	3,756	5,405	144	17,231	29,937	—	—
Psychiatric	1	1,676	1,676	756	45	2,208	3,553	—	—
Tuberculosis	—	—	—	—	—	—	—	—	—
Other long-term	1	64	57	70	123	275	359	—	—
Short-term	49	3,135	2,023	4,579	226	14,748	26,025	—	—
Voluntary nonprofit	42	2,893	1,892	4,262	225	13,831	24,510	24,784	26,592
Proprietary	—	—	—	—	—	—	—	—	—
State and local government	7	242	131	317	242	917	1,515	—	—

¹ Includes full-time personnel plus full-time equivalents of part-time personnel. Excludes residents, interns, and students.

Source: American Hospital Association. *Hospitals, Guide Issue, Part Two*. August 1, 1966, Vol. 40, p. 458. Chicago, The Association, 1966.

Table D-3.—The five areas of greatest expenditures for health care, South Dakota Department of Health; 1959-60, 1961-62, and 1963-64

Areas	July 1, 1959 to June 30, 1960		July 1, 1961 to June 30, 1962		July 1, 1963 to June 30, 1964	
	Dollars	Percent	Dollars	Percent	Dollars	Percent
Total	955,131	100.0	1,070,504	100.0	1,123,610	100.0
Subtotal	483,148	50.6	544,646	50.9	598,553	53.2
Division of Sanitary Engineering	164,484	17.2	14,309	13.5	146,171	13.0
Hospitalization	92,131	9.6	80,365	7.5	120,145	10.7
Local public health nursing	79,993	8.4	119,662	11.2	148,489	13.2
Minnehaha County (Mental Health Center)	74,205	7.8	—	—	—	—
Division of Laboratories	72,335	7.6	—	—	—	—
Mental Health Center (Sioux Falls)	—	—	117,424	11.0	—	—
Maternal, child health, and crippled children's services	—	—	82,886	7.7	88,970	7.9
Division of Tuberculosis and Communicable Disease Control	—	—	—	—	94,778	8.4

Source: State Department of Health. *South Dakota Department of Health, Biennial Reports. 1958-60, p. 10; 1960-62, p. 10; and 1962-64, p. 12. Pierre, South Dakota.*

Table D-4.—State Health Department budget for all expenditures, sources of funds, and amount of these funds for local public health nursing, in South Dakota; 1959-60, 1961-62, and 1963-64

Year	Total budget all sources		Funds from local and other ¹ sources		Funds from State sources		Funds from Federal sources	
	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
July 1, 1959 to June 30, 1960:								
State of South Dakota	955,131	100.0	180,454	18.9	414,833	43.4	359,843	37.7
Public health nursing	79,993	8.4	36,897	20.4	6,428	1.5	36,667	10.2
July 1, 1961 to June 30, 1962:								
State of South Dakota	1,070,504	100.0	226,987	21.2	413,994	38.7	429,522	40.1
Public health nursing	119,662	11.2	59,640	26.3	1,926	0.5	58,094	13.5
July 1, 1963 to June 30, 1964:								
State of South Dakota	1,123,610	100.0	104,901	9.3	492,704	43.9	526,004	46.8
Public health nursing	148,489	13.2	77,543	74.0	638	0.1	70,308	13.4

¹ Voluntary agency support.

Source: State Department of Health. *South Dakota Department of Health, Biennial Reports. 1958-60, p. 10; 1960-62, p. 10; and 1962-64, p. 12. Pierre, South Dakota.*

Table D-5.—Percent distribution of hospital expense coverage, insurer, and number of people protected by hospital insurance plans, in the United States, South Dakota, and bordering States; December 31, 1964

State	Total population (in thousands) July 1, 1964	Percent of people protected				Number of people protected (in thousands) ¹			
		Total ¹	Insurance companies ²	Blue Cross and Blue Shield medical society plans	Inde- pendent plans ³	Total	Insurance companies ²	Blue Cross and Blue Shield medical society plans	Inde- pendent plans ³
United States	191,371	79.0	48.7	32.9	3.8	151,123	93,209	62,922	7,350
South Dakota	701	70.2	61.3	9.0	2.4	492	430	63	17
Bordering States:									
North Dakota	650	81.8	56.9	31.2	0.5	532	370	203	3
Iowa	2,761	81.3	58.4	27.4	1.8	2,246	1,612	757	51
Minnesota	3,525	84.5	64.8	24.6	2.0	2,978	2,286	869	72
Montana	702	67.7	51.6	18.8	1.1	475	362	132	8
Nebraska	1,470	74.6	59.1	18.7	1.2	1,096	869	275	18
Wyoming	338	72.8	50.9	24.6	2.4	246	172	83	8

¹ Eliminates duplication among persons protected by more than one kind of insuring organization or by more than one insurance company policy providing the same type of coverage.

² Net total of people with insurance company protection.

³ Includes university health plans.

Source: American Nurses' Association. *Facts About Nursing: A Statistical Summary, 1966 Edition*, pp. 222 and 227. New York, The Association, 1966.

Table D-6.—Number of people having health insurance protection for hospital, surgical, and regular medical expenses, in the United States, in South Dakota, and in bordering States; December 31, 1964

State	Number of people protected (in thousands) ¹		
	Hospital expenses	Surgical expenses	Regular expenses
United States	151,123	140,667	108,717
South Dakota	492	467	332
Bordering States:			
North Dakota	532	484	397
Iowa	2,246	2,075	1,517
Minnesota	2,978	2,771	2,083
Montana	475	433	310
Nebraska	1,096	1,032	775
Wyoming	246	247	173

¹ Net total of people protected. Eliminates duplication among persons protected by more than one kind of insuring organization or more than one insurance company policy providing the same type of coverage.

Source: American Nurses' Association. *Facts About Nursing: A Statistical Summary, 1966 Edition*, pp. 223 and 227. New York, The Association, 1966.

Table D-7.—Number of beneficiaries of Old-Age, Survivors, Disability, and Health Insurance¹ and amount of benefit payments;² United States, South Dakota, and bordering States; 1964

State	Number of beneficiaries (in thousands)					Amount of benefit payments (in thousands of dollars)				
	Total	Aged ³	Disabled workers	Widowed mothers	Children	Total	Aged ³	Disabled workers	Widowed mothers	Children
United States ⁴	19,441	15,397	885	460	2,700	16,018,353	12,831,200	1,035,911	348,507	1,588,011
South Dakota	79	65	2	2	10	59,616	50,315	2,185	1,095	5,276
Bordering States:										
North Dakota	67	55	2	1	9	50,685	42,402	1,804	1,039	4,873
Iowa	338	289	9	6	34	275,099	235,418	10,943	4,408	20,776
Minnesota	386	323	10	7	44	311,526	263,159	12,165	5,746	26,748
Montana	73	57	3	2	11	60,588	48,483	3,187	1,219	6,853
Nebraska	168	144	5	3	17	132,841	113,748	5,118	2,040	10,170
Wyoming	30	24	1	1	5	24,860	19,745	1,287	472	3,022

¹ Beneficiaries with benefits in current payment status as of December 31, 1964.

² Benefit payments made during calendar year 1964.

³ Includes persons aged 62 or over receiving old-age benefits and wife beneficiaries under age 62 with child beneficiaries in their care.

⁴ 50 States and District of Columbia.

Note: Totals given in source.

Source: U.S. Department of Health, Education, and Welfare. *State Data and State Rankings in Health, Education, and Welfare*, Part 2, Annual supplement to the monthly *Health, Education, and Welfare Indicators*, 1965 edition, pp. S-51 and S-52. Washington, U.S. Government Printing Office, 1965.

Table D-8.—Medical care expenditures of recipients of State aid under Medical Assistance to Aged and under Old-Age Assistance, in South Dakota, fiscal year 1965

Item	Under Medical Assistance to Aged	Under Old-Age Assistance
Total number of recipients	1,060	8,198
Percent who received medical payment	58.5	68.8
Expenditures per recipient:		
Total, per month.....dollars....	36.04	15.99
For hospital services, per month.....dollars....	27.95	11.64
For inpatient care, per day.....dollars....	28.34	26.32
For outpatient care, per year.....dollars....	11.00	19.62
For physician's services, per year.....dollars....	101.33	64.74
Number of physicians' visits per patient per year.....	12.2	11.7
Median amount spent per month by recipients regularly requiring drugs.....dollars....	...	7.10

Sources: Department of Public Welfare, Pierre, South Dakota. *Annual Report, Fiscal Year Ending June 30, 1965, Utilization of Medical Care, Old-Age Assistance and Medical Assistance for the Aged, and Characteristics of Recipients*, Tables I, II, and III. Department of Public Welfare, Pierre, South Dakota, 1965.

South Dakota State Department of Public Welfare. *Old Age Assistance Characteristics Study*, April 1965, p. 40. Pierre, South Dakota, 1965.

Table D-9.—Number of recipients of Medical Assistance for the Aged¹ and amount of payments; United States, South Dakota, and bordering States; December 1964

All areas ² and selected States	Recipients (thousands)	Payments ³ (dollars) per recipient
All areas ²	225.3	\$194.69
South Dakota	0.5	59.47
Bordering States:		
North Dakota	1.2	214.13
Iowa	5.1	73.59
Minnesota	12.3	202.22
Montana	—	—
Nebraska	0.1	347.39
Wyoming	(⁴)	(⁴)

¹ Program initiated in October 1960 under Public Law 778 (Kerr-Mills).

² United States, District of Columbia, Puerto Rico, and the Virgin Islands.

³ Average monthly payment.

⁴ Not computed; base too small.

Source: U.S. Department of Health, Education, and Welfare. *State Data and State Rankings in Health, Education, and Welfare*, Part 2, Annual supplement to the monthly *Health, Education, and Welfare Indicators*, 1965 Edition, pp. S-61 and S-63. Washington, U.S. Government Printing Office, 1965.

Table D-10.—Federal grants-in-aid per capita to State and local governments, in rank order,¹ for South Dakota and bordering States, and the national average for fiscal year 1964

State and national average	Total grants (all purposes)		Grants for health, education, and public assistance		Grants for health services		Grants for education		Grants for public assistance	
	Rank order	Per capita	Rank order	Per capita	Rank order	Per capita	Rank order	Per capita	Rank order	Per capita
United States	—	\$ 51.84	—	\$20.92	—	\$2.02	—	\$2.87	—	\$16.85
South Dakota	11	79.42	16	24.69	10	3.37	4	8.21	29	13.11
Bordering States:										
North Dakota	8	84.50	14	25.79	5	4.63	9	6.07	17	15.09
Iowa	39	44.96	33	17.25	30	2.28	35	2.33	31	12.64
Minnesota	30	50.97	34	17.19	29	2.32	43	1.63	27	13.24
Montana	4	104.14	29	18.80	18	2.90	8	6.57	41	9.33
Nebraska	28	52.53	31	18.07	24	2.74	16	4.45	37	10.88
Wyoming	2	137.96	36	17.11	36	2.05	14	5.69	40	9.37

¹ Among all States, the State receiving the highest per capita grant-in-aid is given a rank order of 1.

Source: U.S. Department of Health, Education, and Welfare, Office of the Assistant Secretary for Program Coordination. *State*

Data and State Rankings in Health, Education, and Welfare, Part 2, 1965 Edition of Health, Education, and Welfare Trends, Annual supplement to the monthly Health, Education, and Welfare Indicators, p. S-73. Washington, U.S. Government Printing Office, 1965.

Table D-11.—Indian population in the 23 selected Federal Indian reservation States, 1960 and 1965

States	Total ¹		Health service population ² 1965
	1960	1965	
Federal Indian reservation States:	453,000	490,000	337,000
Arizona	83,000	92,600	90,200
California	39,000	43,000	2,650
Colorado	4,300	5,100	1,500
Florida	2,500	2,800	850
Idaho	5,200	5,700	4,300
Iowa	1,700	2,000	500
Kansas	5,100	5,700	750
Michigan	9,700	10,300	1,200
Minnesota	15,500	16,700	10,400
Mississippi	3,100	3,500	2,800
Montana	21,200	22,800	19,950
Nebraska	5,500	6,100	3,450
Nevada	6,700	6,700	6,100
New Mexico	56,300	62,200	62,050
North Carolina	38,100	40,500	3,500
North Dakota	11,700	12,600	11,000
Oklahoma	64,700	64,700	64,600
Oregon	8,000	8,800	2,250
South Dakota	25,800	27,400	23,500
Utah	7,000	8,000	5,050
Washington	21,100	23,300	11,350
Wisconsin	14,300	15,000	5,300
Wyoming	4,000	4,500	3,750

¹ The 1960 enumerated population from official 1960 Census publications—Bureau of the Census, PC(1)B Series. The 1965 figures represent Division of Indian Health updating of 1960 enumerated column. State total figures are used primarily for calculating vital rates. Totals have been independently rounded to the nearest hundred.

² Health service population, which is estimated, represents po-

tential beneficiaries of the PHS Indian Health Program. Estimates as of July 1, 1965.

Source: U.S. Department of Health, Education, and Welfare; Public Health Service, Bureau of Medical Services, Division of Indian Health. *Indian Health Highlights*, 1966 edition, p. 1. Washington, Division of Indian Health, June 1966.

Appendix E

Utilization of Health Facilities and Services

Tables

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Table E-1.—Admissions per 1,000 population to non-Federal short-term general hospitals, South Dakota, 1961 to 1965

Year	Population	Total admissions	Admissions per 1,000 population
1961	692,000	114,713	166
1962	703,000	117,810	167
1963	707,000	121,071	171
1964	701,000	120,390	172
1965	703,000	118,855	169

Sources: Division of Medical Facilities, State Department of Health, South Dakota.
U.S. Department of Commerce, Bureau of the Census. *Statistical Abstract of the United States: 1966* (87th edition), p. 11. Washington, U.S. Government Printing Office, 1966.

Statistical Abstract of the United States: 1966 (87th edition), p. 11. Washington, U.S. Government Printing Office, 1966.

Table E-2.—Admission rates¹ and patient days in general, special,² mental,³ and tuberculosis hospitals; United States, South Dakota, and bordering States; September 30, 1964

State	General and special ² hospitals		Mental ³ hospitals		Tuberculosis hospitals	
	Admission rate	Patient days	Admission rate	Patient days	Admission rate	Patient days
United States	144.7	1,327.1	2.7	1,325.7	0.3	57.3
South Dakota	175.2	1,434.5	3.3	1,176.7	0.5	41.7
Bordering States:						
North Dakota	202.5	1,707.6	6.0	938.3	—	—
Iowa	159.1	1,341.2	2.8	896.7	(⁴)	2.6
Minnesota	176.0	1,515.7	3.3	1,506.3	0.2	25.3
Montana	185.0	1,430.9	2.2	801.2	0.7	84.8
Nebraska	164.4	1,384.5	3.0	1,508.9	0.1	21.6
Wyoming	185.5	1,249.4	7.5	2,083.1	0.1	35.6

¹ Rates per 1,000 population based on data generally for hospital year ending September 30, 1964.

² Includes all types of hospitals other than mental and tuberculosis.

³ Includes short-term psychiatric hospitals.

⁴ Less than 0.05.

Source: U. S. Department of Health, Education, and Welfare. *State Data and State Rankings in Health, Education, and Welfare, Part 2 of 1965 Edition of Health, Education, and Welfare Trends*, p. 8-18. Washington, U.S. Government Printing Office, 1965.

Table E-3.—Movement of patients in mental hospitals, general hospitals with psychiatric services, outpatient psychiatric clinics, and institutions for the mentally retarded; United States, South Dakota, and bordering States; 1963

State	State, county, and private mental hospitals			General hospitals with psychiatric services		Outpatient psychiatric clinics		Public and private institutions for the mentally retarded				
	Resident patients, end of year	Total admissions	Net live releases ¹	Deaths	Resident patients, end of year	Direct discharges	Caseload, end of year	Terminations	Resident patients, end of year	Total admissions	Net live releases ¹	Deaths
United States	517,585	358,748	319,086	50,706	8,791	211,357	281,306	323,401	183,864	16,206	9,172	3,662
South Dakota	1,594	1,448	1,141	188	28	945	2,034	1,567	1,114	109	41	37
Bordering States:												
North Dakota	1,563	1,408	1,418	139	9	321	286	406	1,179	51	64	11
Iowa	3,361	6,154	6,049	406	107	3,226	4,393	5,121	2,333	242	421	101
Minnesota	7,749	5,530	5,454	759	427	9,500	6,262	8,052	5,835	387	388	118
Montana	1,587	1,419	1,301	155	13	570	—	—	881	101	106	8
Nebraska	3,729	2,555	2,214	380	77	1,332	1,032	2,458	2,542	138	36	66
Wyoming	683	561	464	44	2	872	2,397	88	559	31	17	15

¹ Excess of patients released alive from hospital (direct discharges plus leave placements) over those returning to hospital. National data on placements and returns from extramural care are not available but net releases may be computed from less detailed movement data as follows: Net release equals resident patients beginning of year, plus all admissions excluding transfers, minus deaths in hospital, minus resident patients end of year.

Source: U.S. Department of Commerce, Bureau of the Census. *Statistical Abstract of the United States: 1966* (87th edition), p. 79. Washington, U.S. Government Printing Office, 1966.

Table E-4.—Number and rate of admissions of patients with psychiatric diagnoses in 1964, and admissions forecast for 1970, by type of service; South Dakota

Type of service	Admissions		
	1964		1970 forecast
	Rate per 100,000 population	Number	
Total .....	...	8,593	8,308
General hospitals	305	2,146	2,257
Yankton State Hospital	218	1,530	1,609
Outpatient mental health centers	601	4,223	4,442
Alcoholism treatment program (Yankton State Hospital)	99	694	...

Source: State Department of Health, Mental Health Section. *The South Dakota Report on Mental Health Planning, 1965*, pp. 66 and 67. Pierre, South Dakota. July 1, 1965.

Table E-5.—State, rank, and rate¹ per 1,000 population, of patient days in general and special hospitals; South Dakota and bordering States; 1964

State	General and special ²		Mental		Tuberculosis	
	Rank ³	Annual rate	Rank ³	Annual rate	Rank ³	Annual rate
South Dakota	15	1,435	23	1,177	32	42
Bordering States:						
North Dakota	3	1,708	34	988	47	—
Iowa	20	1,341	37	897	45	3
Minnesota	9	1,516	14	1,506	38	25
Montana	16	1,481	39	801	9	85
Nebraska	19	1,385	13	1,509	41	22
Wyoming	27	1,249	4	2,083	33	36

¹ Rate per 1,000 population for hospital year ending September 30, 1964.

² Includes all types of hospitals other than mental and tuberculosis.

³ The rank order listed for the various statistics are in all cases from high to low; i.e., the State having the largest value is given

a rank order of 1, regardless of the connotation this might infer.

Source: U.S. Department of Health, Education, and Welfare. *State Data and State Rankings in Health, Education, and Welfare*, Part 2 of 1965 Edition of *Health, Education, and Welfare Trends*, p. S-19. Washington, U.S. Government Printing Office, 1965.

Table E-6.—Average daily patient census, by type of hospital; South Dakota; selected years, 1950-66

Year	All hospitals	Federal hospitals	Non-Federal hospitals				
			Total	Psychiatric	Tuberculosis	Long-term general and other special	Short-term general and other special
1950	5,644	...	...	...	...	...	...
1955	5,797	...	...	...	...	...	...
1960	6,215	1,355	4,860	2,740	28	70	2,022
1961	6,165	1,341	4,824	2,801	24	63	1,936
1962	6,207	1,367	4,840	2,674	84	70	2,012
1963	5,005	1,325	3,680	1,549	83	58	1,990
1964	5,095	1,324	3,771	1,656	—	58	2,057
1965	4,975	1,219	3,756	1,676	—	57	2,023
1966	4,791	1,135	3,656	1,570	—	71	2,015

Source: American Hospital Association. *Hospitals, Guide Issue*, Part Two. Chicago, The Association. Annual editions: 1961, p. 412; 1962, p. 432; 1963, p. 466; 1964, p. 500; 1965, p. 466; 1966, p. 453; and 1967, p. 465.

Table E-7.—Number of beds and average daily patient census, non-Federal, short-term general hospitals; South Dakota; 1961-65

Year	Number of beds	Average daily patient census
1961	3,089	2,269
1962	3,529	2,212
1963	3,692	2,323
1964	3,285	2,360
1965	3,448	2,321

Sources: South Dakota Department of Health, Division of Medical Facilities. Pierre, South Dakota, 1966.
American Hospital Association, *Hospitals, Guide Issue*, Part Two, August 1, 1961. pp. 202-205. Chicago, The Association, 1961.

Table E-8.—Average daily patient census¹ in short-term general and non-Federal hospitals; United States, South Dakota, and bordering States; 1964

State	Patients admitted (1,000)		Average census ¹	
	Total	Short-term general and special ²	Total	Short-term general and special ²
United States	28,266	25,987	1,420,918	550,062
South Dakota	126	108	5,095	2,057
Bordering States:				
North Dakota	136	120	4,712	2,417
Iowa	447	426	16,948	9,080
Minnesota	633	603	29,429	13,083
Montana	132	118	4,456	2,182
Nebraska	246	227	11,740	4,600
Wyoming	65	59	3,119	1,017

¹ Average number of inpatients receiving treatment each day; excludes newborn.
² Non-Federal hospitals.

Source: U.S. Department of Commerce, Bureau of the Census. *Statistical Abstract of the United States: 1966* (87th edition), p. 75. Washington, U.S. Government Printing Office, 1966.

Table E-9.—Hospital occupancy rates for all U.S. hospitals and by type of hospital; South Dakota; selected years, 1960–66

Type of hospital	1960	1961	1962	1963	1964	1965	1966
United States, all hospitals	84.6	83.4	83.3	84.0	83.8	82.3	83.3
South Dakota, all hospitals	80.3	80.7	80.0	76.1	80.2	103.0	75.6
Federal	84.4	84.3	83.5	83.1	85.3	78.3	77.3
Non-Federal	79.2	79.8	79.1	73.9	78.6	114.7	75.1
Psychiatric	95.0	98.0	94.4	87.2	96.3	205.3	98.1
Tuberculosis	23.7	20.0	70.0	70.3	—	—	—
Long-term general and other special	100.0	98.4	100.0	90.6	90.6	89.1	100.0
Short-term general and other special	66.0	64.4	65.0	65.9	68.3	64.5	63.0

Source: American Hospital Association, *Hospitals, Guide Issue*, Part Two. Chicago, The Association. Annual editions: 1961, p. 412; 1962, p. 432; 1963, p. 466; 1964, p. 500; 1965, p. 466; 1966, p. 458; and 1967, p. 465.

Table E-10.—Maternal and child health services in South Dakota and bordering States, 1964

State	Selected maternity services ¹			Selected child health services ¹		
	Medical clinic services		Nursing services	Well-child conference services ²		Nursing services
	Number of mothers	Rate per 1,000 live births ³	Number of mothers	Number of infants	Number of other children	Number of infants and other children
South Dakota	—	—	233	170	306	4,403
Bordering States:						
North Dakota	—	—	438	—	—	6,554
Iowa	706	13	936	2,046	2,954	15,216
Minnesota	—	—	4,982	6,050	7,432	27,899
Montana	—	—	3,413	512	—	33,858
Nebraska	—	—	1,146	2,371	3,735	13,060
Wyoming	—	—	259	—	—	3,758

¹ Reported to the Children's Bureau by agencies receiving funds under the maternal and child health program.

² Well-child conferences or well-baby clinics provide such services as examinations, conferences with parents, referrals, and other activities related to promoting the health of well children.

³ Based on live births, 1964.

Source: U.S. Department of Health, Education, and Welfare. *State Data and State Rankings in Health, Education, and Welfare, Part 2 of 1965 Edition of Health, Education, and Welfare Trends*, p. S-55. Washington, U.S. Government Printing Office, 1965.

Table E-11.—Number of patients, by age group, admitted to public health nursing service, by program area, reported to the South Dakota State Department of Health, 1965

Program	Total	Under 21 years	21-39 years	40-64 years	65 and over	Age not reported
Total	12,288	9,445	786	901	650	506
Communicable disease control	793	746	28	13	6	—
Venereal disease control	323	89	185	45	4	—
Tuberculosis control	800	321	195	217	67	—
Maternity service	506	...	...	...	...	506
Infant and preschool service	1,624	1,624	—	—	—	—
School health services	5,138	5,138	—	—	—	—
Mental hygiene	415	57	148	155	55	—
Morbidity service	1,147	288	164	313	382	—
Crippled children's service	945	945	—	—	—	—
Cancer service	83	6	5	33	39	—
Cardiac service	167	46	6	34	81	—
Mental retardation	203	179	13	11	—	—
Alcoholism	144	6	42	80	16	—

Source: Annual Report of the Division of Public Health Nursing, South Dakota State Department of Health, Pierre, South Dakota, 1965.

Appendix F

Manpower for Health Services

Tables

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Table F-1.—Number of practicing physicians, by region¹ and population, in South Dakota; 1962 and 1966

Region	Estimated population mid-1962	Practicing physicians			Estimated population mid-1966	Practicing physicians		
		M.D.	D.O.	Total		M.D.	D.O.	Total
Total	686,800	564	45	609	695,000	506	39	545
Region I	125,100	142	12	154	122,689	109	12	121
Region II	103,500	76	2	78	105,086	50	2	52
Region III	118,600	87	7	94	122,223	84	5	89
Region IV	88,800	61	4	65	112,046	62	4	66
Region V	141,000	99	18	117	145,487	91	12	103
Region VI	89,300	113	5	118	88,561	110	4	114

¹ For explanation of regions, see Explanatory Notes, p. X.

Sources: South Dakota State Department of Health, Division of Hospital Facilities. *South Dakota State Plan for the Construction of Hospitals and Medical Facilities, 1967*, pp. 46 and 47. Pierre, South Dakota, 1966.

The South Dakota State Board of Medical and Osteopathic Examiners. *Directory of Physicians and Physical Therapists Licensed in South Dakota*. September 1966, pp. 3-32. Sioux Falls, South Dakota, 1966.

Table F-2.—Rank order of ratios of health personnel to population; United States, South Dakota, and bordering States; 1964

State	Professional nurses per 100,000 population		Physicians per 100,000 population (M.D. and (D.O.))		Dentists per 100,000 population	
	Ratio	Rank	Ratio	Rank	Ratio	Rank
United States	302	—	144	—	52	—
South Dakota	270	30	78	48	44	31
Bordering States:						
North Dakota	340	15	89	44	44	30
Iowa	320	21	120	25	57	16
Minnesota	384	8	148	11	68	6
Montana	349	12	102	35	55	17
Nebraska	320	22	114	29	62	9
Wyoming	325	19	93	43	51	21

Source: U.S. Department of Health, Education, and Welfare. *State Data and State Rankings in Health, Education, and Welfare, Part 2 of 1965 Edition of Health, Education, and Welfare Trends*, p. S-16. Washington, U.S. Government Printing Office, 1965.

Table F-3.—Number of doctors of medicine licensed and practicing, by area of clinical practice; South Dakota; September 1966

Area of practice	Number	Percent
Total	506	100.0
General practice ¹	189	39.3
Specialties	307	60.7
Anesthesia	7	2.3
Chest diseases	7	2.3
Dermatology	5	1.6
Eye, ear, nose, and throat	29	9.4
General surgery	82	26.7
Internal medicine	41	13.4
Neurology	3	1.0
Obstetrics and/or gynecology	39	12.7
Orthopedics	9	3.0
Pediatrics	20	6.5
Pathology	17	5.5
Psychiatry	13	4.2
Public health	2	0.7
Radiology	18	5.8
Urology	13	4.2
Not specified	2	0.7

¹ In addition, 73 specialists also do general practice.

Source: South Dakota State Board of Medical and Osteopathic Examiners. *Directory of Physicians and Physical Therapists Licensed in South Dakota*. Sioux Falls, South Dakota. September 1966.

Table F-4.—Number of partnership offices and group-practice clinics and number of physicians participating; South Dakota; September 1966

Size of group	Number of offices and clinics	Total number of physicians
Total	86	...
Total reporting	85	298
Partnership office with		
2 physicians	42	84
Clinic with 3 physicians	18	54
Clinic with 4 physicians	7	28
Clinic with 5 physicians	5	25
Clinic with 6 physicians	5	30
Clinic with 7 physicians	1	7
Clinic with 8 physicians	3	24
Clinic with 9 physicians	1	9
Clinic with 11 physicians	1	11
Clinic with 12 physicians	1	12
Clinic with 14 physicians	1	14
Clinic not reporting number of physicians	1	...

Source: South Dakota Medical Society. Unpublished data. Sioux Falls, South Dakota, 1966.

Table F-5.—Physicians and psychiatrists in South Dakota, by region and population estimates, December 31, 1964

Region ¹	Estimated population per region, mid-year 1964	Number of physicians ²	Psychiatrists	
			Number	Percent of total physicians ³
Total	703,100	514	11	2.1
I	131,500	114	2	1.8
II	105,400	46	0	0.0
III	121,000	85	2	2.4
IV	106,800	62	1	1.6
V	142,900	101	2	2.0
VI	95,500	106	4	3.8

¹ Regions used for Mental Health Planning in South Dakota, based in general upon trade and use of existing health services. For explanation of regions, see Explanatory Notes, p. X.

² Division of Indian Health physicians not included.

³ Percentage of psychiatrists among all physicians in the United States as of 1960, 6.0 percent.

Source: State Department of Health, Mental Health Section. *The South Dakota Report on Mental Health Planning*, July 1, 1965, p. 125. Pierre, South Dakota. 1965.

Table F-6.—Number of accredited schools offering programs in medical technology and number of students and graduates; United States, South Dakota, and bordering States; 1964-65

State	Schools	Students	Graduates
United States	¹ 762	4,648	² 3,283
South Dakota	7	41	26
Bordering States:			
North Dakota	5	42	22
Iowa	16	80	80
Minnesota	13	125	104
Montana	4	19	13
Nebraska	9	84	53
Wyoming	1	10	7

¹ An additional 22 schools did not submit reports on students or graduates.

² No graduates in 1964-65 were reported by 112 schools. About one-third of the 648 schools reported only 1 or 2 graduates during the year.

Source: U.S. Department of Health, Education, and Welfare; Public Health Service, National Center for Health Statistics. *Health Resources Statistics, Health Manpower, 1965*. Public Health Service Pub. 1509, p. 41. Washington, U.S. Government Printing Office, 1965.

Table F-7.—Number of approved schools of certified laboratory assistants and number of students and graduates; United States, South Dakota, and bordering States; 1964-65 and 1966

State	Schools April 1966	Academic year 1964-65		
		Schools	Students	Graduates
United States	114	82	707	¹ 467
South Dakota	1	1	2	—
Bordering States:				
North Dakota	—	—	—	—
Iowa	1	1	8	2
Minnesota	3	3	108	87
Montana	—	—	—	—
Nebraska	1	—	—	—
Wyoming	—	—	—	—

¹ Students graduated January-September 1965. Additional students were scheduled for graduation later in 1965.

Source: U.S. Department of Health, Education, and Welfare; Public Health Service, National Center for Health Statistics. *Health Resources Statistics, Health Manpower, 1965*. Public Health Service Pub. 1500, p. 42. Washington, U.S. Government Printing Office, 1965.

Table F-8.—Number of approved schools of cytotechnology and number of students and graduates; United States, South Dakota, and bordering States; 1964-65

State	Schools	Students	Graduates
United States	¹ 74	353	321
South Dakota	—	—	—
Bordering States:			
North Dakota	—	—	—
Iowa	—	—	—
Minnesota	1	7	7
Montana	—	—	—
Nebraska	1	3	2
Wyoming	—	—	—

¹ One additional school is located in Puerto Rico. Of the 75 schools, 9 reported no graduates, 20 reported 1 or 2 graduates, and 46 reported 3 or more graduates. An additional 4 schools did not submit reports on students or graduates.

Source: U.S. Department of Health, Education, and Welfare; Public Health Service, National Center for Health Statistics. *Health Resources Statistics, Health Manpower, 1965*. Public Health Service Pub. 1500, p. 42. Washington, U.S. Government Printing Office, 1965.

Table F-9.—Number of registered radiologic technologists¹ and area of expertise; United States, South Dakota, and bordering States; 1965

State	X-ray tech- nology	Nuclear medicine tech- nology	Radiation therapy tech- nology
United States	41,117	248	89
South Dakota	178	—	—
Bordering States:			
North Dakota	158	1	—
Iowa	728	1	—
Minnesota	1,284	4	2
Montana	170	—	1
Nebraska	389	3	—
Wyoming	88	—	—

¹ Active and inactive.

Source: U.S. Department of Health, Education, and Welfare; Public Health Service, National Center for Health Statistics. *Health Resources Statistics, Health Manpower, 1965*. Public Health Service Pub. 1509, p. 137. Washington, U.S. Government Printing Office, 1965.

Table F-10.—Number of registered physical therapists,¹ occupational therapists,² speech pathologists,³ and audiologists; United States, South Dakota, and bordering States; 1965

State	Physical therapists	Occupational therapists	Speech pathologists and audiologists
United States	10,169	7,184	12,358
South Dakota	27	18	26
Bordering States:			
North Dakota	24	25	68
Iowa	132	65	255
Minnesota	190	271	259
Montana	28	16	48
Nebraska	56	45	110
Wyoming	23	5	18

¹ Members of the American Physical Therapy Association.

² Members of American Occupational Therapy Association.

³ Members of the American Speech and Hearing Association.

Source: U.S. Department of Health, Education, and Welfare; Public Health Service, National Center for Health Statistics. *Health Resources Statistics, Health Manpower 1965*. Public Health Service Pub. 1509, pp. 119, 128, 153. Washington, U.S. Government Printing Office, 1965.

Table F-11.—Number and employment status of members of American Dietetic Association; United States, South Dakota, and bordering States; 1965

State	Total employed	Dietitians				Nutritionists	Full-time graduate students
		In hospitals and clinics	In college and school food service	In restaurants and commercial business	In consulting, research, teaching		
United States	10,974	6,639	919	1,531	150	751	673
South Dakota	45	29	4	5	1	3	3
Bordering States:							
North Dakota	35	23	1	8	—	1	2
Iowa	172	95	20	39	2	7	7
Minnesota	287	194	12	52	4	11	11
Montana	39	21	3	4	1	6	4
Nebraska	101	71	3	17	—	5	3
Wyoming	18	9	1	5	—	1	1

Source: U.S. Department of Health, Education, and Welfare; Public Health Service, National Center for Health Statistics. *Health Resources Statistics, Health Manpower, 1965*, Public Health Service Pub. 1509, p. 56. Washington, U.S. Government Printing Office, 1965.

Table F-12.—Number of licensed optometrists and pharmacists; United States, South Dakota, and bordering States; March 1, 1966

State	Optometrists	Pharmacists
United States	20,610	117,432
South Dakota	93	489
Bordering States:		
North Dakota	82	337
Iowa	359	1,331
Minnesota	425	2,088
Montana	91	389
Nebraska	184	984
Wyoming	38	285

Source: U.S. Department of Health, Education, and Welfare; Public Health Service, National Center for Health Statistics. *Health Resources Statistics, Health Manpower, 1966*. Public Health Service Pub. 1509, pp. 124 and 160. Washington, U.S. Government Printing Office, 1965.

Table F-13.—Number of psychologists in the health field; United States, South Dakota, and bordering States; 1964

State	Total	Clinical	Counseling and guidance	Social	Measurement
United States	7,790	5,113	1,629	756	292
South Dakota	19	10	7	1	1
Bordering States:					
North Dakota	26	10	12	2	2
Iowa	100	69	20	7	4
Minnesota	177	104	55	13	5
Montana	9	4	4	—	1
Nebraska	44	28	10	4	2
Wyoming	20	9	10	1	—

Source: U.S. Department of Health, Education, and Welfare; Public Health Service, National Center for Health Statistics. *Health Resources Statistics, Health Manpower, 1965*. Public Health Service Pub. 1509, p. 134. Washington, U.S. Government Printing Office, 1965.

Table F-14.—Number of full-time personnel, by designated classifications,¹ employed by State health departments;² United States, South Dakota, and bordering States; January 1, 1966

State	Totals	Physicians	Public health nurses	Clinic nurses	Health educators	Nutritionists	Social workers	Public health investigators	Physical therapists	Psychologists	X-ray technicians	Clerical
United States	13,569	737	1,699	92	324	207	296	491	122	53	191	9,357
South Dakota	48	1	7	—	—	—	—	5	—	—	—	35
Bordering States:												
North Dakota	68	4	7	—	1	1	2	4	—	3	—	46
Iowa	133	4	25	—	5	2	—	7	—	—	4	86
Minnesota	182	8	29	3	4	4	—	—	1	—	—	133
Montana	75	2	18	—	5	1	1	—	1	1	—	46
Nebraska	79	3	2	1	5	2	1	1	—	—	3	61
Wyoming	60	1	24	—	1	—	1	—	—	2	—	31

¹ 11 of 22 designated classifications are listed.

² State personnel serving in State health districts are included.

Source: U.S. Department of Health, Education, and Welfare; Public Health Service, Bureau of State Services, Community Health, Office of Grants Management, Joint Form 5, Report of State Health Department Personnel by Organizational Unit as of January 1, 1966. Unpublished data. August 9, 1966.

Appendix G

Nurse Manpower in South Dakota

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Table G-1.—Number of registered nurses, active and inactive, and ratio of nurses to 100,000 population,¹ in the United States, in South Dakota, and in bordering States; 1949, 1951, 1957, 1962, and 1966

State and year	Active registered nurses		Inactive registered nurses		Nurses not reporting activity status	
	Number	Ratio per 100,000 population	Number	Ratio per 100,000 population	Number	Ratio per 100,000 population
50 States and District of Columbia:						
1949	299,067	200	205,171	137	...	...
1951	333,268	216	221,576	144	...	...
1957	464,138	271	231,834	135	38,430	...
1962	532,118	286	282,819	152	32,594	...
1966	593,694	303	285,791	146	29,646	15
South Dakota:						
1949	985	156	701	111	...	...
1951	1,124	171	830	126	...	...
1957	1,559	234	745	112	7	...
1962	1,896	263	858	119	88	...
1966	2,055	303	804	118	48	...
Bordering States:						
North Dakota:						
1949	828	139	630	106	...	...
1951	934	153	767	126	...	...
1957	1,890	309	980	160	26	...
1962	2,133	338	1,002	158	26	...
1966	2,095	326	768	119	26	...
Iowa:						
1949	4,022	156	4,120	160	...	...
1951	5,587	213	5,607	214	...	...
1957	8,034	296	6,115	225	37	...
1962	8,555	308	6,389	230	648	...
1966	9,956	361	4,996	181	38	...

See footnotes at end of table.

Table G-1.—Continued

State and year	Active registered nurses		Inactive registered nurses		Nurses not reporting activity status	
	Number	Ratio per 100,000 population	Number	Ratio per 100,000 population	Number	Ratio per 100,000 population
Minnesota:						
1949	5,789	197	1,929	66	...	...
1951	7,357	244	3,127	104	...	...
1957	11,906	364	3,128	96	46	...
1962	13,192	381	4,029	116	141	...
1966	14,184	397	3,922	110	328	...
Montana:						
1949	1,201	211	1,389	244	...	...
1951	1,575	265	1,821	307	...	...
1957	2,314	347	1,180	177	14	...
1962	2,412	346	1,272	182	39	...
1966	2,471	352	916	130	17	...
Nebraska:						
1949	1,956	150	1,365	105	...	...
1951	2,543	193	1,769	134	...	...
1957	4,289	308	2,443	175	12	...
1962	4,587	317	2,734	189	68	...
1966	4,674	325	2,547	177	87	...
Wyoming:						
1949	541	195	432	156	...	...
1951	540	185	454	155	...	...
1957	984	313	371	118	16	...
1962	1,066	321	457	132	20	...
1966	1,204	377	410	129	7	...

¹ Ratios computed on estimated resident population as of July 1.

Sources: U.S. Department of Health, Education, and Welfare. *Health Manpower Source Book, Section 2, Nursing Personnel*. Public Health Service Pub. 263, Revised Jan. 1966, pp. 11-13. Washington, U.S. Government Printing Office, 1966.

American Nurses' Association, Research and Statistics Department; unpublished data from the 1966 inventory, 1968.

Table G-2.—Median age of active and inactive registered nurses, in the United States, in South Dakota, and in bordering States; 1949, 1951, 1957, 1962, and 1966

State	Active registered nurses					Inactive registered nurses				
	1949	1951	1957	1962	1966	1949	1951	1957	1962	1966
United States	33.4	34.3	36.8	39.2	40.3	33.8	34.3	36.6	37.5	39.3
South Dakota	29.2	30.1	35.8	35.5	38.3	29.9	30.7	34.6	35.1	37.1
Bordering States:										
North Dakota	28.4	29.0	31.0	34.8	37.5	28.3	29.3	32.5	34.1	35.5
Iowa	31.2	33.0	36.3	37.9	39.3	33.0	33.9	37.7	37.2	38.9
Minnesota	29.8	30.4	33.9	36.6	38.4	30.4	30.7	34.7	34.3	36.0
Montana	30.8	33.3	36.1	38.8	41.9	31.5	32.2	35.4	36.1	39.1
Nebraska	30.7	33.2	34.0	36.8	37.8	31.5	32.4	36.4	37.2	38.6
Wyoming	29.9	33.4	37.1	39.1	42.5	32.2	32.6	35.9	36.6	39.7

Source: U.S. Department of Health, Education, and Welfare. *Health Manpower Source Book, Section 2, Nursing Personnel*, Public Health Service Pub. 263, Revised Jan. 1966, p. 21. Washington, U.S. Government Printing Office, 1966.

Table G-3.—Percent of married registered nurses, active and inactive, in the United States, in South Dakota, and in bordering States; 1949, 1951, 1957, 1962, and 1966

State	Active					Inactive				
	1949	1951	1957	1962	1966	1949	1951	1957	1962	1966
50 States and District of Columbia	42	46	55	61	64	87	86	86	85	86
South Dakota	39	40	55	66	71	87	87	87	88	89
Bordering States:										
North Dakota	33	38	55	67	70	87	86	89	89	90
Iowa	45	49	63	63	73	89	87	91	85	90
Minnesota	34	41	52	62	66	78	81	88	88	88
Montana	46	55	64	71	74	92	89	92	89	88
Nebraska	43	44	57	67	70	87	82	90	89	88
Wyoming	48	57	67	73	77	94	92	90	89	91

Source: U.S. Department of Health, Education, and Welfare. *Health Manpower Source Book, Section 2, Nursing Personnel*, Public Health Service Pub. 263, Revised Jan. 1966, pp. 23-24. Washington, U.S. Government Printing Office, 1966.

Table G-4.—Estimated percent of married nurses, registered and unregistered, in practice, in the United States, in South Dakota, and in bordering States; selected years 1920-66

State	Registered and unregistered nurses ¹			Registered nurses ²				
	1920	1930	1940	1949	1951	1957	1962	1966
United States	11	17	³ 25	42	46	55	61	64
South Dakota	13	16	21	39	40	55	66	71
Bordering States:								
North Dakota	9	10	17	33	38	55	67	70
Iowa	10	14	25	45	49	63	63	73
Minnesota	8	11	18	34	41	52	62	66
Montana	17	19	26	46	55	64	71	74
Nebraska	11	15	26	43	44	57	67	70
Wyoming	33	33	35	48	57	67	73	77

¹ Census Bureau enumeration—no distinction is made between registered and unregistered nurses on the Census form. Includes only female nurses and includes married with husband absent.

² Inventories of Registered Nurses compiled by the American Nurses' Association.

³ Includes 4 percent married with husband absent.

Source: U.S. Department of Health, Education, and Welfare. *Health Manpower Source Book, Section 2, Nursing Personnel*, Public Health Service Pub. 263, Revised Jan. 1966, p. 23. Washington, U.S. Government Printing Office, 1966.

Table G-5.—Number of registered nurse licenses issued, by State issuing license, in the United States and outlying areas, in South Dakota, and in bordering States; 1960-65

State and areas	Licenses issued to nurses for the first time in the United States ¹						Licenses issued to nurses previously licensed in the United States ²					
	1960	1961	1962	1963	1964	1965	1960	1961	1962	1963	1964	1965
United States and outlying areas	32,525	29,928	35,312	32,780	36,088	36,432	799,210	889,477	850,022	935,879	885,632	870,940
South Dakota	237	197	219	246	204	217	3,364	3,303	3,550	3,819	3,759	3,893
Bordering States:												
North Dakota	221	238	211	210	201	83	4,233	4,270	4,298	4,236	3,964	3,901
Iowa	792	701	627	724	683	697	21,762	22,460	23,592	23,724	24,272	22,299
Minnesota	1,370	1,053	1,064	1,185	1,220	1,098	18,709	19,742	19,881	20,296	22,784	23,613
Montana	212	180	141	150	151	132	4,221	4,350	4,315	4,513	4,177	4,206
Nebraska	318	346	336	401	428	439	10,151	10,424	10,750	11,003	11,389	22,792
Wyoming	28	31	18	20	33	26	1,380	1,466	1,520	1,623	1,671	1,745

Note: The United States and outlying areas includes the 50 States, District of Columbia, Puerto Rico, Guam, and the Virgin Islands.

¹ Includes licensure by examination and endorsement from a foreign country.

² Includes licensure by examination, endorsement, reinstatement, and renewal.

Source: American Nurses' Association. *Facts About Nursing: A Statistical Summary*. New York, The Association, Annual eds.: 1962-63, pp. 62-65; 1964, pp. 65 and 66; 1965, pp. 55 and 56; 1966, pp. 54-56; and 1967, pp. 59-61.

Table G-6.—Number of licenses issued and renewed, to registered nurses, by method of licensure and State issuing license, for the United States and outlying areas, for South Dakota, and for bordering States; 1964

State and region	Licenses issued to nurses previously licensed in the United States					Licenses issued to nurses for first time in the United States		
	Total	Examina- tion	Endorse- ment	Reinstatement	Renewal ¹	Total	Examina- tion	Endorse- ment ²
United States and outlying areas	885,632	390	31,037	11,439	842,766	36,088	33,238	2,850
South Dakota	3,759	0	141	98	3,520	204	198	6
Bordering States:								
North Dakota	3,964	0	123	0	3,841	201	201	0
Iowa	24,272	0	507	0	23,765	683	677	6
Minnesota	22,784	3	547	0	22,234	1,220	1,152	68
Montana	4,177	0	153	5	4,019	151	150	1
Nebraska	11,389	0	356	381	10,652	428	428	0
Wyoming	1,671	2	145	0	1,524	33	33	0

¹ State regulations vary as to the frequency of license renewal; thus in some States all registered nurses licensed will not be represented by 1 year's renewal figure.

² Licenses issued on basis of license or certificate from foreign country.

Source: American Nurses' Association. *Facts About Nursing: A Statistical Summary*, pp. 54-56. New York, The Association, 1966.

Table G-7.—Number of registered nurses from foreign countries licensed by endorsement in South Dakota, by jurisdiction; 1958-66

Foreign jurisdictions	Year ¹							
	1958-59	1959-60	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66
Total	1	...	1	5	6	2	7	3
Canada	0	...	0	2	1	1	6	0
England	0	...	1	1	0	0	1	0
Nicaragua	0	...	0	0	1	0	0	0
Norway	1	...	0	1	3	1	0	0
Peru	0	...	0	1	1	0	0	0
Philippines	0	...	0	0	0	0	0	3

¹ Fiscal year beginning July 1 and ending June 30.

Source: South Dakota Board of Nursing. Report of the South Dakota Board of Nursing for the Biennial Period Ending June 30, 1960, 1962, 1964, and 1966.

Table G-8.—Number of registered nurses requesting licensure by endorsement from other States,¹ in South Dakota; 1958-66

State	Total 1958-66	1958-59	1959-60	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66
Total, all States..	1,079	142	120	113	129	156	122	148	149
Minnesota	258	41	28	18	30	40	27	30	44
Iowa	122	11	11	10	17	21	15	21	16
North Dakota	98	14	16	12	8	17	12	8	11
Nebraska	88	10	5	14	8	11	12	13	15
Illinois	78	9	6	11	8	11	8	16	9
Colorado	36	6	6	3	5	5	3	4	4
New York	34	6	5	3	4	4	4	3	5
Montana	33	0	3	8	5	5	4	5	3
California	28	5	5	1	3	2	4	2	6
Wisconsin	24	4	1	3	3	4	2	3	4
Kansas	23	6	2	1	6	3	1	2	2
Texas	14	1	1	2	1	1	3	3	2
Washington	13	2	1	3	2	1	2	2	0
Arizona	1	0	0	0	0	0	0	0	0
All other	229	27	30	24	28	31	25	36	28

¹ Selected on the basis of exchange between the States.

Source: South Dakota Board of Nursing. Biennial Reports of the South Dakota Board of Nursing: 1960, p. 17; 1962, pp. 17 and 18; 1964, pp. 19 and 20; and 1966, pp. 20 and 21.

Table G-9.—Number of registered nurses requesting endorsement for licensure to other states,¹ from South Dakota, 1958-66

State	Total 1958-66	1958-59	1959-60	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66
Total, all States..	2,489	242	270	290	293	322	320	336	416
Minnesota	494	57	65	61	64	64	65	55	63
Colorado	237	28	25	19	21	37	27	48	32
Iowa	203	17	22	22	22	35	24	24	37
Nebraska	173	17	19	26	23	21	22	21	24
Illinois	118	13	10	17	12	15	17	8	26
Washington	116	12	7	15	12	19	8	17	26
Arizona	89	7	9	11	10	9	18	13	12
Wisconsin	86	13	13	11	13	5	2	11	18
Texas	74	3	11	7	9	13	10	8	13
North Dakota	63	7	7	6	4	13	10	6	10
Montana	60	5	8	9	5	10	6	4	13
California	52	3	0	5	3	1	0	12	28
New York	50	4	7	8	10	4	3	9	5
Kansas	34	7	2	1	3	5	8	5	3
All other	640	49	65	72	82	71	100	95	106

¹ Selected on the basis of exchange between the States.

Source: South Dakota Board of Nursing. Biennial Reports of the South Dakota Board of Nursing: 1960, p. 17; 1962, pp. 17 and 18; 1964, pp. 19 and 20; and 1966, pp. 20 and 21.

Table G-10.—Number of registered nurses licensed by examination,¹ licensed by endorsement from other States, and endorsed for licensure in other States; South Dakota; 1958-66

Year ²	Licensed in State			Endorsement to other States
	By examination	By endorsement	Total	
1958-59	237	142	379	242
1959-60	259	120	379	270
1960-61	210	113	323	290
1961-62	185	129	314	293
1962-63	218	156	362	322
1963-64	252	122	374	320
1964-65	239	148	387	335
1965-66	189	149	338	413

¹ Includes first examination and re-examination of graduates of schools in the State and out of State.

² Fiscal year beginning July 1 and ending June 30.

Source: South Dakota Board of Nursing. Report of the South Dakota Board of Nursing for the Biennial Period Ending June 30, 1960, 1962, 1964, and 1966.

Table G-11.—Number of active practical nurses and the nurse-population ratios, in the United States, in South Dakota, and in bordering States: 1950 and 1960

State	Number		Rate per 100,000 population	
	1950	1960	1950	1960
United States	136,541	205,974	90	115
South Dakota	383	605	59	89
Bordering States:				
North Dakota	257	522	41	83
Iowa	2,315	2,863	88	104
Minnesota	2,758	3,948	92	116
Montana	437	742	74	110
Nebraska	1,188	1,895	90	134
Wyoming	116	245	40	74

Source: U.S. Department of Health, Education, and Welfare. *Health Manpower Source Book, Section 2, Nursing Personnel*, Public Health Service Pub. 263, Revised Jan. 1966, p. 75. Washington, U.S. Government Printing Office, 1966.

Table G-12.—Number of practical nurses licensed for the first time, and proportion licensed by examination, in the United States and outlying areas, in South Dakota, and in bordering States; selected years 1945-65

State and outlying areas	Total number of new licenses										Percent of new licenses by examination												
	1945	1950	1955	1960	1963	1964	1965	1945	1950	1955	1960	1963	1964	1965	1945	1950	1955	1960	1963	1964	1965		
United States	858	11,425	16,930	19,760	25,058	22,727	27,459	87	44	73	87	97	97.1	98.7	...	3	100	100	100	100.0	100.0	100.0	
South Dakota	...	218	35	136	3	116	112	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bordering States:																							
North Dakota	...	45	30	68	120	151	131	...	31	100	100	100	100.0	100.0	...	100	100	100	100	100.0	100.0	100.0	
Iowa	...	325	59	165	232	284	349	...	100	100	100	100	99.9	100.0	...	100	100	100	100	99.7	99.2	100.0	
Minnesota	...	354	199	652	704	734	720	...	100	99	100	100	99.7	99.2	...	100	100	100	100	100.0	100.0	100.0	
Montana	...	...	77	19	39	83	102	...	...	100	100	100	100.0	100.0	...	...	...	...	...	100.0	100.0	100.0
Nebraska	88	108	130	161	100.0	100.0	100.0
Wyoming	...	...	29	9	14	30	28	...	...	100	100	100	100.0	96.4	...	...	...	...	...	100.0	100.0	96.4

Sources: U.S. Department of Health, Education, and Welfare. *Health Manpower Source Book, Section 2, Nursing Personnel*, Public Health Service Pub. 268, Revised Jan. 1966, p. 76. Washington, U.S. Government Printing Office, 1966. (Data 1945-63)
 American Nurses' Association. *Facts About Nursing: A Statistical Summary*, Annual eds.: 1966, p. 193; 1967, p. 198. New York, The Association, 1966 and 1967, and percentage computations of 1964 and 1965 data, Bureau of Health Manpower, Division of Nursing. (Data 1964 and 1965).

Table G-13.—Number of practical nurse licenses¹ issued to those previously licensed, by State issuing license, for aggregate United States,² for South Dakota, and for bordering States; 1960-65

State	1960	1961	1962	1963	1964	1965
Aggregate United States	226,979	202,105	260,712	233,200	288,028	221,868
South Dakota	386	542	637	578	735	805
Bordering States:						
North Dakota	467	533	615	725	695	779
Iowa	1,988	2,104	2,346	2,558	2,802	2,830
Minnesota	3,947	4,386	4,775	5,169	5,666	6,212
Montana	572	565	578	565	612	626
Nebraska	806	909	978	1,083	1,196	1,344
Wyoming	312	297	343	346	366	397

¹ Includes licenses by examination, endorsement, renewal, and reinstatement.

² Including Puerto Rico, Guam, Samoa, and the Virgin Islands.

Source: American Nurses' Association. *Facts About Nursing: A Statistical Summary*. New York, The Association. Annual eds.: 1962-63, pp. 195 and 196; 1964, p. 207; 1965, p. 199; 1966, pp. 191 and 192; 1967, pp. 186 and 197.

Table G-14.—Number of practical nurses requesting licensure by endorsement from other States, to South Dakota; 1958-66

State	Years								
	1958-66	1958-59	1959-60	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66
Total, all States	127	10	16	11 ^a	11	10	15	28	26
Minnesota	40	7	6	4	2	3	3	8	7
North Dakota	18	1	2	0	2	1	4	1	7
Nebraska	14	0	0	0	0	1	3	7	3
Washington	4	1	1	2	0	0	0	0	0
Arizona	3	0	1	0	0	1	0	1	0
Colorado	3	0	0	0	0	1	1	1	0
Iowa	3	0	0	0	2	0	0	0	1
New York	3	0	0	2	1	0	0	0	0
California	2	0	0	0	0	1	0	0	1
Kansas	2	0	0	0	1	0	0	0	1
Wisconsin	2	0	1	0	1	0	0	0	0
Texas	1	0	0	1	0	0	0	0	0
Illinois	0	0	0	0	0	0	0	0	0
Montana	0	0	0	0	0	0	0	0	0
All other	32	1	5	2	2	2	4	10	6

Source: South Dakota Board of Nursing. Biennial Reports of the South Dakota Board of Nursing: 1960, p. 17; 1962, pp. 17 and 18; 1964, pp. 19 and 20; and 1966, pp. 20 and 21.

Table G-15.—Number of practical nurses requesting endorsement for licensure to other States, from South Dakota; 1958-66

State	Years								
	1958-66	1958-59	1959-60	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66
Total, all States	461	17	36	49	49	56	86	80	88
Minnesota	139	3	12	11	16	19	27	24	27
Iowa	57	0	4	10	6	8	10	10	9
California	41	1	3	2	7	4	9	9	6
Nebraska	38	1	5	5	3	7	3	4	10
Colorado	28	1	1	4	2	2	6	5	7
North Dakota	23	1	3	3	3	1	4	4	4
Washington	16	2	0	2	1	2	4	2	3
Kansas	11	2	1	0	0	2	2	3	1
Montana	11	5	4	1	2	1	1	0	1
Arizona	8	0	0	1	1	1	1	3	1
Illinois	8	0	1	0	1	1	3	1	1
New York	6	1	0	0	0	0	1	0	4
Wisconsin	6	0	0	0	0	0	1	3	2
Texas	3	1	0	0	0	1	0	0	1
All other	66	3	2	10	7	7	14	12	11

Source: South Dakota Board of Nursing. Biennial Reports of the South Dakota Board of Nursing: 1960, p. 17; 1962, pp. 17 and 18; 1964, pp. 19 and 20; and 1966, pp. 20 and 21.

Table G-16.—Number and percent of active registered nurses, by field of employment, in the United States and in South Dakota; 1949, 1951, 1957, 1962, and 1966

United States and South Dakota fields of employment	1949		1951		1957		1962		1966	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
50 States and District of Columbia:										
Total	299,067	100.0	333,268	100.0	464,138	100.0	532,118	100.0	593,694	100.0
Hospital and nursing home	141,266	47.2	162,211	48.7	275,047	59.3	335,404	63.0	387,847	65.3
Public health ¹	28,487	9.5	29,372	8.8	33,145	7.1	40,687	7.6	46,349	7.8
Occupational health	13,056	4.4	14,234	4.3	17,538	3.8	17,569	3.3	18,155	3.1
Nursing education	12,036	4.0	12,143	3.6	13,679	2.9	16,294	3.1	20,818	3.5
Private duty	64,915	21.7	69,780	20.9	69,530	15.0	64,155	12.1	57,193	9.7
Office	26,381	8.8	28,163	8.5	36,929	8.0	43,558	8.2	47,628	8.0
Other	1,368	0.5	1,787	0.5	4,892	1.0	2,496	0.5	1,885	0.3
Unclassified	11,558	3.9	15,578	4.7	13,378	2.9	11,955	2.2	13,819	2.3
South Dakota:										
Total	985	100.0	1,124	100.0	1,559	100.0	1,896	100.0	2,055	100.0
Hospital and nursing home	536	54.4	671	59.7	893	57.3	1,261	66.4	1,433	69.7
Public health ¹	60	6.1	47	4.2	94	6.0	96	5.1	118	5.7
Occupational health	5	0.5	9	0.8	4	0.3	5	0.3	6	0.3
Nursing education	65	6.6	68	6.0	111	7.1	132	7.0	141	6.9
Private duty	151	15.3	156	13.9	139	8.9	135	7.1	111	5.4
Office	113	12.0	107	9.5	170	10.9	205	10.8	207	10.1
Other	1	0.1	8	0.7	12	0.8	5	0.3	3	0.1
Unclassified	49	5.0	53	5.2	136	8.7	57	3.0	36	1.8

¹ Includes school nurses.Source: U. S. Department of Health, Education, and Welfare. *Health Manpower Source Book, Section 2, Nursing Personnel*, Public Health Service Pub. 263, Revised Jan. 1966, pp. 25-28. Washington, U.S. Government Printing Office, 1966.**Table G-17.—Number of active registered nurses, by field of employment, in the United States, in South Dakota, and in bordering States; 1962**

State	Total	Hospital	Public health ¹	Occupational health	Nursing education	Private duty	Office	Other	Unknown
United States	532,118	335,404	40,687	17,569	16,294	64,155	43,558	2,496	11,955
South Dakota	1,896	1,261	96	5	132	135	205	5	57
Bordering States:									
North Dakota	2,138	1,572	86	1	112	163	175	3	26
Iowa	8,555	5,214	446	142	333	745	903	26	746
Minnesota	13,192	9,790	751	226	454	1,100	701	21	149
Montana	2,412	1,576	115	5	87	265	288	5	71
Nebraska	4,587	3,273	195	72	200	356	412	18	61
Wyoming	1,066	711	69	16	24	67	147	4	28

¹ Includes school nurses.Source: U.S. Department of Health, Education, and Welfare. *Health Manpower Source Book, Section 2, Nursing Personnel*, Public Health Service Pub. 263, Revised 1966, p. 28. Washington, U.S. Government Printing Office, 1966.

Table G-18.—Percent distribution of active registered nurses, by field of employment, in the United States, in South Dakota, and in bordering States; 1962

State	Total	Hospital	Public health ¹	Occupational health	Nursing education	Private duty	Office	Other	Unknown
United States	100.0	62.9	7.6	3.3	3.1	12.2	8.2	0.5	2.2
South Dakota	100.0	66.4	5.1	0.3	7.0	7.1	10.8	0.3	3.0
Bordering States:									
North Dakota	100.0	72.6	4.0	0.1	5.2	7.6	8.2	0.1	1.2
Iowa	100.0	60.9	5.2	1.7	3.9	8.7	10.6	0.3	8.7
Minnesota	100.0	74.3	5.7	1.7	3.4	8.3	5.3	0.2	1.1
Montana	100.0	65.4	4.8	0.2	3.6	11.0	11.9	0.2	2.9
Nebraska	100.0	71.2	4.3	1.6	4.4	7.8	9.0	0.4	1.3
Wyoming	100.0	66.6	6.5	1.5	2.3	6.3	13.8	0.4	2.6

¹ Includes school nurses.

Source: Computed from figures in table G-17.

Table G-19.—Number and percent of active registered nurses, by type of position, in the United States and in South Dakota; 1949, 1951, 1957, 1962, and 1966

United States and South Dakota fields of employment	1949 ¹		1951 ¹		1957 ²		1962 ³		1966 ³	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
50 States and District of Columbia:										
Total	299,067	100.0	333,268	100.0	464,138	100.0	532,118	100.0	593,694	100.0
Administrator or assistant	10,973	3.6	11,788	3.5	12,789	2.7	17,193	3.2	19,959	3.3
Consultant	1,394	0.5	1,273	0.4	1,375	0.3	2,717	0.5	3,201	0.5
Supervisor or assistant	32,203	10.8	33,086	9.9	38,997	8.4	49,002	9.2	58,011	9.8
Instructor	6,913	2.3	6,610	2.0	11,392	2.5	15,349	2.9	20,606	3.5
Head nurse or assistant	23,698	9.6	31,737	9.5	49,502	10.7	71,888	13.5	87,904	14.8
Staff or general duty nurse	101,527	34.0	110,325	33.1	212,476	45.8	281,602	53.0	317,568	53.5
Other	4,532	1.5	6,082	1.8	122,687	26.4	77,128	14.5	68,838	11.6
Unclassified	112,827	37.7	132,367	39.8	14,920	3.2	17,239	3.2	17,607	3.0
South Dakota:										
Total	985	100.0	1,124	100.0	1,559	100.0	1,896	100.0	2,055	100.0
Administrator or assistant	60	6.1	81	7.2	91	5.8	92	4.8	115	5.6
Consultant	4	0.4	7	0.6	7	0.4	14	0.7	13	0.6
Supervisor or assistant	149	15.1	169	15.0	138	8.9	168	8.9	206	10.0
Instructor	22	2.2	25	2.2	71	4.5	100	5.3	120	5.9
Head nurse or assistant	91	9.2	84	7.5	168	10.8	229	12.1	284	13.8
Staff or general duty nurse	321	32.7	397	35.4	651	41.8	1,038	54.7	1,116	54.3
Other	10	1.0	26	2.3	361	23.2	189	10.0	162	7.9
Unclassified	328	33.3	335	29.8	72	4.6	66	3.5	39	1.9

¹ Office and private duty nurses were included under "Unclassified."² Office and private duty nurses were included under "Other."³ Private duty nurses were included under "Other." Office nurses were classified according to position, and were included with "Staff

or general duty nurse" if not reported.

Source: U.S. Department of Health, Education, and Welfare. *Health Manpower Source Book, Section 2, Nursing Personnel*, Public Health Service Pub. 263, Revised Jan. 1966, pp. 29-32. Washington, U.S. Government Printing Office, 1966.

Table G-20.—Number of active registered nurses, by type of position, in the United States, in South Dakota, and in bordering States; 1962

State	Total	Adminis- trator or assistant	Con- sultant	Super- visor or assistant	Instruc- tor	Head nurse or assistant	Staff or general duty nurse ¹	Other ²	Unknown
United States	532,118	17,193	2,717	49,002	15,349	71,888	281,602	77,128	17,239
South Dakota	1,896	92	14	168	100	229	1,038	189	66
Bordering States:									
North Dakota	2,138	71	4	218	93	295	1,136	230	91
Iowa	8,555	311	29	743	294	977	4,854	902	445
Minnesota	13,192	420	54	1,189	427	1,794	7,533	1,498	277
Montana	2,412	98	11	218	59	362	1,279	328	57
Nebraska	4,587	169	13	447	182	552	2,615	523	86
Wyoming	1,066	38	5	90	28	103	685	90	27

¹ Office nurses are classified according to position, and were included with "Staff or general duty nurses" if not reported.

² Includes private duty nurses.

Source: U.S. Department of Health, Education, and Welfare. *Health Manpower Source Book, Section 2, Nursing Personnel*, Public Health Service Pub. 263, Revised Jan. 1966, p. 32. Washington, U.S. Government Printing Office, 1966.

Table G-21.—Percent distribution of active registered nurses, by type of position, in the United States, in South Dakota, and in bordering States; 1962

State	Total	Adminis- trator or assistant	Con- sultant	Super- visor or assistant	Instruc- tor	Head nurse or assistant	Staff or general duty nurse ¹	Other ²	Unknown
United States	100.0	3.2	0.5	9.2	2.9	13.5	52.9	14.5	3.2
South Dakota	100.0	4.9	0.7	8.9	5.3	12.1	54.7	10.0	3.4
Bordering States:									
North Dakota	100.0	3.3	0.2	10.2	4.3	13.8	53.1	10.8	4.3
Iowa	100.0	3.6	0.3	8.8	3.4	11.4	56.8	10.5	5.2
Minnesota	100.0	3.2	0.4	9.0	3.2	13.6	57.1	11.4	2.1
Montana	100.0	4.1	0.5	9.0	2.4	15.0	53.0	13.6	2.4
Nebraska	100.0	3.7	0.3	9.7	4.0	12.0	57.0	11.4	1.9
Wyoming	100.0	3.6	0.5	8.4	2.6	9.7	64.3	8.4	2.5

¹ Office nurses are classified according to position, and were included with "Staff or general duty nurses" if not reported.

² Includes private duty nurses.

Source: U.S. Department of Health, Education, and Welfare. *Health Manpower Source Book, Section 2, Nursing Personnel*, Public Health Service Pub. 263, Revised Jan. 1966, p. 32. Washington, U.S. Government Printing Office, 1966.

Table G-22.—Highest educational preparation of all registered nurses,¹ by age groups, in South Dakota; 1962

Educational preparation	Total ²	Under 25 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65 and over	Un-known
Total ²	2,319	395	406	392	303	242	179	172	104	62	67	60
No degree	1,764	332	320	255	244	184	134	122	67	39	33	34
Baccalaureate ³	252	51	57	35	28	20	22	15	7	10	4	3
Master's in nursing	35	0	3	2	0	9	6	3	7	0	2	3
Master's in another field	9	0	0	1	1	3	1	2	0	0	1	0
Doctorate in nursing	1	0	0	1	0	0	0	0	0	0	0	0
Doctorate in another field	0	0	0	0	0	0	0	0	0	0	0	0
No answer	258	12	26	35	30	26	16	30	23	13	27	20

¹ Includes 65 nurses who did not indicate whether or not they were employed. These nurses are not included on subsequent tables on this subject showing the number actively employed and the number not actively employed.

² Includes only those nurses who are located and registered in State.

³ Includes 9 nurses who indicated they had at least a baccalaureate. Source: Special substudy of the 1962 Inventory of Professions' Registered Nurses; unpublished data.

Table G-23.—Percent distribution of all registered nurses at various age levels, by highest educational preparation,¹ in South Dakota; 1962

Educational preparation	Total	Under 25 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65 and over	Un-known
Total ²	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No degree	76.1	84.1	78.8	77.6	80.5	76.1	74.9	70.9	64.5	62.9	49.3	56.7
Baccalaureate ³	10.9	12.9	14.1	10.6	9.2	8.3	12.3	8.7	6.7	16.1	6.0	5.0
Master's in nursing	1.5	0.0	0.7	0.6	0.0	3.7	3.4	1.7	6.7	0.0	3.0	5.0
Master's in another field	0.4	0.0	0.0	0.3	0.3	1.2	0.5	1.2	0.0	0.0	1.5	0.0
Doctorate in nursing	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Doctorate in another field	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
No answer	11.1	3.0	6.4	10.6	10.0	10.7	8.9	17.5	22.1	21.0	40.2	33.3

¹ Includes 65 nurses who did not indicate whether or not they were employed. These nurses are not included on subsequent tables on this subject showing the number actively employed and the number not actively employed.

² Includes only those nurses who are located and registered in

State.

³ Includes 9 nurses who indicated they had at least a baccalaureate.

Source: Special substudy of the 1962 Inventory of Professional Registered Nurses; unpublished data.

Table G-24.—Percent distribution of all registered nurses at various levels of educational preparation,¹ by age groups, in South Dakota; 1962

Educational preparation	Total	Under 25 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65 and over	Un-known
Total ²	100.0	17.0	17.5	14.2	13.1	10.4	7.7	7.4	4.5	2.7	2.9	2.6
No degree	100.0	18.8	18.2	14.5	13.8	10.4	7.6	6.9	3.8	2.2	1.9	1.9
Baccalaureate ³	100.0	20.2	22.6	13.9	11.1	7.9	8.7	6.0	2.8	4.0	1.6	1.2
Master's in nursing	100.0	0.0	8.6	5.7	0.0	25.7	17.1	8.6	20.0	0.0	5.7	8.6
Master's in another field	100.0	0.0	0.0	11.1	11.1	33.4	11.1	22.2	0.0	0.0	11.1	0.0
Doctorate in nursing	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Doctorate in another field	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
No answer	100.0	4.7	10.1	13.6	11.6	10.1	6.2	11.6	8.9	5.0	10.5	7.7

¹ Includes 65 nurses who did not indicate whether or not they were employed. These nurses are not included on subsequent tables on this subject showing the number actively employed and the number not actively employed.

² Includes only those nurses who are located and registered in

State.

³ Includes 9 nurses who indicated they had at least a baccalaureate.

Source: Special substudy of the 1962 Inventory of Professional Registered Nurses; unpublished data.

Table G-25.—Highest educational preparation of all registered nurses,¹ by age groups, in South Dakota; 1966

Educational preparation	Total	Under 25 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65 and over	Un-known
Total	2,907	317	487	382	386	376	286	211	190	105	92	75
No degree ²	2,177	281	378	293	294	298	219	163	124	61	44	22
Baccalaureate ³	338	35	78	47	50	35	24	16	24	13	10	6
Master's in nursing	43	0	4	5	2	4	11	5	5	4	2	1
Master's in another field	17	0	1	0	1	1	6	1	4	1	1	1
Doctorate in nursing	1	0	0	0	1	0	0	0	0	0	0	0
Doctorate in another field	2	0	0	0	0	0	1	0	0	0	0	1
No answer	329	1	26	37	38	38	25	26	33	26	35	44

¹ Includes those nurses who are employed or residing in State.

² Includes 25 nurses who indicated they had an associate degree.

³ Includes 13 nurses who indicated they had at least a baccalaureate.

State.

Source: American Nurses' Association. The 1966 Inventory of Registered Nurses, South Dakota; unpublished data; March 1968.

Table G-26.—Percent distribution of all registered nurses¹ at various age levels, by highest educational preparation, in South Dakota; 1966

Educational preparation	Total	Under 25 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65 and over	Un-known
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No degree ²	74.9	88.7	77.6	76.7	76.2	79.2	76.6	77.2	65.3	58.0	47.3	29.4
Baccalaureate ³	11.6	11.0	16.0	12.3	12.9	9.3	8.4	7.6	12.6	12.4	10.9	8.0
Master's in nursing	1.5	0.0	0.8	1.3	0.5	1.1	3.9	2.4	2.6	3.8	2.2	1.3
Master's in another field	0.6	0.0	0.2	0.0	0.3	0.3	2.1	0.5	2.1	1.0	1.1	1.3
Doctorate in nursing	(⁴)	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Doctorate in another field	0.1	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	1.3
No answer	11.3	0.3	5.4	9.7	9.8	10.1	8.7	12.3	17.4	24.8	38.0	58.7

¹ Includes only those nurses who are employed or residing in State.

² Includes 25 nurses who indicated they had an associate degree.

³ Includes 13 nurses who indicated they had at least a baccalaureate.

State.

⁴ Less than one-tenth of a percent.

Source: American Nurses' Association. The 1966 Inventory of Registered Nurses, South Dakota; unpublished data; 1968.

Table G-27.—Percent distribution of all registered nurses¹ at various levels of educational preparation, by age groups, in South Dakota; 1966

Educational preparation	Total	Under 25 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65 and over	Un-known
Total	100.0	10.9	16.8	13.1	13.3	12.9	9.8	7.2	6.6	3.6	3.2	2.6
No degree ²	100.0	12.9	17.4	13.4	13.5	13.7	10.1	7.5	5.7	2.8	2.0	1.0
Baccalaureate ³	100.0	10.3	23.1	13.9	14.8	10.4	7.1	4.7	7.1	3.8	3.0	1.8
Master's in nursing	100.0	0.0	9.3	11.6	4.7	9.3	25.6	11.6	11.6	9.3	4.7	2.3
Master's in another field	100.0	0.0	5.9	0.0	5.9	5.9	35.2	5.9	23.5	5.9	5.9	5.9
Doctorate in nursing	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Doctorate in another field	100.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0	50.0
No answer	100.0	0.3	7.9	11.2	11.6	11.6	7.6	7.9	10.0	7.9	10.6	13.4

¹ Includes those nurses who are employed or residing in State.

² Includes 25 nurses who indicated they had an associate degree.

³ Includes 13 nurses who indicated they had at least a baccalau-

reate.

Source: American Nurses' Association. The 1966 Inventory of Registered Nurses, South Dakota; unpublished data; 1968.

Table G-28.—Highest educational preparation of registered nurses actively employed, by age groups, in South Dakota; 1962

Educational preparation	Total ¹	Under 25 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65 and over	Un-known
Total ¹	1,716	313	278	225	228	183	146	137	73	53	45	32
No degree	1,369	272	226	187	191	142	113	104	53	37	23	21
Baccalaureate ²	199	37	40	26	26	18	20	11	6	10	3	2
Master's in nursing	31	0	3	2	0	7	6	2	6	0	2	3
Master's in another field	7	0	0	1	1	3	0	2	0	0	0	0
Doctorate in nursing	1	0	0	1	0	0	0	0	0	0	0	0
Doctorate in another field	0	0	0	0	0	0	0	0	0	0	0	0
No answer	109	4	9	8	10	13	7	18	11	6	17	6

¹ Includes only those nurses who are located and registered in State.

² Includes 7 nurses who indicated they had at least a baccalaureate.

Source: Special substudy of the 1966 Inventory of Registered Nurses; unpublished data.

Table G-29.—Percent distribution of actively employed registered nurses at various age levels, by highest educational preparation, in South Dakota; 1962

Educational	Total	Under 25 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65 and over	Un-known
Total ¹	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No degree	78.9	86.9	81.3	83.1	83.8	77.7	77.4	75.9	69.7	69.8	51.1	65.6
Baccalaureate ²	11.6	11.8	14.4	11.6	11.4	9.8	13.7	8.0	7.9	0.0	6.7	6.2
Master's in nursing	1.8	0.0	1.1	0.9	0.0	3.8	4.1	1.5	7.9	0.0	4.4	9.4
Master's in another field	0.4	0.0	0.0	0.4	0.4	1.6	0.0	1.5	0.0	0.0	0.0	0.0
Doctorate in nursing	0.1	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Doctorate in another field	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
No answer	6.3	1.3	3.2	3.6	4.4	7.1	4.8	13.1	14.5	11.3	37.8	18.8

¹ Includes only those nurses who are located and registered in State.

² Includes 7 nurses who indicated they had at least a baccalaureate.

Source: Special substudy of the 1962 Inventory of Professional Registered Nurses; unpublished data.

Table G-30.—Percent distribution of actively employed registered nurses at various levels of educational preparation, by age groups, in South Dakota; 1962

Educational	Total	Under 25 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65 and over	Un-known
Total ¹	100.0	18.2	16.2	13.1	13.3	10.7	8.5	8.0	4.4	3.1	2.6	1.9
No degree	100.0	19.8	16.4	13.7	14.0	10.4	8.3	7.6	3.9	2.7	1.7	1.5
Baccalaureate ²	100.0	18.6	20.1	13.1	13.1	9.0	10.1	5.5	3.0	5.0	1.5	1.0
Master's in nursing	100.0	0.0	9.7	6.5	0.0	22.5	19.3	6.5	19.3	0.0	6.5	9.7
Master's in another field	100.0	0.0	0.0	14.3	14.3	42.8	0.0	28.6	0.0	0.0	0.0	0.0
Doctorate in nursing	100.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Doctorate in another field	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
No answer	100.0	3.7	8.3	7.3	9.2	11.9	6.4	16.5	10.1	5.5	15.6	5.5

¹ Includes only those nurses who are located and registered in State.

² includes 7 nurses who indicated they had at least a baccalaureate.

Source: Special substudy of the 1962 Inventory of Professional Registered Nurses; unpublished data.

Table G-31.—Highest educational preparation of registered nurses actively employed, by age groups, in South Dakota; 1966

Educational preparation	Total	Under 25 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65 and over	Un-known
Total	2,055	276	332	229	257	267	219	165	147	80	44	39
No degree ¹	1,655	246	264	194	216	220	178	133	103	53	27	21
Baccalaureate ²	249	30	59	26	33	28	19	14	21	11	5	3
Master's in nursing	40	0	4	5	2	3	10	5	5	4	1	1
Master's in another field	11	0	1	0	0	1	5	1	3	0	0	0
Doctorate in nursing	1	0	0	0	1	0	0	0	0	0	0	0
Doctorate in another field	1	0	0	0	0	0	1	0	0	0	0	0
No answer	98	0	4	4	5	15	6	12	15	12	11	14

¹ Includes 16 nurses who indicated they had an associate degree.

² Includes 7 nurses who indicated they had at least a baccalaureate.

Source: American Nurses' Association. The 1966 Inventory of Registered Nurses, South Dakota; unpublished data; March 1968.

Table G-32.—Percent distribution of actively employed registered nurses at various age levels, by highest educational preparation, in South Dakota; 1966

Educational	Total	Under 25 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65 and over	Un-known
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No degree ¹	80.5	89.1	79.5	84.7	84.1	82.4	81.3	80.6	70.1	66.2	61.3	53.8
Baccalaureate ²	12.1	10.9	17.8	11.4	12.8	10.5	8.7	8.5	14.3	13.8	11.4	7.7
Master's in nursing	1.9	0.0	1.2	2.2	0.8	1.1	4.6	3.0	3.4	5.0	2.3	2.6
Master's in another field	0.5	0.0	0.3	0.0	0.0	0.4	2.3	0.6	2.0	0.0	0.0	0.0
Doctorate in nursing	0.1	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Doctorate in another field	0.1	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
No answer	4.8	0.0	1.2	1.7	1.9	5.6	2.7	7.3	10.2	15.0	25.0	35.9

¹ Includes 16 nurses who indicated they had an associate degree.

² Includes 7 nurses who indicated they had at least a baccalaureate.

Source: American Nurses' Association. The 1966 Inventory of Registered Nurses, South Dakota; unpublished data; March 1968.

Table G-33.—Percent distribution of actively employed registered nurses at various levels of educational preparation, by age groups, in South Dakota; 1966

Educational	Total	Under 25 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65 and over	Un-known
Total	100.0	13.4	16.2	11.1	12.5	13.0	10.7	8.0	7.2	3.9	2.1	1.9
No degree ¹	100.0	14.8	16.0	11.7	13.1	13.3	10.8	8.0	6.2	3.2	1.6	1.3
Baccalaureate ²	100.0	12.0	23.8	10.4	13.4	11.2	7.6	5.6	8.4	4.4	2.0	1.2
Master's in nursing	100.0	0.0	10.0	12.5	5.0	7.5	25.0	12.5	12.5	10.0	2.5	2.5
Master's in another field	100.0	0.0	9.1	0.0	0.0	9.1	45.4	9.1	27.3	0.0	0.0	0.0
Doctorate in nursing	100.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Doctorate in another field	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0
No answer	100.0	0.0	4.1	4.1	5.1	15.4	6.1	12.2	15.3	12.2	11.2	14.3

¹ Includes 16 nurses who indicated they had an associate degree.

² Includes 7 nurses who indicated they had at least a baccalaureate.

Source: American Nurses' Association. The 1966 Inventory of Registered Nurses, South Dakota; unpublished data; March 1968.

Table G-34.—Highest educational preparation of registered nurses not actively employed, by age groups, in South Dakota; 1962

Educational preparation	Total	Under 25 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65 and over	Un-known
Total ¹	538	76	125	101	71	53	28	30	20	8	18	8
No degree	359	55	91	68	50	37	17	15	11	2	9	4
Baccalaureate ²	50	13	17	9	2	2	2	4	0	0	0	1
Master's in nursing	2	0	0	0	0	2	0	0	0	0	0	0
Master's in another field	2	0	0	0	0	0	1	0	0	0	1	0
Doctorate in nursing	0	0	0	0	0	0	0	0	0	0	0	0
Doctorate in another field	0	0	0	0	0	0	0	0	0	0	0	0
No answer	125	8	17	24	19	12	8	11	9	6	8	3

¹ Includes only those nurses who are located and registered in State.

² Includes 1 nurse who indicated she had at least a baccalaureate.

Source: Special substudy of the 1962 Inventory of Professional Registered Nurses; unpublished data.

Table G-35.—Percent distribution of registered nurses not actively employed and at various age levels, by highest educational preparation, in South Dakota; 1962

Educational preparation	Total	Under 25 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65 and over	Un-known
Total ¹	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No degree	66.7	72.4	72.8	67.3	70.4	69.8	60.7	50.0	55.0	25.0	50.0	50.0
Baccalaureate ²	9.3	17.1	13.6	8.9	2.8	3.8	7.1	13.3	0.0	0.0	0.0	12.5
Master's in nursing	0.4	0.0	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0
Master's in another field	0.4	0.0	0.0	0.0	0.0	0.0	3.6	0.0	0.0	0.0	5.6	0.0
Doctorate in nursing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Doctorate in another field	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
No answer	23.2	10.5	13.6	23.8	26.8	22.6	28.6	36.7	45.0	75.0	44.4	37.5

¹ Includes only those nurses who are located and registered in State.

² Includes 1 nurse who indicated she had at least a baccalaureate.

Source: Special substudy of the 1962 Inventory of Professional Registered Nurses; unpublished data.

Table G-36.—Percent distribution of registered nurses not actively employed and at various levels of educational preparation, by age groups, in South Dakota; 1962

Educational preparation	Total	Under 25 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65 and over	Un-known
Total	100.0	14.1	23.2	18.8	13.2	9.9	5.2	5.6	3.7	1.5	3.3	1.5
No degree ¹	100.0	15.3	25.4	18.9	13.9	10.3	4.7	4.2	3.1	0.6	2.5	1.1
Baccalaureate ²	100.0	26.0	34.0	18.0	4.0	4.0	4.0	8.0	0.0	0.0	0.0	2.0
Master's in nursing	100.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
Master's in another field	100.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0	0.0	50.0	0.0
Doctorate in nursing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Doctorate in another field	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
No answer	100.0	6.4	13.6	19.2	15.2	9.6	6.4	8.8	7.2	4.8	6.4	2.4

¹ Includes only those nurses who are located and registered in State.

² Includes 1 nurse who indicated she had at least a baccalaureate.

Source: Special substudy of the 1962 Inventory of Professional Registered Nurses; unpublished data.

Table G-37.—Highest educational preparation of registered nurses not actively employed, by age groups, in South Dakota; 1966

Educational preparation	Total	Under 25 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65 and over	Un-known
Total	804	40	154	150	127	107	65	45	42	20	42	12
No degree ¹	514	34	113	98	77	76	41	30	21	8	16	0
Baccalaureate ²	86	5	19	21	17	7	5	2	2	1	5	2
Master's in nursing	3	0	0	0	0	1	1	0	0	0	1	0
Master's in another field	6	0	0	0	1	0	1	0	1	1	1	1
Doctorate in nursing	0	0	0	0	0	0	0	0	0	0	0	0
Doctorate in another field	1	0	0	0	0	0	0	0	0	0	0	1
No answer	194	1	22	31	32	23	17	13	18	10	19	8

¹ Includes 9 nurses who indicated they had an associate degree.

² Includes 5 nurses who indicated they had at least a baccalaureate.

Source: American Nurses' Association. The 1966 Inventory of Registered Nurses, South Dakota; unpublished data; 1968.

Table G-38.—Percent distribution of registered nurses not actively employed and at various age levels, by educational preparation, in South Dakota; 1966

Educational preparation	Total	Under 25 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65 and over	Un-known
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No degree ¹	63.9	85.0	73.4	65.3	60.6	71.0	63.1	66.7	50.0	40.0	38.1	0.0
Baccalaureate ²	10.7	12.5	12.3	14.0	13.4	6.6	7.7	4.4	4.8	5.0	11.9	16.7
Master's in nursing	0.4	0.0	0.0	0.0	0.0	0.9	1.5	0.0	0.0	0.0	2.4	0.0
Master's in another field	0.8	0.0	0.0	0.0	0.8	0.0	1.5	0.0	2.4	5.0	2.4	8.3
Doctorate in nursing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Doctorate in another field	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.3
No answer	24.1	2.5	14.3	20.7	25.2	21.5	26.2	28.9	42.8	50.0	45.2	66.7

¹ Includes 9 nurses who indicated they had an associate degree.

² Includes 5 nurses who indicated they had at least a baccalaureate.

Source: American Nurses' Association. The 1966 Inventory of Registered Nurses, South Dakota; unpublished data; 1968.

Table G-39.—Percent distribution of registered nurses not actively employed and at various levels of educational preparation, by age groups, in South Dakota; 1966

Educational preparation	Total	Under 25 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years	50-54 years	55-59 years	60-64 years	65 and over	Un- known
Total	100.0	5.0	19.1	18.7	15.8	13.3	8.1	5.6	5.2	2.5	5.2	1.5
No degree ¹	100.0	6.6	22.0	19.1	15.0	14.8	8.0	5.8	4.1	1.5	3.1	0.0
Baccalaureate ²	100.0	5.8	22.1	24.4	19.8	8.2	5.8	2.3	2.3	1.2	5.8	2.3
Master's in nursing	100.0	0.0	0.0	0.0	0.0	33.4	33.3	0.0	0.0	0.0	33.3	0.0
Master's in another field	100.0	0.0	0.0	0.0	16.7	0.0	16.7	0.0	16.6	16.6	16.7	16.7
Doctorate in nursing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Doctorate in another field ..	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
No answer	100.0	0.5	11.3	16.0	16.5	11.8	8.8	6.7	9.3	5.2	9.8	4.1

¹ Includes 9 nurses who indicated they had an associate degree.

² Includes 5 nurses who indicated they had at least a baccalaureate.

Source: American Nurses' Association. The 1966 Inventory of Registered Nurses, South Dakota; unpublished data; March 1968.

Table G-40.—Fields of employment of employed registered nurses, by highest educational preparation, in South Dakota; 1962

Field of employment	Highest educational preparation															
	Total		No degree		Baccalaureate ¹		Master's in nursing		Master's in another field		Doctorate in nursing		Doctorate in another field		No answer	
	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent
Total ²	1,716	100.0	1,369	100.0	199	100.0	31	100.0	7	100.0	1	100.0	0	—	109	100.0
Hospital or other institution	1,128	65.8	980	71.7	92	46.2	4	12.9	2	28.6	1	100.0	0	—	49	45.0
School of nursing	126	7.3	41	3.0	59	29.7	22	71.0	4	57.1	0	—	0	—	0	—
Private duty	127	7.4	93	6.8	8	4.0	1	3.2	0	—	0	—	0	—	25	22.9
Public health (except school nurse)	48	2.8	32	2.3	12	6.0	3	9.7	0	—	0	—	0	—	1	0.9
School nurse	33	1.9	18	1.3	12	6.0	0	—	1	14.3	0	—	0	—	2	1.8
Industrial nurse	5	0.3	4	0.3	0	—	0	—	0	—	0	—	0	—	1	0.9
Office nurse (physician's or dentist's)	201	11.7	166	12.1	13	6.6	0	—	0	—	0	—	0	—	22	20.2
Other specified field	4	0.2	2	0.1	1	0.5	1	3.2	0	—	0	—	0	—	6	—
Field not reported	44	2.6	33	2.4	2	1.0	0	—	0	—	0	—	0	—	9	8.3

¹ Includes 7 nurses who indicated they had at least a baccalaureate.

² Includes only those nurses who are located and registered in State.

Source: Special substudy of the 1962 Inventory of Professional Registered Nurses; unpublished data.

Table G-41.—Fields of employment of employed registered nurses, by highest educational preparation, in South Dakota; 1966

Field of employment	Highest educational preparation															
	Total		No degree ¹		Baccalaureate ²		Master's in nursing		Master's in another field		Doctorate in nursing		Doctorate in another field		No answer	
	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent
Total	2,055	100.0	1,655	100.0	249	100.0	40	100.0	11	100.0	1	100.0	1	100.0	98	100.0
Hospital or other institution	1,433	69.7	1,236	74.7	141	56.7	6	15.0	3	27.2	0	—	0	—	47	47.9
School of nursing	141	6.9	44	2.7	59	23.7	27	67.5	7	63.3	0	—	1	100.0	3	3.1
Private duty	111	5.4	82	4.9	7	2.8	1	2.5	0	—	0	—	0	—	21	21.4
Public health (except school nurse)	68	3.3	44	2.7	16	6.4	4	10.0	1	9.2	0	—	0	—	3	3.1
School nurse	50	2.4	34	2.0	11	4.4	1	2.5	0	—	0	—	0	—	4	4.1
Industrial nurse	6	0.3	6	0.4	0	—	0	—	0	—	0	—	0	—	0	—
Office nurse (physician's or dentist's)	207	10.1	186	11.2	10	4.0	0	—	0	—	1	100.0	0	—	10	10.2
Other specified field	3	0.1	1	0.1	2	0.8	0	—	0	—	0	—	0	—	0	—
Field not reported	36	1.8	22	1.3	3	1.2	1	2.5	0	—	0	—	0	—	10	10.2

¹ Includes 16 nurses who indicated they had an associate degree.

² Includes 7 nurses who indicated they had at least a baccalaureate.

Source: American Nurses' Association. The 1966 Inventory of Registered Nurses, South Dakota; unpublished data; March 1968.

Table G-42.—Highest educational preparation of registered nurses, by field of employment, in 15 States;¹ 1962

Highest educational preparation	Field of employment									
	Total		Hospital or other institution		School of nursing		Private duty		Public health (except school nurse)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	91,584	100.0	58,989	100.0	3,057	100.0	9,899	100.0	4,006	100.0
No degree	73,269	80.0	49,551	84.1	890	29.1	8,124	82.1	2,256	58.8
Baccalaureate	10,804	11.8	5,922	10.0	1,203	39.3	448	4.5	1,237	30.9
Master's in nursing	1,649	1.8	562	1.0	691	22.6	27	0.3	191	4.8
Master's in another field	600	0.7	149	0.3	235	7.7	13	0.1	105	2.6
Doctorate in nursing	104	0.1	58	0.1	5	0.2	11	0.1	2	(²)
Doctorate in another field	38	(²)	14	(²)	13	0.4	3	(²)	3	0.1
Not reported	5,120	5.6	2,683	4.5	20	0.7	1,273	12.9	112	2.8

Highest educational preparation	Field of employment									
	School nurse		Industrial nurse		Office nurse (physician's or dentist's)		Other specified field		Field not reported	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	3,413	100.0	3,034	100.0	7,900	100.0	329	100.0	1,007	100.0
No degree	2,204	64.6	2,608	85.9	6,681	84.6	195	59.3	660	65.5
Baccalaureate	913	26.8	239	7.9	647	8.2	93	28.3	102	10.1
Master's in nursing	113	3.3	12	0.4	21	0.3	19	5.8	13	1.3
Master's in another field	66	1.9	5	0.2	3	(²)	11	3.3	13	1.3
Doctorate in nursing	1	(²)	3	0.1	22	0.3	1	0.3	1	0.1
Doctorate in another field	3	0.1	0	—	1	(²)	1	0.3	0	—
Not reported	113	3.3	167	5.5	525	6.6	9	2.7	218	21.7

¹ Includes all nurses registered and employed in the following States: Arizona, Colorado, Connecticut, Delaware, Illinois, Maryland, Minnesota, Nevada, North Dakota, Rhode Island, South Dakota, Utah, Vermont, Washington, and Wyoming.

² Less than 0.1 percent.
Source: American Nurses' Association. *The Nation's Nurses, The 1962 Inventory of Registered Professional Nurses*. New York, The Association, 1965, p. 86.

Table G-43.—Highest educational preparation of registered nurses, by field of employment; South Dakota; 1962

Highest educational preparation	Field of employment									
	Total		Hospital or other institution		School of nursing		Private duty		Public health (except school nurse)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total ¹	1,716	100.0	1,128	100.0	126	100.0	127	100.0	48	100.0
No degree	1,369	79.8	980	86.9	41	32.5	93	73.2	32	67.7
Baccalaureate ²	199	11.6	92	8.2	59	46.8	8	6.3	12	25.0
Master's in nursing	31	1.8	4	0.3	22	17.5	1	0.8	3	6.2
Master's in another field	7	0.4	2	0.2	4	3.2	0	—	0	—
Doctorate in nursing	1	0.1	1	0.1	0	—	0	—	0	—
Doctorate in another field	0	—	—	—	—	—	—	—	—	—
Not reported	109	6.3	49	4.3	0	—	25	19.7	1	1.1

See footnotes at end of table.

Table G-43.—Continued

Highest educational preparation	Field of employment									
	School nurse		Industrial nurse		Office nurse (physician's or dentist's)		Other specified field		Field not reported	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	33	100.0	5	100.0	201	100.0	4	100.0	44	100.0
No degree	18	54.5	4	80.0	166	82.6	2	50.0	33	75.0
Baccalaureate	12	36.3	0	—	13	6.5	1	25.0	2	4.5
Master's in nursing	0	—	0	—	0	—	1	25.0	0	—
Master's in another field	1	3.1	0	—	0	—	0	—	0	—
Doctorate in nursing	0	—	0	—	0	—	0	—	0	—
Doctorate in another field	0	—	—	—	—	—	—	—	—	—
Not reported	2	6.1	1	20.0	22	10.9	0	—	9	20.5

¹ Includes only those nurses who are located and registered in State.

² Includes 7 nurses who indicated they had at least a baccalaureate.

Source: Special substudy of the 1962 Inventory of Professional Registered Nurses; unpublished data.

Table G-44.—Highest educational preparation of registered nurses, by field of employment; South Dakota; 1966

Highest educational preparation	Field of employment									
	Total		Hospital or other institution		School of nursing		Private duty		Public health (except school nurse)	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	2,055	100.0	1,433	100.0	141	100.0	111	100.0	68	100.0
No degree ¹	1,655	80.5	1,236	86.3	44	31.2	82	73.9	44	64.7
Baccalaureate ²	249	12.1	141	9.8	59	41.9	7	6.3	16	23.5
Master's in nursing	40	1.9	6	0.4	27	19.2	1	0.9	4	5.9
Master's in another field	11	0.5	3	0.2	7	4.9	0	—	1	1.5
Doctorate in nursing	1	0.1	0	—	0	—	0	—	0	—
Doctorate in another field	1	0.1	0	—	1	0.7	0	—	0	—
Not reported	98	4.8	47	3.3	3	2.1	21	18.9	3	4.4

Highest educational preparation	Field of employment									
	School nurse		Industrial nurse		Office nurse (physician's or dentist's)		Other specified field		Field not reported	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	50	100.0	6	100.0	207	100.0	3	100.0	36	100.0
No degree	34	68.0	6	100.0	186	89.9	1	33.3	22	61.1
Baccalaureate	11	22.0	0	—	10	4.8	2	66.7	3	8.3
Master's in nursing	1	2.0	0	—	0	—	0	—	1	2.8
Master's in another field	0	—	0	—	0	—	0	—	0	—
Doctorate in nursing	0	—	0	—	1	0.5	0	—	0	—
Doctorate in another field	0	—	0	—	0	—	0	—	0	—
Not reported	4	8.0	0	—	10	4.8	0	—	10	27.8

¹ Includes 16 nurses who indicated they had an associate degree.

² Includes 7 nurses who indicated they had at least a baccalaureate.

Source: American Nurses' Association. The 1966 Inventory of Registered Nurses, South Dakota; unpublished data; March 1968.

Table G-45.—Position classification of employed registered nurses, by highest educational preparation, in South Dakota; 1966

Type of position	Highest educational preparation															
	Total		No degree ¹		Baccalaureate ²		Master's in nursing		Master's in another field		Doctorate in nursing		Doctorate in another field		Not reported	
	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent
Total	2,055	100.0	1,655	80.0	249	12.1	40	1.9	11	0.5	1	0.1	1	0.1	98	4.8
Administrator or assistant	115	100.0	65	56.5	30	26.1	11	9.6	3	2.6	1	0.8	1	0.8	5	4.4
Consultant	13	100.0	5	38.4	4	30.8	4	30.8	0	—	0	—	0	—	0	—
Supervisor or assistant	206	100.0	162	78.7	25	12.1	5	2.4	1	0.5	0	—	0	—	13	6.3
Instructor	120	100.0	40	33.3	57	47.5	18	15.0	5	4.2	0	—	0	—	0	—
Head nurse or assistant	284	100.0	251	88.4	24	8.5	1	0.3	0	—	1	0.3	0	—	7	2.5
General duty or staff nurse	1,116	100.0	980	87.8	93	8.3	0	—	2	0.2	0	—	0	—	41	3.7
Other specified ² type	162	100.0	124	76.6	13	8.0	1	0.6	0	—	0	—	0	—	24	14.8
Type not reported	39	100.0	23	71.8	3	7.7	0	—	0	—	0	—	0	—	8	20.5

¹ Includes 16 nurses who reported they had an associate degree.

² Includes 7 nurses who indicated they had at least a baccalaureate.

Source: American Nurses' Association. The 1966 Inventory of Registered Nurses, South Dakota; unpublished data; March 1963.

Table G-46.—Number and percent distribution of employed registered nurses, by field of employment, type of position, and academic degree; South Dakota; 1966

Field of employment and type of position	Total		Master's or above		Baccalaureate ¹		No degree ²		Not reported	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	2,055	100.0	53	2.6	249	12.1	1,655	80.5	98	4.8
Hospital and related institutions ³	1,433	100.0	9	0.6	141	9.8	1,236	86.3	47	3.3
Administrators and assistants ⁴	89	100.0	3	3.3	21	23.6	60	67.5	5	5.6
Supervisors and assistants	177	100.0	3	1.7	23	13.0	142	80.2	9	5.1
Head nurses and assistants ⁵	259	100.0	2	0.7	30	11.6	222	85.8	5	1.9
Staff nurses, and other	885	100.0	1	0.1	67	7.6	792	89.5	25	2.8
Position not reported	23	100.0	0	—	0	—	20	86.9	3	13.1
Public health	68	100.0	5	7.4	16	23.5	44	64.7	3	4.4
Administrators and assistants	3	100.0	1	33.3	0	—	2	66.7	0	—
Consultants	7	100.0	1	14.2	3	42.8	3	42.8	0	—
Supervisors and assistants ⁶	11	100.0	2	18.2	0	—	9	81.8	0	—
Staff nurses	43	100.0	1	2.3	11	25.6	28	65.2	3	6.9
Position not reported	4	100.0	0	—	2	50.0	2	50.0	0	—
School nursing	50	100.0	1	2.0	11	22.0	34	68.0	4	8.0
Administrator and assistants	2	100.0	1	50.0	0	—	1	50.0	0	—
Supervisors and assistants ⁷	8	100.0	0	—	2	25.0	5	62.5	1	12.5
Staff nurses and other	40	100.0	0	—	9	22.5	28	70.0	3	7.5
Position not reported	0	—	—	—	—	—	—	—	—	—
Private duty	111	100.0	1	0.9	7	6.3	82	73.9	21	18.9
Office nursing	207	100.0	1	0.5	10	4.8	186	89.9	10	4.8
Administrators and assistants	1	100.0	0	—	0	—	1	100.0	0	—
Supervisors and assistants	4	100.0	0	—	0	—	4	100.0	0	—
Head nurses and assistants	22	100.0	1	4.6	0	—	20	90.8	1	4.6
Staff and other	180	100.0	0	—	10	5.6	161	89.4	9	5.0
Position not reported	0	—	—	—	—	—	—	—	—	—
Industrial health	6	100.0	0	—	0	—	6	100.0	0	—
Administrators and assistants	0	—	—	—	—	—	—	—	—	—
Supervisors and assistants	0	—	—	—	—	—	—	—	—	—
Staff	6	100.0	0	—	0	—	6	100.0	0	—
Schools of nursing	141	100.0	35	24.8	59	41.9	44	31.2	3	2.1
Administrators and assistants ⁸	22	100.0	13	59.1	7	31.8	2	9.1	0	—
Supervisors and assistants	9	100.0	1	11.1	0	—	8	88.9	0	—
Instructors ⁹	101	100.0	21	20.8	53	52.5	27	26.7	0	—
Staff and other	7	100.0	0	—	1	14.3	4	57.1	2	28.6
Position not reported	2	100.0	0	—	1	50.0	0	—	1	50.0

¹ Includes 7 nurses who indicated they had at least a baccalaureate.

² Includes 16 nurses who indicated they had an associate degree.

³ Includes 1 nurse who indicated she was employed in a nursing home.

⁴ Includes 3 nurses who reported their position as consultant.

⁵ Includes 19 nurses who reported their position as instructor.

⁶ Includes 10 nurses who reported their position as head nurse or assistant.

⁷ Includes 4 nurses who reported their position as head nurse or assistant.

⁸ Includes 1 nurse who reported her position as consultant.

⁹ Includes 3 nurses who reported their position as head nurse or assistant.

Source: American Nurses' Association. The 1966 Inventory of Registered Nurses, South Dakota; unpublished data; March 1968.

Table G-47.—Highest educational preparation, by type of position, of hospital-employed registered nurses in 15 States; 1962¹

Highest educational preparation	Total		Administrator		Consultant		Supervisor		Instructor	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	58,939	100.0	2,256	100.0	51	100.0	7,737	100.0	477	100.0
No degree	49,551	84.1	1,347	59.7	26	51.0	6,289	81.3	223	46.8
Baccalaureate	5,922	10.0	502	22.3	14	27.4	987	12.8	188	39.4
Master's in nursing	562	1.0	251	11.1	7	13.7	110	1.4	40	8.4
Master's in another field	149	0.3	65	2.9	3	5.9	26	0.3	13	2.7
Doctorate in nursing	58	0.1	4	0.2	0	—	5	0.1	2	0.4
Doctorate in another field	14	(²)	2	0.1	0	—	0	—	1	0.2
Not reported	2,683	4.5	85	3.7	1	2.0	320	4.1	10	2.1

Highest educational preparation	Head nurse		General duty		Other specified type		Type not reported	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	10,774	100.0	34,637	100.0	1,518	100.0	1,489	100.0
No degree	9,384	87.1	30,287	87.4	1,245	82.0	750	50.4
Baccalaureate	936	8.7	3,077	8.9	137	9.0	81	5.4
Master's in nursing	44	0.4	89	0.3	10	0.7	11	0.7
Master's in another field	9	0.1	28	0.1	1	0.1	4	0.3
Doctorate in nursing	18	0.2	29	0.1	0	—	0	—
Doctorate in another field	2	(²)	7	(²)	2	0.1	0	—
Not reported	381	3.5	1,120	3.2	123	8.1	643	43.2

¹ Includes all nurses registered and employed in the following States: Arizona, Colorado, Connecticut, Delaware, Illinois, Maryland, Minnesota, Nevada, North Dakota, Rhode Island, South Dakota, Utah, Vermont, Washington, and Wyoming.

² Less than 0.1 percent.

Source: American Nurses' Association. *The Nation's Nurses, The 1962 Inventory of Registered Professional Nurses*. New York, The Association, 1965, p. 36.

Table G-48.—Highest educational preparation, by type of position, of hospital-employed registered nurses; South Dakota; 1962

Highest educational preparation	Total ¹		Type of position							
			Administrator		Consultant		Supervisor		Instructor	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	1,128	100.0	54	100.0	3	100.0	139	100.0	9	100.0
No degree	980	86.9	38	70.4	1	33.3	117	84.2	5	55.6
Baccalaureate ²	92	8.2	10	18.5	2	66.7	13	9.3	3	33.3
Master's in nursing	4	0.3	3	5.5	0	—	0	—	0	—
Master's in another field	2	0.2	1	1.9	0	—	1	0.7	0	—
Doctorate in nursing	1	0.1	0	—	0	—	0	—	0	—
Doctorate in another field	0	—	—	—	—	—	—	—	—	—
Not reported	49	4.3	2	3.7	0	—	8	5.8	1	11.1

See footnotes at end of table.

Table G-48.—Continued

Highest educational preparation	Type of position							
	Head nurse		General duty		Other specified type		Type not reported	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	177	100.0	670	100.0	44	100.0	32	100.0
No degree	158	89.3	597	89.1	39	88.7	25	78.1
Baccalaureate	14	7.9	46	6.9	2	4.5	2	6.3
Master's in nursing	0	—	0	—	0	—	1	3.1
Master's in another field	0	—	0	—	0	—	0	—
Doctorate in nursing	1	0.5	0	—	0	—	0	—
Doctorate in another field	0	—	0	—	0	—	0	—
Not reported	4	2.3	27	4.0	3	6.8	4	12.5

¹ Includes only those nurses who are located and registered in State.

² Includes 3 nurses who indicated they had at least a baccalaureate.

Source: Special substudy of the 1962 Inventory of Professional Registered Nurses; unpublished data.

Table G-49.—Highest educational preparation, by type of position, of hospital-employed registered nurses; South Dakota; 1966

Highest educational preparation	Type of position									
	Total		Administrator		Consultant		Supervisor		Instructor	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	1,433	100.0	86	100.0	3	100.0	177	100.0	19	100.0
No degree ¹	1,236	86.3	59	68.6	1	33.3	142	80.2	11	57.9
Baccalaureate ²	141	9.8	21	24.5	0	—	23	13.0	7	36.8
Master's in nursing	6	0.4	1	1.1	2	66.7	2	1.1	0	—
Master's in another field	3	0.2	0	—	0	—	1	0.6	1	5.3
Doctorate in nursing	0	—	—	—	—	—	—	—	—	—
Doctorate in another field	0	—	—	—	—	—	—	—	—	—
Not reported	47	3.3	5	5.8	0	—	9	5.1	0	—

Highest educational preparation	Type of position							
	Head nurse		General duty		Other specified type		Type not reported	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	240	100.0	839	100.0	46	100.0	23	100.0
No degree	211	87.9	754	89.9	38	82.6	20	86.9
Baccalaureate	23	9.6	62	7.4	5	10.9	0	—
Master's in nursing	1	0.4	0	—	0	—	0	—
Master's in another field	0	—	1	0.1	0	—	0	—
Doctorate in nursing	0	—	—	—	—	—	—	—
Doctorate in another field	0	—	—	—	—	—	—	—
Not reported	5	2.1	22	2.6	3	6.5	3	13.1

¹ Includes 12 nurses who indicated they had an associate degree.

² Includes 5 nurses who indicated they had at least a baccalaureate.

Source: American Nurses' Association. The 1966 Inventory of Registered Nurses, South Dakota; unpublished data; March 1968.

Table G-50.—Position classification of hospital-employed registered nurses, by highest educational preparation, in South Dakota, 1962

Type of position of hospital-employed nurses	Total ¹		Highest educational preparation					
			No degree		Baccalaureate ²		Master's in nursing	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total ¹	1,128	100.0	980	100.0	92	100.0	4	100.0
Administrator or assistant	54	4.8	38	3.9	10	10.8	3	75.0
Consultant	3	0.3	1	0.1	2	2.2	0	—
Supervisor or assistant	139	12.3	117	11.9	13	14.1	0	—
Instructor	9	0.8	5	0.5	3	3.3	0	—
Head nurse or assistant	177	15.7	158	16.1	14	15.2	0	—
General duty or staff nurse	670	59.4	597	60.9	46	50.0	0	—
Other specified type	44	3.9	39	4.0	2	2.2	0	—
Type not reported	32	2.8	25	2.6	2	2.2	1	25.0

Type of position of hospital-employed nurses	Highest educational preparation							
	Master's in another field		Doctorate in nursing		Doctorate in another field		No answer	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total ¹	2	100.0	1	100.0	0	—	49	100.0
Administrator or assistant	1	50.0	0	—	0	—	2	4.1
Consultant	0	—	0	—	0	—	0	—
Supervisor or assistant	1	50.0	0	—	0	—	8	16.3
Instructor	0	—	0	—	0	—	1	2.0
Head nurse or assistant	0	—	1	100.0	0	—	4	8.2
General duty or staff nurse	0	—	0	—	0	—	27	55.1
Other specified type	0	—	0	—	0	—	3	6.1
Type not reported	0	—	0	—	0	—	4	8.2

¹ Includes only those nurses who are located and registered in State.

² Includes 3 nurses who indicated they had at least a baccalaureate.

Source: Special substudy of the 1962 Inventory of Professional Registered Nurses; unpublished data.

Table G-51.—Position classification of hospital-employed and other institutional-employed registered nurses, by highest educational preparation, in South Dakota; 1966

Type of position of hospital-employed nurses	Total		Highest educational preparation					
			No degree ¹		Baccalaureate ²		Master's in nursing	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	1,433	100.0	1,236	100.0	141	100.0	6	100.0
Administrator or assistant	86	6.0	59	4.8	21	14.9	1	16.6
Consultant	3	0.2	1	0.1	0	—	2	33.4
Supervisor or assistant	177	12.4	142	11.5	23	16.3	2	33.3
Instructor	19	1.3	11	0.8	7	5.0	0	—
Head nurse or assistant	240	16.7	211	17.1	23	16.3	1	16.6
General duty or staff nurse	839	58.6	754	61.0	62	44.0	0	—
Other specified type	46	3.2	38	3.1	5	3.5	0	—
Type not reported	23	1.6	20	1.6	0	—	0	—

Type of position of hospital-employed nurses	Highest educational preparation							
	Master's in another field		Doctorate in nursing		Doctorate in another field		No answer	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	3	100.0	0	—	0	—	47	100.0
Administrator or assistant	0	—	0	—	0	—	5	10.6
Consultant	0	—	0	—	0	—	0	—
Supervisor or assistant	1	33.4	0	—	0	—	9	19.2
Instructor	1	33.4	0	—	0	—	0	—
Head nurse or assistant	0	—	0	—	0	—	5	10.6
General duty or staff nurse	1	33.3	0	—	0	—	22	46.8
Other specified type	0	—	0	—	0	—	3	6.4
Type not reported	0	—	0	—	0	—	3	6.4

¹ Includes 12 nurses who indicated they had an associate degree.

² Includes 5 nurses who indicated they had at least a baccalaureate.

Source: American Nurses' Association. The 1966 Inventory of Registered Nurses, South Dakota; unpublished data; March 1968.

Table G-52.—Registered nurses: Supply and needs, by ownership and type of hospital; South Dakota; 1966

Ownership and type of hospital	Number of hospitals reporting employees	Total	Full time	Part time	Percent part time	Total need for additional nursing personnel ¹	Ratio of needs to present total staffing (percent)
Total hospitals reporting	54	1,247	881	366	29.4	189	15.2
Short-term	49	1,079	726	353	32.7	170	15.8
Long-term	3	83	79	4	4.8	1	1.2
Psychiatric	2	85	72	9	10.6	18	21.2
Government, Federal	10	247	235	12	4.9	26	10.5
Short-term	7	121	116	5	4.1	12	9.9
Long-term	2	75	75	0	—	1	1.3
Psychiatric	1	51	44	7	13.7	13	25.5
Government, non-Federal	8	125	80	45	36.0	9	7.2
Short-term	7	91	48	43	47.3	4	4.4
Long-term	0	—	—	—	—	—	—
Psychiatric	1	34	32	2	5.9	5	14.7
Non-government	36	875	566	309	35.3	154	17.6
Short-term	35	867	562	305	35.2	154	17.8
Long-term	1	8	4	4	50.0	0	—
Psychiatric	0	—	—	—	—	—	—

¹ Need reported by employer.

Source: Division of Nursing, Public Health Service. Survey of Manpower Resources in Hospitals, 1966; unpublished data.

Table G-53.—Licensed practical nurses: Supply and needs, by ownership and type of hospital; South Dakota; 1966

Ownership and type of hospital	Number of hospitals reporting employees	Total	Full time	Part time	Percent part time	Total need for additional nursing personnel ¹	Ratio of needs to present total staffing (percent)
Total hospitals reporting	54	317	265	52	16.4	111	35.0
Short-term	49	286	234	52	18.2	111	38.8
Long-term	3	26	26	0	—	0	—
Psychiatric	2	5	5	0	—	0	—
Government, Federal	10	57	55	2	3.5	3	5.3
Short-term	7	27	25	2	7.4	3	11.1
Long-term	2	26	26	0	—	0	—
Psychiatric	1	4	4	0	—	0	—
Government, non-Federal	8	16	11	5	31.3	1	6.3
Short-term	7	15	10	5	33.3	1	6.7
Long-term	0	—	—	—	—	—	—
Psychiatric	1	1	1	0	—	0	—
Non-government	36	244	199	45	18.4	107	43.9
Short-term	35	244	199	45	18.4	107	43.9
Long-term	1	0	—	—	—	0	—
Psychiatric	0	—	—	—	—	—	—

¹ Need reported by employer.

Source: Division of Nursing, Public Health Service. Survey of Manpower Resources in Hospitals, 1966; unpublished data.

Table G-54.—Aides, orderlies, and attendants: Supply and needs, by ownership and type of hospital; South Dakota; 1966

Ownership and type of hospital	Number of hospitals reporting employees	Total	Full time	Part time	Percent part time	Total need for additional nursing person 1el ¹	Ratio of needs to present total staffing (percent)
Total hospitals reporting	54	9,905	1,592	313	16.4	103	5.4
Short-term	49	1,265	968	297	23.5	93	7.4
Long-term	3	95	79	16	16.8	0	0.0
Psychiatric	2	545	545	0	0.0	10	1.8
Government, Federal	10	358	355	3	0.8	6	1.7
Short-term	7	145	142	3	2.1	6	4.1
Long-term	2	67	67	0	0.0	0	0.0
Psychiatric	1	146	146	0	0.0	0	0.0
Government, non-Federal	8	487	462	25	5.1	10	2.1
Short-term	7	88	63	25	28.4	0	0.0
Long-term	0	—	—	—	—	—	—
Psychiatric	1	399	399	0	—	10	2.5
Non-government	36	1,060	775	285	26.9	87	8.2
Short-term	35	1,032	763	269	26.1	87	8.4
Long-term	1	28	12	16	57.1	0	0.0
Psychiatric	0	—	—	—	—	—	—

¹ Need reported by employer.

Source: Division of Nursing, Public Health Service. Survey of Manpower Resources in Hospitals, 1966; unpublished data.

Table G-55.—Selected hospital personnel: Supply and needs, in the United States, in South Dakota, and in bordering States; 1966

Personnel	Present staff				Additional needs	
	All hospitals	Reporting hospitals			All hospitals	Reporting hospitals
		Total	Full time	Part time		
Registered nurses:						
United States	360,969	295,638	210,834	84,804	79,470	63,834
South Dakota	1,302	1,247	881	366	140	123
Bordering States:						
North Dakota	1,241	1,131	802	329	198	181
Iowa	5,584	4,584	2,816	1,769	828	676
Minnesota	9,203	8,692	5,620	3,072	1,674	1,581
Montana	1,547	1,300	876	424	235	205
Nebraska	3,042	2,386	1,511	875	247	608
Wyoming	692	576	413	163	103	88
Licensed practical or vocational nurses:						
United States	150,569	120,800	104,746	16,054	41,404	33,244
South Dakota	385	317	265	52	101	95
Bordering States:						
North Dakota	484	435	355	80	90	83
Iowa	1,311	1,063	855	208	448	359
Minnesota	3,527	3,340	2,380	960	807	762
Montana	401	344	283	61	107	92
Nebraska	757	589	495	94	319	237
Wyoming	160	130	101	29	37	30
Aides, orderlies and attendants:						
United States	492,007	390,561	354,852	35,709	69,746	55,344
South Dakota	1,971	1,905	1,592	313	85	81
Bordering States:						
North Dakota	2,248	2,080	1,737	343	104	98
Iowa	7,910	6,252	4,942	1,310	979	845
Minnesota	9,988	9,247	7,058	2,189	2,707	2,602
Montana	2,103	1,783	1,430	353	215	188
Nebraska	5,200	4,293	3,349	944	623	509
Wyoming	1,073	920	794	126	126	110
Surgical technical aides:						
United States	17,623	14,563	12,902	1,661	3,913	3,231
South Dakota	96	91	69	22	3	8
Bordering States:						
North Dakota	66	61	56	5	10	9
Iowa	432	365	275	90	61	52
Minnesota	349	334	293	41	110	106
Montana	99	88	76	12	24	21
Nebraska	162	126	106	20	27	22
Wyoming	44	38	19	19	13	12

Source: American Hospital Association. *Manpower Resources in Hospital—1966: Summary Report of a Survey Conducted by the Bureau of Health Manpower, Public Health Service, Department of Health, Education, and Welfare, and the American Hospital Association*, pp. 3, 37, 38, 40, 41, 42, 50, and 52. Chicago, The Association, 1966.

Table G-56.—Nursing personnel employed by the Federal Government in the Indian Health Program¹ and in Veterans Administration Hospitals,² in South Dakota; 1966-67

Place of employment	Total personnel	Registered nurses	Licensed practical nurses	Nursing aides	Vacancies
Total	579	230	67	285	³ 22
Veterans hospitals	422	⁴ 146	31	248	...
Indian Health	157	84	36	37	22
Hospital or clinic	130	65	28	37	12
Public health	27	19	8	...	10

¹ Staff as of October 1967.
² Staff as of December 1966.
³ Among the 22 vacancies: 9 registered nurses, 1 licensed practical nurse, and 2 nursing aides in the hospitals or clinic; 9 registered nurses and 1 licensed practical nurse in Public Health Nursing.
⁴ 3 part-time nurses.
 Source: Information released by employing agencies.

Table G-57.—Estimated number and percent distribution of personnel employed in State institutions, by type of personnel, in South Dakota; 1966

Institution	Total		Registered nurses		Licensed practical nurses		Nursing aides	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	753	100.0	52	6.9	...	...	701	93.1
Yankton State Hospital	402	100.0	¹ 36	9.0	...	...	366	91.0
Redfield State Hospital	210	100.0	10	4.8	...	...	200	95.2
Custer State Hospital	79	100.0	4	5.1	...	...	75	94.9
State Soldiers' Home, Hot Springs	62	100.0	2	9.7	...	...	60	90.3

¹ 3 of 36 nurses work part time. Average daily patient census for 1966 was 1,450.
 Source: Yankton State Hospital, Yankton, South Dakota. Personnel for other institutions are estimated, December 1966.

Table G-58.—Number of registered nurses and licensed practical nurses, full time and part time, and percent of full time, employed in licensed nursing homes and homes for the aged, by type of care, in South Dakota; November 1966

Type of care	Homes		Personnel ¹							
			Registered nurses				Licensed practical nurses			
			Total	Number		Percent full time	Total	Number		Percent full time
				Full time	Part time			Full time	Part time	
Total	136	4,727	193	108	82	56.0	71	56	13	78.9
Intensive care ²	10	497	59	24	35	40.7	11	5	6	45.5
Nursing care	7	553	23	17	6	73.9	15	13	2	86.7
Intermediate care	69	2,964	108	64	41	59.3	42	35	5	83.3
Supervised living	48	636	1	1	0	100.0	2	2	0	100.0
Supervised living and intermediate care	2	77	2	2	0	100.0	1	1	0	100.0

¹ Not all personnel identified as to full time or part time.
² Nine of 10 homes reporting staff.
 Source: South Dakota Department of Health, Division of Medical Facilities, Pierre, South Dakota. November 3, 1966.

Table G-59.—Number of employed registered nurses in area of clinical practice, by field of employment, in South Dakota; 1962

Area of clinical practice	Total ¹	Field of employment								
		Hospital or other institution	School of nursing	Private duty	Public health (except school nurse)	School nurse	Industrial nurse	Office nurse (physician's or dentist's)	Other specified field	Field not reported
Total ¹	1,716	1,128	126	127	48	33	5	201	4	44
Medical	165	138	10	1	1	0	0	9	1	5
Surgical	278	245	16	3	0	0	0	12	0	2
Medical-surgical	150	101	22	17	2	0	0	7	0	1
Pediatric	61	46	8	0	1	1	0	4	0	1
Obstetric	116	97	11	0	0	0	0	6	0	2
Maternal-child health	7	1	3	0	1	1	0	0	0	1
Gynecologic	6	4	0	0	0	0	0	1	0	1
Psychiatric	56	53	2	0	0	0	0	1	0	0
Mental health	9	6	1	1	1	0	0	0	0	0
General practice	827	410	53	104	42	31	5	153	3	26
Other specified area	32	24	0	0	0	0	0	8	0	0
Area not reported	9	3	0	1	0	0	0	0	0	5

¹ Includes only those nurses who are located and registered in state.

Source: Special substudy of The 1962 Inventory of Professional Registered Nurses; unpublished data.

Table G-60.—Percent distribution of employed registered nurses in area of clinical practice, by field of employment, in South Dakota; 1962

Area of clinical practice	Total ¹	Field of employment								
		Hospital or other institution	School of nursing	Private duty	Public health (except school nurse)	School nurse	Industrial nurse	Office nurse (physician's or dentist's)	Other specified field	Field not reported
Total ¹	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Medical	9.6	12.2	7.9	0.8	2.1	0.0	0.0	4.4	25.0	11.4
Surgical	16.2	21.7	12.7	2.4	0.0	0.0	0.0	6.0	0.0	4.5
Medical-surgical	8.7	9.0	17.5	13.3	4.1	0.0	0.0	3.5	0.0	2.3
Pediatric	3.6	4.1	6.3	0.0	2.1	3.0	0.0	2.0	0.0	2.3
Obstetric	6.8	8.6	8.7	0.0	0.0	0.0	0.0	3.0	0.0	4.5
Maternal-child health	0.4	0.1	2.4	0.0	2.1	3.0	0.0	0.0	0.0	2.3
Gynecologic	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.5	0.0	2.3
Psychiatric	3.3	4.7	1.6	0.0	0.0	0.0	0.0	0.5	0.0	0.0
Mental health	0.5	0.5	0.8	0.8	2.1	0.0	0.0	0.0	0.0	0.0
General practice	48.2	36.3	42.1	81.9	87.5	94.0	100.0	76.1	75.0	59.0
Other specified area	1.9	2.1	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0
Area not reported	0.5	0.3	0.0	0.8	0.0	0.0	0.0	0.0	0.0	11.4

¹ Includes only those nurses who are located and registered in State.

Source: Special substudy of The 1963 Inventory of Professional Registered Nurses; unpublished data.

Table G-61.—Number of employed registered nurses in area of clinical practice, by field of employment, in South Dakota; 1966

Area of clinical practice	Total	Field of employment								
		Hos- pital or other insti- tution ¹	School of nursing	Private duty	Public health (except school nurse)	School nurse	Indus- trial nurse	Office nurse (physi- cian's or dentist's)	Other speci- fied field	Field not re- ported
Total	2,055	1,433	141	111	68	50	6	207	3	36
Medical	180	148	10	2	0	0	0	16	1	3
Surgical	284	254	18	1	0	0	0	9	0	2
Medical-surgical	206	154	28	14	2	1	0	4	0	3
Pediatric	90	76	4	2	2	1	0	5	0	0
Obstetric	161	140	11	3	0	0	0	5	0	2
Maternal-child health	27	12	9	0	3	1	0	2	0	0
Gynecologic	5	4	1	0	0	0	0	0	0	0
Psychiatric	103	89	10	1	1	0	0	0	0	2
Mental health	6	5	0	0	0	0	0	0	0	1
General practice	642	398	23	41	38	26	2	108	0	6
Other specified area	64	55	0	0	0	0	2	3	2	2
Area not reported	287	98	27	47	22	21	2	55	0	15

¹ Includes nursing homes.

Source: American Nurses' Association. The 1966 Inventory of Registered Nurses, South Dakota; unpublished data; March 1968.

Table G-62.—Percent distribution of employed registered nurses in area of clinical practice, by field of employment, in South Dakota; 1966

Area of clinical practice	Total	Field of employment								
		Hos- pital or other insti- tution ¹	School of nursing	Private duty	Public health (except school nurse)	School nurse	Indus- trial nurse	Office nurse (physi- cian's or dentist's)	Other speci- fied field	Field not re- ported
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Medical	8.8	10.3	7.1	1.8	0.0	0.0	0.0	7.7	33.3	8.3
Surgical	13.8	17.8	12.8	0.9	0.0	0.0	0.0	4.4	0.0	5.6
Medical-surgical	10.0	10.8	19.9	12.6	2.9	2.0	0.0	1.9	0.0	8.3
Pediatric	4.4	5.3	2.3	1.8	2.9	2.0	0.0	2.4	0.0	0.0
Obstetric	7.8	9.8	7.8	2.7	0.0	0.0	0.0	2.4	0.0	5.6
Maternal-child health	1.3	0.8	6.4	0.0	4.4	2.0	0.0	1.0	0.0	0.0
Gynecologic	0.2	0.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Psychiatric	5.0	6.2	7.1	0.9	1.5	0.0	0.0	0.0	0.0	5.5
Mental health	0.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8
General practice	31.3	27.7	16.3	36.9	55.9	52.0	33.3	52.2	0.0	16.7
Other specified area	3.1	3.8	0.0	0.0	0.0	0.0	33.3	1.4	66.7	5.5
Area not reported	14.0	6.8	19.1	42.4	32.4	42.0	33.4	26.6	0.0	41.7

¹ Includes nursing homes.

Source: American Nurses' Association. The 1966 Inventory of Registered Nurses, South Dakota; unpublished data; March 1968.

Table G-63.--Number and percent of employed registered nurses in area of clinical practice, by highest educational preparation, in South Dakota; 1962

Area of clinical practice	Highest educational preparation															
	Total ¹		No degree		Baccalaureate ²		Master's in nursing		Master's in another field		Doctorate in nursing		Doctorate in another field		No answer	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total ¹	1,716	100.0	1,369	79.7	199	11.6	31	1.8	7	0.4	1	0.1	0	0	109	6.4
Medical	165	100.0	143	86.7	15	9.1	1	0.6	0	—	1	0.6	0	0	5	3.0
Surgical	278	100.0	248	89.2	22	7.9	1	0.4	0	—	0	—	0	0	7	2.5
Medical-surgical	150	100.0	121	80.7	20	13.3	4	2.7	0	—	0	—	0	0	5	3.3
Pediatric	61	100.0	48	78.7	9	14.8	2	3.3	1	1.6	0	—	0	0	1	1.6
Obstetric	116	100.0	99	85.3	16	13.8	1	0.9	0	—	0	—	0	0	0	—
Maternal-child health	7	100.0	4	57.1	3	42.9	0	—	0	—	0	—	0	0	0	—
Gynecologic	6	100.0	6	100.0	0	—	0	—	0	—	0	—	0	0	0	—
Psychiatric	56	100.0	48	85.7	8	14.3	0	—	0	—	0	—	0	0	0	—
Mental health	9	100.0	7	77.8	1	11.1	1	11.1	0	—	0	—	0	0	0	—
General practice	827	100.0	611	73.9	103	12.5	21	2.5	6	0.7	0	—	0	0	86	10.4
Other specified area	32	100.0	28	87.5	1	3.1	0	—	0	—	0	—	0	0	3	9.4
No answer	9	100.0	6	66.7	1	11.1	0	—	0	—	0	—	0	0	2	22.2

¹ Includes only nurses who are located and registered in State.

² Includes 7 nurses who indicated they had at least a baccalaureate.

Source: Special substudy of The 1962 Inventory of Professional Registered Nurses; unpublished data.

Table G-64.—Number and percent of employed registered nurses in area of clinical practice, by highest educational preparation, in South Dakota; 1966

Area of clinical practice	Highest educational preparation															
	Total		No degree ¹		Baccalaureate ²		Master's in nursing		Master's in another field		Doctorate in nursing		Doctorate in another field		Not reported	
	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent
Total	2,055	100.0	1,655	80.5	259	12.1	40	1.9	11	0.5	1	0.1	1	0.1	98	4.8
Medical	180	100.0	161	89.4	13	7.2	1	0.6	1	0.6	1	—	0	—	4	2.2
Surgical	284	100.0	245	86.3	27	9.5	2	0.7	1	0.4	0	—	0	—	9	3.2
Medical-surgical	206	100.0	164	79.7	33	16.0	5	2.4	0	—	0	—	0	—	4	1.9
Pediatric	90	100.0	77	85.6	11	12.2	1	1.1	0	—	0	—	0	—	1	1.1
Obstetric	161	100.0	137	85.1	19	11.8	1	0.6	0	—	0	—	0	—	4	2.5
Maternal-child health	27	100.0	17	63.0	9	33.3	0	—	1	3.7	0	—	0	—	0	—
Gynecologic	5	100.0	4	80.0	1	20.0	0	—	0	—	0	—	0	—	0	—
Psychiatric	103	100.0	74	71.8	22	21.4	4	3.9	1	1.0	0	—	0	—	2	1.9
Mental health	6	100.0	2	33.3	2	33.3	1	16.7	0	—	0	—	0	—	0	—
General practice	642	100.0	536	83.4	73	11.4	10	1.6	4	0.6	0	—	0	—	19	3.0
Other specified area	64	100.0	58	90.6	6	9.4	0	—	0	—	0	—	0	—	0	—
No answer	287	100.0	180	62.8	33	11.5	15	5.2	3	1.0	1	0.3	1	0.3	54	18.9

¹ Includes 16 nurses who indicated they had an associate degree or no degree.

² Includes 7 nurses who indicated they had at least a baccalaureate.

Source: American Nurses' Association. The 1966 Inventory of Registered Nurses, South Dakota; unpublished data; March 1968.

Table G-65.—Proportion of registered nurses, employed and not employed in nursing, having specialized educational preparation in psychiatric nursing, by level of educational preparation, in South Dakota; 1962

Level of educational preparation	Total registered nurses ¹	Nurses having specialized educational preparation in psychiatric nursing	
		Number	Percent of total nurses
Total	2,319	31	1.3
No degree	1,764	0	0.0
Baccalaureate ²	252	27	10.7
Master's in nursing	35	4	11.4
Master's in another field	9	0	0.0
Doctorate in nursing	1	0	0.0
Doctorate in another field	0	0	0.0
No answer	258	—	—

¹ Includes only those nurses located and registered in State.

² Includes 9 nurses who indicated they had at least a baccalaureate.

Source: American Nurses' Association. Special substudy of the 1962 Inventory of Professional Registered Nurses; unpublished data.

Table G-66.—Proportion of registered nurses, employed and not employed in nursing, having specialized educational preparation in psychiatric nursing, by level of educational preparation, in South Dakota; 1966

Level of educational preparation	Total registered nurses	Nurses having specialized educational preparation in psychiatric nursing	
		Number	Percent of total nurses
Total	2,907	44	1.5
No degree	2,177	0	0.0
Baccalaureate ¹	338	37	10.9
Master's in nursing	43	7	16.3
Master's in another field	17	0	0.0
Doctorate in nursing	1	0	0.0
Doctorate in another field	2	0	0.0
No answer	329	—	—

¹ Includes 13 nurses who indicated they had at least a baccalaureate.

Source: American Nurses' Association. The 1966 Inventory of Registered Nurses, South Dakota; unpublished data.

Table G-67.—Proportion of employed registered nurses with specialized educational preparation in psychiatric nursing, by area of clinical practice, in South Dakota; 1962

Area of clinical practice	Total employed nurses ¹	Nurses having specialized educational preparation in psychiatric nursing	
		Number	Percent of total nurses
Total	1,716	24	1.3
Medical	165	2	1.3
Surgical	278	1	0.4
Medical-surgical	150	1	0.7
Pediatric	61	1	1.6
Obstetric	116	3	2.6
Maternal-child health	7	0	0.0
Gynecologic	6	0	0.0
Psychiatric	56	2	3.6
Mental health	9	1	11.1
General practice	827	13	15.7
Other specified areas	32	0	0.0
No answer	9	—	—

¹ Includes only those nurses located and registered in State.

Source: American Nurses' Association. Special substudy of the 1962 Inventory of Professional Registered Nurses; unpublished data.

Table G-68.—Proportion of employed registered nurses with specialized educational preparation in psychiatric nursing, by area of clinical practice, in South Dakota; 1966

Area of clinical practice	Total employed nurses	Nurses having specialized educational preparation in psychiatric nursing	
		Number	Percent of total nurses
Total	2,055	38	1.8
Medical	180	2	1.1
Surgical	284	2	0.7
Medical-surgical	206	3	1.5
Pediatric	90	1	1.1
Obstetric	161	2	1.2
Maternal-child health	27	3	11.1
Gynecologic	5	0	0.0
Psychiatric	103	11	10.7
Mental health	6	1	16.7
General practice	642	9	1.4
Other specified areas	64	0	0.0
No answer	287	4	1.4

Source: American Nurses' Association. The 1966 Inventory of Registered Nurses, South Dakota; unpublished data.

Table G-69.—Number of full-time registered nurse instructors in initial and graduate programs¹ preparing registered nurses, and total with academic degrees, in the United States, in South Dakota, and in bordering States; 1949 and 1964

State	Total nurse instructors		Nurse instructors with academic degrees			
			Number		Percent	
	1949	1964	1949	1964	1949	1964
United States	10,431	12,504	5,722	10,113	55	81
South Dakota	83	88	44	74	53	84
Bordering States:						
North Dakota	68	71	32	55	47	77
Iowa	217	262	107	178	49	68
Minnesota	294	345	202	299	69	87
Montana	56	58	36	55	64	95
Nebraska	127	155	77	117	61	75
Wyoming	—	13	—	13	—	100

¹ Includes full-time nurse instructors for reporting schools only.

Source: U.S. Department of Health, Education, and Welfare. *Health Manpower Source Book, Section 2, Nursing Personnel*, Public Health Service Pub. 263, Revised Jan. 1966, p. 70. Washington, U.S. Government Printing Office, 1966.

Table G-70.—Academic preparation of registered nurses employed as full-time salaried faculty members, in initial and graduate programs, preparing registered nurses, by region;¹ December 1965

Type of school and academic preparation of nurses on faculty	United States	Middle West	Great Lakes	Mountain	Pacific
Hospital schools:					
Total nurses	² 6,262	526	1,560	121	250
number					
percent	100.0	100.0	100.0	100.0	100.0
R.N. and no degree	18.6	27.6	17.6	9.1	6.4
R.N. and baccalaureate	54.5	53.0	57.6	61.2	62.4
R.N. and master's degree	24.4	16.9	23.1	25.6	29.2
R.N. and doctorate	0.4	0.2	0.5	0.0	0.4
Unknown	2.1	2.3	1.2	4.1	1.6
Collegiate schools:					
Total nurses	² 3,062	315	508	183	457
number					
percent	100.0	100.0	100.0	100.0	100.0
R.N. and no degree	0.4	0.0	0.0	0.5	0.0
R.N. and baccalaureate	14.2	24.8	10.1	20.2	3.5
R.N. and master's degree	77.7	71.1	79.9	72.7	88.6
R.N. and doctorate	7.2	4.1	10.0	6.6	6.6
Unknown	0.5	—	—	—	1.3
Junior colleges:					
Total nurses	566	15	105	19	194
number					
percent	100.0	100.0	100.0	100.0	100.0
R.N. and no degree	4.2	0.0	15.3	0.0	2.1
R.N. and baccalaureate	27.6	6.7	35.2	36.8	26.3
R.N. and master's degree	67.1	93.3	49.5	63.2	71.1
R.N. and doctorate	0.9	0.0	0.0	0.0	0.5
Unknown	0.2	0.0	0.0	0.0	0.0

¹ The States included in each region are: *Middle West*: Iowa, Kansas, Missouri, Nebraska, North Dakota, and South Dakota; *Great Lakes*: Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin; *Mountain*: Arizona, Colorado, Idaho, Montana, New Mexico, Utah, and Wyoming; *Pacific*: Alaska, California, Hawaii, Nevada, Oregon,

and Washing ..

² Includes Puerto Rico.

Source: American Nurses' Association. *Facts About Nursing. A Statistical Summary*, p. 39. New York, The Association, 1966.

Table G-71.—Academic preparation of registered nurses employed as full-time salaried faculty members in practical nursing educational programs, by region; December 1965

Region ¹	Total		R.N. and no degree	R.N. and baccalaureate	R.N. and master's degree	R.N. and doctorate	Unknown
	Number	Percent					
Total ²	1,975	100.0	37.1	43.8	16.0	0.5	2.6
Middle West	137	100.0	41.6	43.1	6.6	0.7	8.0
Great Lakes	477	100.0	40.7	42.6	13.4	0.6	2.7
Mountain	75	100.0	16.0	72.0	12.0	0.0	0.0
Pacific	218	100.0	20.7	46.3	28.9	1.8	2.3

¹ The States included in each region are: *Middle West*: Iowa, Kansas, Missouri, Nebraska, North Dakota, and South Dakota; *Great Lakes*: Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin; *Mountain*: Arizona, Colorado, Idaho, Montana, New Mexico, Utah, and Wyoming; *Pacific*: Alaska, California, Hawaii, Nevada, Oregon,

and Washington.

² Includes Puerto Rico.

Source: American Nurses' Association. *Facts About Nursing. A Statistical Summary*, p. 40. New York, The Association, 1966.

Table G-72.—Number of registered nurses employed full time and part time as faculty members in programs of nursing,¹ and number of unfilled budgeted positions in the various programs, United States; January 3, 1966

Type of program	Total programs questioned	Number programs responding	Percent programs responding	Number full-time nurse-faculty reported	Number part-time nurse-faculty reported	Number reported unfilled budgeted positions
Total	2,560	2,195	85.7	17,391	3,086	1,762
Master's degree	56	56	100.0	978	86	81
Baccalaureate ²	52	28	53.8	107	35	18
Baccalaureate	198	³ 197	99.5	2,988	338	302
Associate degree	174	158	90.8	904	96	114
Diploma	821	766	93.3	8,499	1,622	1,000
Practical nursing	957	726	75.9	2,547	611	98
Cooperating agencies	302	264	87.4	1,368	298	149

¹ Includes nurse faculty employed by cooperating agencies.

² Specifically for graduates of diploma and associate degree nursing programs.

³ Statistics for 16 of these programs are included with those of

the master's degree programs. It was not possible for the institution to separate these.

Source: Research and Studies Service, National League for Nursing. *Nurse-Faculty Census 1966*, p. 3. New York, The League, 1966.

Table G-73.—Number of registered nurses employed full time as faculty in nursing programs, and number and percent of unfilled budgeted positions in these programs, for programs reporting,¹ in the United States, in South Dakota, and in bordering States; 1966

State	All programs			Diploma programs			Associate degree programs			Baccalaureate and higher degree programs		
	Total positions	Vacant		Total positions	Vacant		Total positions	Vacant		Total positions	Vacant	
		Number	Percent		Number	Percent		Number	Percent		Number	Percent
Total programs reporting	13,480	1,515	11.0	8,499	1,000	12.0	908	114	13.0	4,073	401	10.0
South Dakota	81	11	14.0	42	6	14.0	4	0	—	35	5	14.0
Bordering States:												
North Dakota	81	9	11.0	52	5	10.0	0	—	—	29	4	14.0
Iowa	307	29	9.0	205	19	9.0	3	3	100.0	99	7	7.0
Minnesota	376	34	9.0	245	12	5.0	21	0	—	110	22	20.0
Montana	33	1	3.0	21	1	5.0	0	0	—	12	0	—
Nebraska	186	15	8.0	148	9	6.0	0	0	—	38	6	16.0
Wyoming	14	0	—	0	0	—	0	0	—	14	0	—

¹ Excludes those schools that did not report both total budgeted positions and vacant budgeted positions.

Source: Computed by the Manpower Analysis and Resources Branch, Division of Nursing, from unpublished data provided by the National League for Nursing, 1966.

Table G-74.—Number of registered nurses employed full time or part time for public health work in State and local agencies, by type of employing agency, in the United States, in South Dakota, and in bordering States; January 1, 1966

State	Total	State Agency			Local agency							
		Total	Official	Non-official	Total	Health department	Other official	Visiting nurse service	Other non-official	Combination service	Established home care	Board of education
United States	40,234	1,214	1,184	30	39,020	15,872	690	4,607	317	2,210	42	15,282
South Dakota	99	5	5	0	94	33	26	0	0	0	0	35
Bordering States:												
North Dakota	74	6	6	0	68	68	0	0	0	0	0	0
Iowa	439	19	19	0	420	64	0	68	0	35	0	253
Minnesota	609	32	32	0	577	37	95	35	0	75	1	334
Montana	106	19	19	0	87	36	35	0	0	0	0	16
Nebraska	147	2	2	0	145	11	0	0	0	36	0	98
Wyoming	79	7	6	1	72	4	21	0	0	0	0	47

Source: U.S. Department of Health, Education, and Welfare. *Nurses in Public Health, January 1966*, Public Health Service Pub. 785, Revised 1967, p. 17. Washington, U.S. Government Printing Office, 1967.

Table G-75.—Number of registered nurses employed full time for public health work, by employing agency and by public health nursing (PHN) preparation and highest degree or credential, in South Dakota; January 1, 1966

Preparation, degree, or credential	Total	Position			
		Administrators, consultants, and supervisors		Staff nurses	
		All local agencies	Boards of education	All local agencies	Boards of education
Total	85	4	2	53	26
Completed PHN preparation	39	4	2	31	2
Highest credential:					
Graduate degree	4	1	1	2	0
Baccalaureate	21	2	0	17	2
Associate degree or diploma	14	1	1	12	0
Incomplete PHN preparation	23	0	0	16	7
Highest credential:					
Graduate degree	0	0	0	0	0
Baccalaureate	2	0	0	1	1
Associate degree or diploma	21	0	0	15	6
No PHN preparation	23	0	0	6	17
Highest credential:					
Graduate degree	0	0	0	0	0
Baccalaureate	3	0	0	1	2
Associate degree or diploma	20	0	0	5	15
PHN preparation not reported	0	0	0	0	0
Highest credential:					
Graduate degree	0	0	0	0	0
Baccalaureate	0	0	0	0	0
Associate degree or diploma	0	0	0	0	0

Source: U.S. Department of Health, Education, and Welfare. *Nurses in Public Health, January 1966*, Public Health Service Pub. 786, Revised 1967, pp. 32-34. Washington, U.S. Government Printing Office, 1967.

Table G-76.—Proportion of registered nurses at staff level employed full time for public health work in local agencies,¹ in South Dakota and in bordering States; selected years, 1937 to 1966

State	Percent employed by—														
	Local official health agencies ²					Local nonofficial health agencies ³					Boards of education				
	1937	1947	1957	1964	1966	1937	1947	1957	1964	1966	1937	1947	1957	1964	1966
50 States and D.C.	45	50	47	46	46	32	23	14	11	11	21	24	37	42	42
South Dakota	83	61	54	55	67	—	—	—	—	—	17	33	43	45	33
Bordering States:															
North Dakota	92	95	98	100	100	—	—	—	—	—	8	—	—	—	—
Iowa	11	25	31	26	29	43	28	15	14	13	44	45	53	59	56
Minnesota	27	45	46	42	38	31	18	7	6	7	41	34	47	52	55
Montana	63	80	73	62	73	11	4	10	3	—	26	10	16	22	18
Nebraska	12	22	30	40	29	31	27	—	—	—	43	46	69	66	70
Wyoming	28	50	33	4	40	5	—	—	—	—	67	45	67	67	60

¹ The proportion employed by State agencies is not directly shown in this table. This figure is the difference between 100 percent and the sum of the percent for the three types of local agencies shown.

² Local official agencies include health departments, other official agencies, and combination services. Some local nurse health agencies provide school health service.

³ Local nonofficial agencies include Visiting Nurses Association, other voluntary organizations, and in 1966, established home care

programs.

Sources: U.S. Department of Health, Education, and Welfare. *Health Manpower Source Book, Section 2, Nursing Personnel*, Public Health Service Pub. 263, Revised Jan. 1966, p. 105. Washington, U.S. Government Printing Office, 1966.

U.S. Department of Health, Education, and Welfare. *Nurses in Public Health, January 1966*; unpublished data.

Table G-77.—Supervisory and staff registered nurses employed full time for public health work, in the United States, in South Dakota, and in bordering States; selected years, 1937 to 1966

State	Supervisory ¹					Staff				
	1937	1947	1957	1964	1966	1937	1947	1957	1964	1966
50 States and D.C.	322	2,330	3,092	4,001	5,515	17,212	18,537	24,498	30,253	31,918
South Dakota	2	4	6	7	11	53	33	37	53	79
Bordering States:										
North Dakota	2	7	9	11	14	26	41	53	55	59
Iowa	3	29	32	38	45	213	196	259	347	312
Minnesota	6	31	55	67	83	401	379	417	476	422
Montana	2	12	9	15	18	62	51	62	76	77
Nebraska	1	6	14	11	13	68	94	97	122	122
Wyoming	2	2	5	7	11	18	22	36	51	55

¹ Includes administrators, consultants, and supervisors. Public health nurses employed by national agencies, universities, colleges, and schools of nursing are excluded.

Sources: U.S. Department of Health, Education, and Welfare. *Health Manpower Source Book, Section 2, Nursing Personnel*, Public

Health Service Pub. 263, Revised Jan. 1966, p. 103. Washington, U.S. Government Printing Office, 1966.

U.S. Department of Health, Education, and Welfare. *Nurses in Public Health, January 1966*; Public Health Service Pub. 785, Revised 1967, p. 21. Washington, U.S. Government Printing Office, 1967.

Table G-78.—Ratios of staff¹ public health nurses to population,² for the United States, for South Dakota, and for bordering States; selected years, 1937 to 1966

State	Staff nurse per 100,000 population					Population per staff nurse				
	1937	1947	1957	1964	1966	1937	1947	1957	1964	1966
50 States and D.C.	13.4	13.2	14.9	16.2	16.5	7,500	7,600	6,700	6,200	6,072
South Dakota	8.0	5.6	5.5	7.5	11.5	12,600	17,800	18,100	13,400	8,684
Bordering States:										
North Dakota	3.9	7.2	8.6	8.5	9.0	25,400	13,900	11,600	11,700	11,051
Iowa	8.5	7.9	9.6	12.6	11.3	11,800	12,600	10,400	7,900	8,840
Minnesota	14.7	13.9	12.9	13.6	11.8	6,800	7,200	7,800	7,300	8,441
Montana	11.2	9.9	9.5	10.8	11.0	8,900	10,100	10,600	9,200	9,130
Nebraska	5.0	7.5	6.9	8.3	8.4	20,000	13,400	14,400	12,000	11,959
Wyoming	7.5	3.7	11.5	15.0	16.2	13,300	11,500	8,700	6,600	6,182

¹ Includes staff nurses employed by boards of education.

² Populations used were total population excluding armed forces overseas as of July 1 of the year previous to the year stated in the table. Nurses were counted as of January 1 of the year.

Sources: U.S. Department of Health, Education, and Welfare.

Health Manpower Source Book, Section 2, Nursing Personnel, Public Health Service Pub. 263, Revised Jan. 1966, p. 104. Washington, U.S. Government Printing Office, 1966.

U.S. Department of Health, Education, and Welfare. *Nurses in Public Health, January 1966*; unpublished data.

Table G-79.—Number of State and local agencies employing registered nurses full time and part time for public health work, by type of agency, in the United States, in South Dakota, and in bordering States; January 1, 1966

State	State agency				Local agency						
	Total	Official	Non-official	Total	Health department	Other official	Visiting nurse service	Other non-official	Combination service	Established home care	Board of education
United States	8,664	92	84	18,572	2,210	293	651	107	85	17	5,209
South Dakota	47	1	0	46	25	2	0	0	0	0	19
Bordering States:											
North Dakota	21	1	0	20	20	0	0	0	0	0	0
Iowa	235	2	0	233	46	0	16	0	2	0	169
Minnesota	192	3	0	189	8	54	3	0	2	1	121
Montana	34	1	0	33	6	21	0	0	0	0	6
Nebraska	48	1	0	47	3	0	0	0	1	0	43
Wyoming	44	2	1	42	1	10	0	0	0	0	31

¹ An additional local agency was added in those States where nurses employed by the State Health Department were assigned to local areas.

Source: U.S. Department of Health, Education, and Welfare. *Nurses in Public Health, January 1966*. Public Health Service Pub. 785, Revised 1967, p. 16. Washington, U.S. Government Printing Office, 1967.

Table G-80.—Number of registered nurses and licensed practical nurses employed in public health work in State and local agencies, by position and by full time and by part time, in the United States, in South Dakota, and in bordering States; January 1, 1966

State	Full time						Part time					
	Total	Administrator	Consultant		Staff	Total	Administrator	Consultant		Staff	Total	
			Generalized	Specialized	Registered	Licensed practical		Generalized	Specialized	Registered	Licensed practical	
United States	37,760	1,196	194	770	32,221	3,378	21	3	48	3,206	37	
South Dakota	96	3	2	2	79	9	0	0	0	9	0	
Bordering States:												
North Dakota	73	2	0	4	59	2	0	0	0	1	1	
Iowa	362	26	2	4	312	83	0	0	1	81	1	
Minnesota	520	27	7	24	422	105	2	0	0	102	1	
Montana	100	1	0	8	77	11	0	0	0	11	0	
Nebraska	141	5	0	2	122	14	0	0	0	12	2	
Wyoming	66	2	0	3	55	13	0	0	0	13	0	

Source: U.S. Department of Health, Education, and Welfare. *Nurses in Public Health, January 1966*. Public Health Service Pub. 785, Revised 1967, p. 21. Washington, U.S. Government Printing Office, 1967.

Table G-81.—Number of registered nurses and licensed practical nurses employed both full time and part time for public health work in State and local agencies, by position, in the United States, in South Dakota, and in bordering States; January 1, 1966

State	Total	Adminis- trator	Super- visor	Consultant		Staff	
				General- ized	Special- ized	Pro- fessional	Licensed practical
United States	41,138	1,217	2,501	197	818	35,501	904
South Dakota	105	3	4	2	2	88	6
Bordering States:							
North Dakota	75	2	8	0	4	60	1
Iowa	445	26	13	2	5	393	6
Minnesota	625	29	25	7	24	524	16
Montana	111	1	9	0	8	88	5
Nebraska	155	5	6	0	2	134	8
Wyoming	79	2	6	0	3	68	0

Source: U.S. Department of Health, Education, and Welfare. *Nurses in Public Health, January 1966*. Public Health Service Pub. 785, Revised 1967, p. 21. Washington, U.S. Government Printing Office, 1967.

Table G-82.—Educational preparation of registered nurses in public health work, in administrative, consultant, and supervisory positions, in the United States, in South Dakota, and in bordering States; selected years, 1949-66

State	Number for whom education was reported				Percent with approved PHN education				Percent with baccalaureate or higher degree			
	1942	1952	1964	1966	1942	1952	1964	1966	1942	1952	1964	1966
United States ¹	1,966	2,686	3,999	4,564	65	81	83	77	34	62	76	72
South Dakota	4	5	7	11	50	80	100	100	0	80	71	82
Bordering States:												
North Dakota	5	4	11	14	100	100	100	100	40	75	64	57
Iowa	33	29	38	43	67	72	63	53	36	69	63	58
Minnesota	33	51	67	83	82	82	93	89	48	78	85	84
Montana	7	6	15	18	86	100	100	94	43	50	73	89
Nebraska	15	12	11	13	60	75	82	85	33	83	100	92
Wyoming	3	2	7	11	100	100	86	91	67	50	86	82

¹ 1949, 1952, 1964—include the present 50 States and District of Columbia; 1966 includes the 50 States, District of Columbia, and Territories.

Sources: U.S. Department of Health, Education, and Welfare. *Health Manpower Source Book, Section 2, Nursing Personnel*, Public

Health Service Pub. 263, Revised Jan. 1966, p. 107. Washington, U.S. Government Printing Office, 1966.

U.S. Department of Health, Education, and Welfare. *Nurses in Public Health, January 1966*. Public Health Service Pub. 785, Revised 1967, p. 30. Washington, U.S. Government Printing Office, 1967.

Table G-83.—Educational preparation of registered nurses in staff positions in public health work, in the United States, in South Dakota, and in bordering States; selected years, 1942-66

State	Number for whom education was reported				Percent with approved education in public health nursing				Percent with baccalaureate or higher degree			
	1942	1952	1964	1966	1942	1952	1964	1966	1942	1952	1964	1966
United States ¹	18,586	21,490	30,012	32,140	24	30	38	36	10	18	35	37
South Dakota	67	30	53	79	19	40	30	41	6	13	30	33
Bordering States:												
North Dakota	47	49	55	59	34	24	25	25	8	—	16	14
Iowa	211	239	347	309	37	28	30	23	10	16	25	21
Minnesota	376	389	475	421	48	63	74	76	25	40	61	65
Montana	63	56	76	77	62	46	45	51	19	23	36	43
Nebraska	124	105	122	122	15	20	30	16	18	16	51	43
Wyoming	34	32	48	55	56	9	40	38	35	19	38	27

¹ 1942, 1952, 1964—include the present 50 States and District of Columbia; 1966 includes the 50 States, District of Columbia, and Territories.

Sources: U.S. Department of Health, Education, and Welfare. *Health Manpower Source Book, Section 2, Nursing Personnel*, Public

Health Service Pub. 263, Revised Jan. 1966, p. 106. Washington, U.S. Government Printing Office, 1966.

U.S. Department of Health, Education, and Welfare. *Nurses in Public Health, January 1966*. Public Health Service Pub. 785, Revised 1967, p. 30. Washington, U.S. Government Printing Office, 1967.

Table G-84.—Position classification of registered nurses in public health work (excluding nurses employed by boards of education), by highest educational preparation, in South Dakota; 1962

Type of position of public health nurses (excluding school nurses)	Total ¹	Highest educational preparation						No answer
		No degree	Bacca-laureate	Master's in nursing	Master's in another field	Doctorate in nursing	Doctorate in another field	
Total ¹	48	32	12	3	0	0	0	1
Administrator or assistant	2	0	1	1	0	0	0	0
Consultant	5	2	2	1	0	0	0	0
Supervisor or assistant	4	4	0	0	0	0	0	0
Instructor	0	0	0	0	0	0	0	0
Head nurse or assistant	2	1	0	0	0	0	0	1
General duty or staff nurse	23	13	9	1	0	0	0	0
Other specified type	0	0	0	0	0	0	0	0
Type not reported	12	12	0	0	0	0	0	0

¹ Includes only those nurses who are located and registered in State.

Source: Special substudy of the 1962 Inventory of Registered Professional Nurses; unpublished data.

Table G-85.—Number of nurses' registries¹ serving practical nurse registrants, and number of calls, in the United States, in South Dakota, and in bordering States; 1965

State	Number of registries reporting	Number of calls		
		Received	Filled	Unfilled or cancelled
United States	² 109	107,909	82,070	25,839
South Dakota ³	—	—	—	—
Bordering States:				
North Dakota ³	—	—	—	—
Iowa	3	419	335	84
Minnesota	3	2,142	1,605	537
Montana ³	—	—	—	—
Nebraska	2	252	177	75
Wyoming ³	—	—	—	—

¹ Includes only registries approved or sponsored by State or District Nurses' Associations.

² There are 153 approved professional registries; of these, 109 indicated that they placed practical nurses as well as professional

nurses.

³ These States have no registries for registered nurses.

Source: American Nurses' Association. *Facts About Nursing: A Statistical Summary*, p. 183. New York, The Association, 1966.

Table G-86.—Number of nurses' registries¹ serving registered nurses for private duty nursing, and number of calls, in the United States, in South Dakota, and in bordering States; 1965

State	Number of registries	Number of registries reporting	Number of calls ²		
			Received	Filled	Unfilled or cancelled
United States	153	139	718,069	431,138	286,931
South Dakota ³	—	—	—	—	—
Bordering States:					
North Dakota ³	—	—	—	—	—
Iowa	4	3	2,847	1,837	1,010
Minnesota	3	3	7,069	3,966	3,103
Montana ³	—	—	—	—	—
Nebraska	2	2	2,260	1,589	671
Wyoming ³	—	—	—	—	—

¹ Includes only registries approved or sponsored by State or District Nurses' Associations.

² Includes an incomplete report from one registry in New Hampshire.

³ These States have no registries for registered nurses.

Source: American Nurses' Association. *Facts About Nursing: A Statistical Summary*, p. 117. New York, The Association, 1966.

Table G-87.—Percent distribution, by age, of all employed registered nurses in the United States and all registered nurses employed in occupational health; September 1, 1961 to January 31, 1963¹

Age	Percent distribution	
	All registered nurses, 1962	Occupational health nurses
Total	100.0	100.0
Under 30	25.6	4.0
30-39	25.3	16.7
40-44	12.0	16.8
45-49	11.6	18.4
50-59	18.2	37.1
60 and older	7.3	7.0

¹ Registration period covered in occupational health survey was Sept. 1, 1961 to Jan. 31, 1963.

Note: Data are based on 516,224 employed registered nurses in the Nation who reported their age in the 1962 Inventory and on 9,996 registered nurses in occupational health who reported their age in the occupational health survey. That survey included 10,025

nurses, 29 of whom did not respond.

Source: U.S. Department of Health, Education, and Welfare, Public Health Service, Division of Occupational Health. *Occupational Health Nurses, An Initial Survey*, p. 8. Washington, U.S. Government Printing Office, 1966.

Table G-88.—Percent distribution of registered nurses employed in occupational health, by selected educational characteristics, in the United States, in South Dakota, and in bordering States; 1964

State	Hold a college degree		Attended a college course in occupational health		Year of graduation from basic nursing		
	Number of nurses reporting	Percent with degree	Number of nurses reporting	Percent attending a course	Number of nurses reporting	Percent	
						Before 1930	1950 or later
United States	9,537	6.7	9,425	16.8	9,568	15.4	12.0
South Dakota	2	0.0	2	(1)	2	0.0	(1)
Bordering States:							
North Dakota	0	—	—	—	—	—	—
Iowa	75	5.3	78	7.7	77	22.1	13.0
Minnesota	135	10.4	135	28.9	136	16.9	19.1
Montana	3	0.0	3	0.0	3	0.0	(1)
Nebraska	42	(4)	41	(1)	41	(4)	(11)
Wyoming	10	(3)	10	0.0	10	(1)	(1)

Note: Whenever the total number of respondents for a State was less than 50, numbers rather than percents are given, in parentheses. Percents and numbers may not reflect total reporting, since the survey questionnaire solicited additional breakdowns in data not included in the study report.

Source: U.S. Department of Health, Education, and Welfare; Public Health Service, Division of Occupational Health. *Occupational Health Nurses: An Initial Survey*, pp. 121 and 123. Washington, U.S. Government Printing Office, 1966.

Table G-89.—Distribution of registered nurses employed in occupational health, by type of industry and number of employees in workplace; United States, South Dakota, and bordering States; 1964

State	Type of industry				Number of employees in workplace ¹		
	Number of nurses reporting	Manufacturing	Nonmanufacturing	Government	Number of nurses reporting	Less than 500 employees	2,500 or more employees
United States	9,496	7,284	1,633	579	9,574	1,934	3,246
South Dakota	2	(1)	(1)	0	2	(1)	0
Bordering States:							
North Dakota	0	—	—	—	—	—	—
Iowa	75	66	4	5	78	8	23
Minnesota	134	93	35	6	133	28	34
Montana	3	(2)	(1)	0	3	(1)	0
Nebraska	41	(25)	(14)	(2)	42	(12)	(9)
Wyoming	10	(7)	(3)	0	10	(7)	(1)

¹ State data not available for workplaces having 500 to 2,499 employees.

Note: Whenever the total number of respondents for a State was less than 50, the numbers are shown in parentheses. Numbers not in parentheses were computed by the Division of Nursing, based on

the percentages presented in the source shown below.

Source: U.S. Department of Health, Education, and Welfare, Public Health Service, Division of Occupational Health. *Occupational Health Nurses: An Initial Survey*, pp. 117, 119, and 123. Washington, U.S. Government Printing Office, 1966.

Table G-90.—Distribution of selected medical and administrative characteristics of workplace of registered nurses employed in occupational health; United States, South Dakota, and bordering States; 1964

State	Workplaces with and without physicians ¹			Physician on call		Written standing orders		Policy and procedural manual	
	Number of nurses reporting	No physician	Physician present 35 hours or more per week	Number of nurses reporting	Number of workplaces	Number of nurses reporting	Number of workplaces	Number of nurses reporting	Number of workplaces
United States	9,172	3,008	2,192	8,918	8,508	9,099	7,097	8,999	6,902
South Dakota	2	(2)	0	2	(2)	2	0	2	(2)
Bordering States:									
North Dakota	0	—	—	—	—	—	—	—	—
Iowa	73	32	14	71	69	72	51	71	46
Minnesota	130	54	16	129	122	130	94	129	102
Montana	3	(1)	(1)	3	(3)	3	0	3	0
Nebraska	41	(8)	(8)	39	(39)	40	(23)	40	(24)
Wyoming	9	(3)	0	9	(8)	9	(5)	9	(5)

¹ State data not shown for workplaces where physicians are present less than 35 hours per week.

Note: Whenever the total number of respondents for a State was less than 50, the numbers are shown in parentheses. Numbers not in parentheses were computed by the Division of Nursing, based on

the percentages presented in the source shown below.

Source: U.S. Department of Health, Education, and Welfare, Public Health Service, Division of Occupational Health. *Occupational Health Nurses: An Initial Survey*, pp. 117, 119, and 123. Washington, U.S. Government Printing Office, 1966.

Appendix H

Nursing Education

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Table H-1.—Number of schools¹ offering initial programs for registered nurses; United States, South Dakota, and bordering States; selected years, 1900-66

State	1900	1910	1920	1931	1940	1950	1960	1964	1966
50 States and District of Columbia	432	1,105	1,755	1,844	1,304	1,193	1,114	1,145	1,206
South Dakota	...	7	18	21	13	7	10	11	11
Bordering States:									
North Dakota	...	4	15	17	15	10	10	9	9
Iowa	10	35	59	46	29	26	26	25	23
Minnesota	13	29	57	59	28	27	25	27	27
Montana	...	6	14	16	10	6	4	5	6
Nebraska	2	18	33	19	14	14	14	14	14
Wyoming	1	3	5	6	1	...	1	1	1

¹ Data for 1950 and later are for State-approved schools of nursing. Data for the other years indicated some non-State-approved schools. The number of those nonapproved schools was very small in 1940, but was a larger part of the total number of schools in earlier years because of the less widespread prevalence of State laws governing the requirements for schools of nursing.

Sources: U.S. Department of Health, Education, and Welfare. *Health Manpower Source Book, Section 2, Nursing Personnel*, Public Health Service Pub. 262, Revised January 1966, p. 52. Washington, U.S. Government Printing Office, 1966.

National League for Nursing. *State-Approved Schools of Nursing—R.N.*, p. 103. New York, The League, 1967.

Table H-2.—Number of initial programs for registered and practical nurse education, by control and support; South Dakota; 1966

Type of program	Number of programs	Administrative control					Financial support (principal source)	
		Hospital	University or senior college	Junior or community college	Independent	Trade or vocational school	Public	Private
Total	14	5	5	—	2	2	4	10
Baccalaureate	3	—	3	—	—	—	1	2
Associate degree	2	—	2	—	—	—	1	1
Diploma	6	4	—	—	2	—	—	6
Practical	3	1	—	—	—	2	2	1

Sources: National League For Nursing. *State-Approved Schools of Nursing—R.N.*, pp. 85-86. New York, The League, 1967.

National League For Nursing. *State-Approved Schools of Nursing—L.P.N./L.V.N.*, p. 51. New York, The League, 1967.

Table H-3.—Number of schools, student enrollments, admissions, and graduations from initial nursing education programs for registered nurses; South Dakota; 1956-66

Academic year September 1 to August 31	Schools	Enrollments	Admissions ¹	Graduations
1956-57	11	859	336	194
1957-58	11	789	251	231
1958-59	10	800	251	200
1959-60	10	824	328	244
1960-61	11	900	310	197
1961-62	11	915	374	186
1962-63	11	866	336	223
1963-64	11	875	323	280
1964-65	10	1,006	516	217
1965-66	11	1,128	462	246

¹ As of academic year September 1 to August 31.

Source: National League for Nursing, *State-Approved Schools of Professional Nursing*. New York, The League, Annual Editions: 1958, p. 33; 1959, p. 33; 1960, p. 31; 1961, p. 32; 1962, pp. 80 and 81; 1963, pp. 72 and 73; 1964, pp. 77 and 78; 1965, pp. 79 and 80; 1966, pp. 83 and 84; 1967, pp. 85 and 86. (Title change, 1967 edition, *State-Approved Schools of Nursing—R.N.*)

Table H-4.—Number of enrollments, admissions, and graduations from initial nursing education programs for registered nurses, by type of program; South Dakota; 1957-66

Year	Total			Baccalaureate			Diploma			Associate degree		
	Enrollments	Admissions	Graduations	Enrollments	Admissions	Graduations	Enrollments	Admissions	Graduations	Enrollments	Admissions	Graduations
Total	7,945	3,015	1,948	2,444	969	354	5,264	1,936	1,566	237	110	28
1957-58	789	251	231	191	77	49	598	174	182	—	—	—
1958-59	800	251	200	190	77	42	610	174	158	—	—	—
1959-60	824	328	244	178	68	39	646	260	205	—	—	—
1960-61	871	299	194	187	55	23	684	244	171	—	—	—
1961-62	915	374	186	261	106	31	635	262	155	19	6	—
1962-63	866	336	228	296	111	30	543	204	198	27	21	—
1963-64	875	323	280	300	125	40	542	180	233	33	18	7
1964-65	1,006	382	197	392	150	45	561	210	142	53	22	10
1965-66	999	471	188	449	200	55	445	228	122	105	43	11

Source: National League for Nursing, *State-Approved Schools of Professional Nursing*. New York, The League, Annual Editions: 1959, p. 33; 1960, p. 31; 1961, p. 32; 1962, p. 80; 1963, p. 72; 1964, p. 96; 1965, p. 80; 1966, p. 83; 1967, p. 103. (Title change, 1967 edition, *State-Approved Schools of Nursing—R.N.*)

Table H-5.—Percent distribution of enrollments, admissions, and graduations from initial nursing education programs for registered nurses, by type of program; South Dakota; 1957-66

Year	Total			Baccalaureate			Diploma			Associate degree		
	Enroll-ments	Admis-sions	Gradu-ations	Enroll-ments	Admis-sions	Gradu-ations	Enroll-ments	Admis-sions	Gradu-ations	Enroll-ments	Admis-sions	Gradu-ations
1957-58	100.0	100.0	100.0	24.2	30.7	21.2	75.8	69.3	78.8	—	—	—
1958-59	100.0	100.0	100.0	23.8	30.7	21.0	76.2	69.3	79.0	—	—	—
1959-60	100.0	100.0	100.0	21.6	20.7	16.0	78.4	79.3	84.0	—	—	—
1960-61	100.0	100.0	100.0	21.5	18.4	11.9	78.5	81.6	88.1	—	—	—
1961-62	100.0	100.0	100.0	28.5	28.3	16.7	69.4	70.1	83.3	2.1	1.6	—
1962-63	100.0	100.0	100.0	34.2	33.0	13.2	62.7	60.7	86.8	3.1	6.3	—
1963-64	100.0	100.0	100.0	34.3	38.7	14.3	61.9	55.7	88.2	3.8	5.6	2.5
1964-65	100.0	100.0	100.0	39.0	39.3	22.8	55.8	55.0	72.1	5.2	5.7	5.1
1965-66	100.0	100.0	100.0	44.9	42.5	29.3	44.5	48.4	64.9	10.6	9.1	5.8

Source: Computed by the Manpower Analysis and Resources Branch, Division of Nursing, from data published in *State-Approved Schools of Professional Nursing*, National League for Nursing, New York, Annual Editions: 1959-67. (Title change, 1967 edition, *State-Approved Schools of Nursing—R.N.*)

Table H-6.—Number and percent distribution of admissions to all nursing programs—diploma, associate degree, and baccalaureate; United States, South Dakota, and bordering States; academic year 1965-66

State	Number and percent distribution of admissions by type of program							
	Total admissions		Diploma		Associate degree		Baccalaureate	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
United States	60,701	100.0	38,904	64.1	8,638	14.2	13,159	21.7
South Dakota	471	100.0	228	48.4	43	9.1	200	42.5
Bordering States:								
North Dakota	293	100.0	179	61.1	—	—	114	38.9
Iowa	1,087	100.0	894	82.2	29	2.7	164	15.1
Minnesota	1,661	100.0	1,061	63.9	241	14.5	359	21.6
Montana	291	100.0	122	41.9	19	6.5	150	51.5
Nebraska	388	100.0	575	83.6	—	—	113	16.4
Wyoming	80	100.0	—	—	—	—	80	100.0

Source: Computed by the Manpower Analysis and Resources Branch, Division of Nursing, from individual school data published in *State-Approved Schools of Nursing—R.N.* National League for Nursing, New York, 1967.

Table H-7.—Number of admissions to schools offering initial nursing education programs for registered nurses; United States, South Dakota, and bordering States; selected years, 1936-66

State	Academic year ending June 30			Calendar year			Academic year ending August 31		
	1936	1940	1945	1945	1950	1955	1960	1964	1966
50 States and District of Columbia	28,845	37,200	61,471	56,567	44,185	46,267	48,919	52,274	60,701
South Dakota	192	229	466	411	318	381	328	323	516
Bordering States:									
North Dakota	209	296	433	484	355	371	342	333	293
Iowa	589	808	1,162	910	881	1,014	869	978	1,128
Minnesota	810	1,105	2,314	1,731	1,414	1,446	1,436	1,536	1,661
Montana	219	261	332	296	216	280	256	217	291
Nebraska	332	379	488	575	534	509	502	627	688
Wyoming	12	18	38	31	—	33	34	70	80

Sources: U.S. Department of Health, Education, and Welfare. *Health Manpower Source Book, Section 2, Nursing Personnel*, Public Health Service Pub. 263, Revised January 1966, p. 53. Washington, U.S. Government Printing Office, 1966 (1936-1964 data).
National League for Nursing. *State-Approved Schools of Nursing—R.N.*, p. 103. New York, The League, 1967 (1966 data).

Table H-8.—Student enrollment¹ in schools offering initial nursing education programs for registered nurses; United States, South Dakota, and bordering States; selected years, 1900-66

State	1900	1910	1920	1931 ²	1940	1950	1960	1964	1966
United States	11,164	31,851	54,953	100,419	97,345	98,203	118,163	128,429	139,070
South Dakota	—	80	288	541	613	811	824	875	1,060
Bordering States:									
North Dakota	—	55	384	727	831	774	752	825	829
Iowa	230	929	1,772	2,240	2,099	2,047	2,393	2,461	2,537
Minnesota	296	810	2,266	3,776	3,231	3,341	3,689	3,787	3,877
Montana	—	119	292	551	619	555	549	551	678
Nebraska	24	362	726	1,212	1,070	1,114	1,378	1,632	1,774
Wyoming	6	46	117	167	44	—	87	131	128

¹ Enrollments are for the schools listed in table H-1 (Number of schools offering initial programs for registered nurses). Figures for 1900-40 are fall enrollments; those for 1950 are as of January 1; the 1960, 1964, and 1966 figures are as of October 15 of those years.

² High student enrollment may have been related to economic conditions.

Sources: U.S. Department of Health, Education, and Welfare. *Health Manpower Source Book, Section 2, Nursing Personnel*, Public Health Service Pub. 263, Revised January 1966, p. 52. Washington, U.S. Government Printing Office, 1966 (1900-64 data).

National League for Nursing. *State-Approved Schools of Nursing—R.N.*, p. 103. New York, The League, 1967 (1966 data).

Table H-9.—Number of students enrolled in schools offering initial nursing education programs for registered nurses, by type of program; United States, South Dakota, and bordering States; October 15, 1957, 1964, and 1966

State	Total			Baccalaureate			Associate degree			Diploma		
	1957	1964	1966	1957	1964	1966	1957	1964	1966	1957	1964	1966
	50 States and District of Columbia	112,479	128,429	139,070	18,640	27,608	33,081	1,360	8,513	15,338	92,479	92,308	90,651
South Dakota	859	875	1,060	221	300	449	—	33	105	638	542	506
Bordering States:												
North Dakota	831	825	829	122	221	252	—	—	—	709	604	577
Iowa	2,742	2,461	2,537	437	382	424	—	35	65	2,305	2,044	2,048
Minnesota	3,756	3,787	3,877	927	844	899	—	204	466	2,829	2,739	2,512
Montana	655	551	678	269	317	365	—	—	52	386	234	261
Nebraska	1,229	1,632	1,774	223	264	320	—	—	—	1,001	1,368	1,454
Wyoming	68	131	128	68	131	128	—	—	—	—	—	—

Sources: U.S. Department of Health, Education, and Welfare. *Health Manpower Source Book, Section 2, Nursing Personnel, Public Health Service Pub. 263, Revised January 1966*, p. 61. Washington, U.S. Government Printing Office, 1966 (1957-64 data).

National League for Nursing. *State-Approved Schools of Nursing—R.N.*, p. 108. New York, The League, 1967 (1966 data).

Table H-10.—Number of graduations from schools offering initial nursing education programs for registered nurses; United States, South Dakota, and bordering States; selected years, 1900-66

State	Graduations in academic year ending June 30					Graduations in calendar year			Graduations in academic year ending August 31		
	1900	1910	1920	1931	1940	1945	1950	1955	1960	1964	1966
50 States and District of Columbia	3,546	7,622	14,980	25,971	22,670	31,721	25,790	28,603	29,895	35,050	35,125
South Dakota	—	26	62	153	148	212	187	177	244	280	217
Bordering States:											
North Dakota	—	14	108	186	194	294	209	238	199	199	226
Iowa	61	183	383	615	469	666	494	676	695	735	634
Minnesota	106	198	529	988	765	906	940	1,075	1,027	1,251	1,242
Montana	—	25	87	128	168	174	151	132	224	116	122
Nebraska	10	92	176	274	275	302	308	312	316	413	432
Wyoming	2	11	21	35	27	12	—	—	10	19	25

Sources: U.S. Department of Health, Education, and Welfare. *Health Manpower Source Book, Section 2, Nursing Personnel*, Public Health Service Pub. 263, Revised January 1966, p. 54. Washington, U.S. Government Printing Office, 1966 (1900-64 data).
National League for Nursing. *State-Approved Schools of Nursing—R.N.*, p. 103. New York, The League, 1967 (1966 data).

Table H-11.—Number of students graduated from schools offering initial nursing education programs for registered nurses, by type of program; United States, South Dakota, and bordering States; academic years ending August 31, 1957, 1964, and 1966

State	Total			Baccalaureate			Associate degree			Diploma		
	1957	1964	1966	1957	1964	1966	1957	1964	1966	1957	1964	1966
50 States and District of Columbia	29,775	35,050	35,125	3,516	5,053	5,498	276	1,962	3,349	25,983	28,035	26,278
South Dakota	194	280	217	32	40	55	—	7	11	162	233	151
Bordering States:												
North Dakota	228	199	226	19	52	59	—	—	—	209	147	167
Iowa	769	735	684	89	90	91	—	—	15	680	645	578
Minnesota	1,014	1,251	1,242	194	259	245	—	—	139	320	992	858
Montana	172	116	122	42	27	35	—	31	29	130	58	58
Nebraska	321	413	432	40	66	50	—	—	—	231	347	382
Wyoming	9	19	25	9	19	25	—	—	—	—	—	—

¹ Includes 38 students who were granted master's degree from an initial program.

Sources: U.S. Department of Health, Education, and Welfare. *Health Manpower Source Book, Section 2, Nursing Personnel*, Public Health Service Pub. 263, Revised January 1966, p. 63. Washington, U.S. Government Printing Office, 1966 (1957-64 data).
National League for Nursing. *State-Approved Schools of Nursing—R.N.*, p. 103. New York, The League, 1967 (1966 data).

Table H-12.—Withdrawal rates¹ from initial nursing education programs for registered and practical nurses, by type of program; United States and South Dakota; programs completed at end of academic year; 1959-67

Year	United States				South Dakota			
	Bacca-laureate	Diploma	Associate degree	Practical	Bacca-laureate	Diploma	Associate degree	Practical
1959-60	41.8	27.9	37.7	28.5	51.9	...	—	...
1960-61	36.1	33.4	42.6	33.3	70.1	...	—	5.4
1961-62	40.9	35.6	44.4	32.1	59.7	40.4	—	16.0
1962-63	40.7	31.6	40.9	35.8	55.9	18.9	—	23.4
1963-64	41.9	26.2	43.8	33.3	27.3	11.1	52.4	25.9
1964-65	40.5	26.5	43.7	33.3	57.5	30.4	42.4	34.5
1965-66	42.7	30.7	45.6	33.7	50.5	32.2	50.0	16.5
1966-67	40.3	30.7	46.1	...	...	...	...	...

¹ Does not take account of transfers in and out and irregularities in individual student's schedules.

Source: Computed by the Manpower Analysis and Resources Branch, Division of Nursing, from admission and graduation data published in *State-Approved Schools of Professional Nursing*, National League for Nursing, New York, Annual editions, 1959-67.

APPENDIX H. NURSING EDUCATION

Table H-13.—Number of State-approved schools and number of programs accredited by National League for Nursing for registered nurse education; United States, South Dakota, and bordering States; 1950, 1960, 1966, 1967, and 1967

State	Total number of schools						Number of programs								
	1950			1960			Total			NLN-accredited			Not accredited		
	1950	1960	1966	1967	1960	1966	1967	1960	1966	1967	1960	1966	1967		
United States	1,190	1,123	1,191	1,219	1,314	1,137	1,193	1,225	583	721	743	554	472	482	
South Dakota	7	10	10	11	9	10	10	11	6	6	6	4	4	5	
Bordering States:															
North Dakota	10	11	9	9	10	11	9	9	3	6	6	8	3	3	
Iowa	26	26	24	23	31	26	24	23	13	21	20	13	3	3	
Minnesota	27	25	27	27	29	30	27	27	22	22	22	8	5	5	
Montana	6	5	5	6	7	6	6	7	4	4	4	2	2	3	
Nebraska	14	13	14	14	22	13	14	14	10	13	13	3	1	1	
Wyoming	—	1	1	1	—	1	1	1	1	1	1	—	—	—	

¹ New schools are not eligible for accreditation until the first class is graduated.

Note: National League for Nursing accreditation began in 1950. All schools listed are State-approved schools but not all have achieved national accreditation.

Source: National League for Nursing, *State-Approved Schools of Professional Nursing*. New York, The League, Annual Editions: 1950, pp. 22, 32, 36, 38, 48, and 60; 1960, pp. 11, 16, 18, 19, 25, 31, 36, and 39; 1966, p. 104; and 1967, p. 102. (Title change, 1967 edition, *State-Approved Schools of Nursing—R.N.*)

Table H-14.—Number of initial programs,¹ type of program offered, and accreditation status, for registered nurse education; United States, South Dakota, and bordering States; 1950, 1960, 1966, and 1967

State	Total number of programs				Type of program and accreditation						
					Baccalaureate						
					Number				NLN-accredited		
					1950	1960	1966	1967	1950	1960	1966	1967	1960	1966	1967
United States	1,314	1,137	1,193	1,225	195	171	198	210	88	141	147
South Dakota	9	10	10	11	2	3	3	3	0	1	1
Bordering States:											
North Dakota	10	11	9	9	1	2	3	3	0	1	1
Iowa	31	26	24	23	5	2	2	2	1	1	1
Minnesota	29	29	27	27	5	8	8	8	5	6	6
Montana	8	6	6	7	2	1	1	1	1	1	1
Nebraska	22	13	14	14	8	3	3	3	1	3	3
Wyoming	—	1	1	1	—	1	1	1	1	1	1

State	Type of program and accreditation													
	Associate degree						Diploma							
	Number				NLN-accredited		Number				NLN-accredited			
	1950	1960	1966	1967	1960	1966	1967	1950	1960	1966	1967	1960	1966	1967
U.S.	1	48	174	218	5	6	19	1,118	918	821	797	490	574	577
S. Dak.	0	0	1	2	0	0	0	7	7	6	6	6	5	5
N. Dak.	0	0	0	0	0	0	0	9	9	6	6	3	5	5
Iowa	0	0	1	1	0	0	0	26	24	21	20	12	20	19
Minn.	0	0	2	2	0	0	0	24	21	17	17	17	16	16
Mont.	0	0	1	2	0	0	0	6	5	4	4	3	3	3
Nebr.	0	0	0	0	0	0	0	14	10	11	11	9	10	10
Wyo.	0	0	0	0	0	0	0	0	0	0	0	0	0	0

¹ Number of programs reported as of Jan. 1, 1950, and as of Oct. 15 for 1959-66.

Note: National League for Nursing accreditation began in 1950. All schools listed are State-approved schools.

Source: National League for Nursing. *State-Approved Schools of Professional Nursing*. New York, The League, Annual eds.: 1950, pp. 22, 32, 36, 38, 43, and 60; 1960, pp. 11, 16, 18, 19, 25, 31, 36, and 39; 1966, p. 104; and 1967, p. 102. (Title change, 1967 edition, *State-Approved Schools of Nursing—R.N.*)

Table H-15.—Number and percent distribution of student admissions to accredited and nonaccredited nursing programs; United States, South Dakota, and bordering States; academic year 1965-66

State	Number of student admissions			Percent total admissions accredited
	Total	Accredited	Nonaccredited	
United States	60,701	44,584	16,117	73.4
South Dakota	471	349	122	74.1
Bordering States:				
North Dakota	293	252	41	86.0
Iowa	1,087	1,040	47	95.7
Minnesota	1,661	1,337	324	80.5
Montana	291	234	57	80.4
Nebraska	688	630	58	91.6
Wyoming	80	80	0	100.0

Source: Compiled by the Manpower Analysis and Resources Branch, Division of Nursing, from individual school data published in *State-Approved Schools of Nursing—R.N.* National League for Nursing, New York, 1967.

Table H-16.—Performance of nurse graduates of South Dakota schools for registered nurses on first-time licensing examinations, South Dakota, 1958-66

Year ¹	Examinations			Examinations, by type of program					
				Degree ²			Diploma		
	Total	Passed		Total	Passed		Total	Passed	
Number		Percent	Number		Percent	Number		Percent	
1958-59	232	220	94.8	43	43	100.0	189	177	93.7
1959-60	253	242	95.7	40	40	100.0	213	202	94.8
1960-61	205	198	96.6	30	29	96.7	175	169	96.6
1961-62	185	163	88.1	32	32	100.0	153	131	85.6
1962-63	215	204	94.9	24	24	100.0	191	180	94.2
1963-64	255	234	91.8	42	40	95.2	213	194	91.1
1964-65	237	199	84.0	48	42	87.5	189	157	83.1
1965-66	192	173	90.1	45	40	88.8	147	133	90.5

¹ Fiscal year beginning July 1 and ending June 30.

² Includes candidates from associate degree programs for the years 1964-65 and 1965-66.

Source: South Dakota Board of Nursing. *Report of the South Dakota Board of Nursing for the Biennial Period Ending June 30.* Mitchell, South Dakota, The Board, Biennial Eds.: 1960, p. 10; 1962, p. 11; 1964, p. 13; 1966, p. 13.

Table H-17.—Number of initial programs for registered and practical nurse education admitting men and married women, by type of program; South Dakota, 1966

Type of program	Total number of programs	Programs admitting men	Programs admitting married women
Total	13	10	12
Baccalaureate	3	2	3
Associate degree	2	2	2
Diploma ¹	5	3	4
Practical	3	3	3

¹ Two diploma programs are closing.

Sources: National League For Nursing. *State-Approved Schools of Nursing—R.N.* pp. 85, 86. New York, The League, 1967.
National League for Nursing: *State-Approved Schools of Nursing—L.P.N./L.V.N.*, p. 51. New York, The League, 1967.

Table H-18.—Number of full-time instructors in schools offering initial programs for registered nurses, number of students per instructor, and average enrollment per school; United States, South Dakota, and bordering States; 1936, 1949, and 1964

State	Number of instructors			Students per instructor			Enrollment per school		
	1936	1949 ¹	1964 ¹	1936	1949 ¹	1964 ¹	1936	1949 ¹	1964 ¹
50 States and District of Columbia ..	4,675	10,406	12,334	15	8	9	52	74	112
South Dakota	29	83	88	17	8	10	31	94	84
Bordering States:									
North Dakota	44	68	71	14	10	9	37	74	79
Iowa	101	217	262	16	8	9	51	69	99
Minnesota	113	294	345	19	10	11	74	110	156
Montana	38	56	58	14	9	8	43	86	96
Nebraska	51	127	155	16	8	10	58	80	114
Wyoming	4	—	13	8	—	10	33	—	126

¹ Data are for schools reporting both faculty number and student enrollment.

Source: U.S. Department of Health, Education, and Welfare. *Health Manpower Source Book, Section 2, Nursing Personnel*, Public Health Service Pub. 263, Revised January 1966, p. 69. Washington, U.S. Government Printing Office, 1966.

Table H-19.—Fluctuations in female enrollment in institutions of higher education and in initial nursing education programs for registered nurses; United States and South Dakota; selected years, 1955-65

Year	Higher educational institutions				Initial programs for registered nurses			
	United States		South Dakota		United States		South Dakota	
	Number of students enrolled	Percent change	Number of students enrolled	Percent change	Number of students enrolled	Percent change	Number of students enrolled	Percent change
1955	937,000	—	3,909	—	114,423	—	899	—
1956	1,019,122	+8.8	4,644	+18.8	114,674	+0.2	896	-0.4
1957	1,064,993	+4.5	4,926	+6.1	112,989	-1.5	859	-4.1
1958	1,148,130	+7.8	5,120	+3.9	113,518	+0.5	789	-8.1
1959	1,228,500	+7.0	4,965	-3.0	115,057	+1.4	800	+1.4
1960	1,339,367	+9.0	5,655	+13.9	118,849	+3.3	824	+3.0
1961	1,467,000	+9.5	5,831	+3.1	123,012	+3.5	900	+9.2
1962	1,591,141	+8.5	6,291	+7.9	123,861	+0.7	915	+1.7
1963	1,827,988	+14.9	6,617	+5.2	124,744	+0.7	866	-5.4
1964	2,052,106	+12.3	¹ 5,364	...	129,269	+3.6	875	+1.0
1965	2,314,736	+12.8	9,230	...	135,702	+4.9	1,006	+14.8

¹ Incomplete.

Sources: U.S. Department of Health, Education, and Welfare, Office of Education, *Opening Fall Enrollment in Higher Educational Institutions*. Washington, U.S. Government Printing Office. 1955, p. 40; 1956, p. 40; 1957, p. 42; 1958, p. 27; 1959, p. 28; 1960, p. 32;

1961, p. 28; 1962, p. 29; 1963, p. 34; 1964, pp. 69 and 70; 1965, p. 74 (higher education data).

American Nurses' Association. *Facts About Nursing, A Statistical Summary*. New York, The Association, Annual eds.: 1955-56, pp. 75-77; 1958, pp. 70, and 71; 1959, p. 71; 1960, p. 71; 1961, p. 81; 1962, p. 92; 1964, p. 94; 1965, p. 83; 1966, p. 82 (professional nursing data).

Table H-20.—Estimated number of female high school graduates, number of admissions to initial nursing education programs for registered nurses, and ratio of admissions to graduates; South Dakota; 1961-64

Year	Estimated number of female high school graduates	Number of admissions to nursing schools	Rate of admissions per 100 female high school graduates
1960-61	4,115	374	9.1
1961-62	4,069	336	8.3
1962-63	4,071	323	7.9
1963-64	4,481	382	8.5
1964-65	4,846	471	9.7

Sources: National League for Nursing. *State-Approved Schools of Professional Nursing*. New York, The Association, Annual eds.: 1966, p. 105; and 1967, pp. 85 and 86 (number of admissions to nursing schools data). (Title change, 1967 edition, *State-Approved Schools of Nursing—R.N.*)

U.S. Department of Health, Education, and Welfare, Office of Education; unpublished data (estimated number high school graduates data).

Table H-21.—Residence and migration of college students enrolled in work creditable toward a baccalaureate or higher degree; South Dakota and bordering States; fall 1963

State	Total enrolled ¹	State residents studying in or out of home State ²	Students remaining in home State ³	Migration of students		
				Out of home State	Enrolled from another State	Net difference
South Dakota:						
All	16,122	15,813	12,154	3,659	3,968	+309
Publicly controlled	11,540	11,087	9,298	1,789	2,242	+453
Privately controlled	4,582	4,726	2,856	1,870	1,726	-144
Bordering States:						
North Dakota:						
All	15,280	16,292	12,651	3,641	2,629	-1,012
Publicly controlled	14,666	13,651	12,167	1,484	2,499	+1,015
Privately controlled	614	2,641	484	2,157	130	-2,027
Iowa:						
All	66,343	59,735	44,311	15,424	22,032	+6,608
Publicly controlled	34,422	34,867	26,448	8,419	7,974	-445
Privately controlled	31,921	24,868	17,863	7,005	14,058	+7,053
Minnesota:						
All	79,374	76,863	64,271	12,592	15,103	+2,511
Publicly controlled	57,428	56,586	50,999	5,587	6,429	+842
Privately controlled	21,946	20,277	13,272	7,005	8,674	+1,669
Montana:						
All	15,623	17,069	13,160	3,909	2,463	-1,446
Publicly controlled	13,362	12,854	11,298	1,556	2,064	+508
Privately controlled	2,261	4,215	1,862	2,353	399	-1,954
Nebraska:						
All	38,063	34,251	28,009	6,152	9,964	+3,812
Publicly controlled	27,425	25,479	22,610	2,869	4,815	+1,946
Privately controlled	10,638	8,772	5,489	3,283	5,149	+1,866
Wyoming:						
All	7,164	7,991	5,345	2,646	1,819	-827
Publicly controlled	7,164	6,743	5,345	1,398	1,819	+412
Privately controlled .....	...	1,248	...	1,248	...	-1,248

¹ All enrolled students in the State.² Those with residence in the State and studying either in or out of State.³ Those studying in their home State.Sources: U.S. Department of Health, Education, and Welfare, Office of Education, *Residence and Migration of College Students, Fall 1963, State and Regional Data*, pp. 29, 30, and 31. Washington, U.S. Government Printing Office, 1965.

Table H-22.—Number of graduate nurse students enrolled in colleges and universities; United States, South Dakota, and bordering States; 1957, 1963, 1964, and 1966

State	Total				Baccalaureate				Master's degree and above			
	1957	1963	1964	1966	1957	1963	1964	1966	1957	1963	1964	1966
50 States and District of Columbia . . .	12,321	11,913	12,273	11,863	9,967	8,978	9,280	8,186	2,354	2,935	2,993	3,677
South Dakota	21	28	9	25	21	28	9	25	—	—	—	—
Bordering States:												
North Dakota	—	6	22	15	—	6	22	15	—	—	—	—
Iowa	91	83	128	87	85	57	102	63	6	26	26	24
Minnesota	301	163	137	210	231	84	52	88	70	79	85	122
Montana	17	48	33	47	14	29	23	32	3	19	10	15
Nebraska	48	161	155	176	39	161	155	176	9	—	—	—
Wyoming	5	8	4	4	5	8	4	6	—	—	—	—

Sources: U.S. Department of Health, Education, and Welfare. *Health Manpower Source Book, Section 2, Nursing Personnel*, Public Health Service Pub. 263, Revised January 1966, p. 64. Washington, U.S. Government Printing Office, 1966.

American Nurses' Association. *Facts About Nursing, A Statistical Summary*, pp. 126, 128. New York, The Association, 1967 (1966 data).

Table H-23.—Number of full-time and part-time graduate nurse students enrolled in and graduated from baccalaureate programs in colleges and universities; United States,¹ South Dakota, and bordering States; 1964

State	Enrollment				Graduations	
	Number of institutions	Total	Full-time	Part-time	Number of institutions	Number of graduates
United States ¹	² 160	9,375	4,135	5,240	² 149	2,445
South Dakota	1	9	7	2	2	7
Bordering States:						
North Dakota	3	22	13	9	2	2
Iowa	3	102	62	40	3	36
Minnesota	1	52	37	15	2	54
Montana	1	23	20	3	1	16
Nebraska	6	155	50	105	6	37
Wyoming	1	4	4	—	—	—

¹ Includes Puerto Rico.

² In addition, 6 institutions had no enrollments and 17 had no graduations in 1964.

Source: American Nurses' Association. *Facts About Nursing: A Statistical Summary*, p. 105. New York, The Association, 1966.

Table H-24.—Earned degrees in nursing conferred by higher educational institutions; United States, South Dakota, and bordering States; selected years, 1940-66

State	Baccalaureate					Master's degree or higher				
	1940	1950	1960	1964	1966	1940	1950	1960	1964	1966
50 States and District of Columbia	835	3,283	6,645	7,466	7,884	106	368	1,203	1,301	1,295
South Dakota	0	3	52	47	60	0	0	0	0	0
Bordering States:										
North Dakota	0	3	25	54	68	0	0	0	0	0
Iowa	23	19	120	126	132	0	0	7	8	9
Minnesota	24	47	342	313	273	0	0	69	54	35
Montana	0	28	56	43	56	0	0	10	12	10
Nebraska	52	81	55	103	110	0	0	0	0	0
Wyoming	0	0	13	19	25	0	0	0	0	0

Sources: U.S. Department of Health, Education, and Welfare. *Health Manpower Source Book, Section 2, Nursing Personnel*, Public Health Service Pub. 268, Revised January 1966, p. 68. Washington, U.S. Government Printing Office, 1966.

American Nurses' Association. *Facts About Nursing, A Statistical Summary*, pp. 126 and 129. New York, the Association, 1967 (1966 data).

Table H-25.—Number of graduate nurse students granted academic degrees in nursing from colleges and universities; United States, South Dakota, and bordering States; 1957, 1963, 1964, and 1966

State	Total				Baccalaureate				Master's degree and above			
	1957	1963	1964	1966	1957	1963	1964	1966	1957	1963	1964	1966
50 States and District of Columbia	2,837	3,464	3,714	3,679	2,109	2,302	2,413	2,386	728	1,162	1,301	1,293
South Dakota	3	8	7	5	3	8	7	5	0	0	0	0
Bordering States:												
North Dakota	0	1	2	9	0	1	2	9	0	0	0	0
Iowa	40	40	44	50	34	38	36	41	6	2	8	9
Minnesota	113	107	108	63	80	59	54	28	33	48	54	35
Montana	7	30	28	31	7	27	16	21	0	3	12	10
Nebraska	19	66	37	60	18	66	37	60	1	0	0	0
Wyoming	3	0	11	0	3	0	0	0	0	0	11	0

Sources: U.S. Department of Health, Education, and Welfare, Public Health Service. *Health Manpower Source Book, Section 2, Nursing Personnel*, p. 65. Washington, U.S. Government Printing Office, 1966.

American Nurses' Association. *Facts About Nursing, A Statistical Summary*, pp. 126, and 129. New York, The Association, 1967 (1966 data).

Table H-26.—Number of full-time and part-time graduate nurse students enrolled in baccalaureate programs in colleges and universities; United States and South Dakota; 1958-66

Year	United States										South Dakota			
	Number of colleges and universities	Enrollments						Number of colleges and universities	Enrollments					
		Total		Full-time		Part-time			Total		Full-time		Part-time	
		Number	Percent	Number	Percent	Number	Percent		Number	Percent	Number	Percent	Number	Percent
1958	¹ 103	10,182	100.0	3,427	33.7	6,755	66.3	1	17	100.0	14	82.9	3	17.6
1959	99	9,212	100.0	3,516	38.2	5,696	61.8	1	15	100.0	15	100.0	—	—
1960	131	9,609	100.0	3,856	40.1	5,753	59.9	2	24	100.0	18	75.0	6	25.0
1961	108	8,591	100.0	3,410	39.7	5,181	60.3	1	21	100.0	19	90.5	2	9.5
1962	² 126	8,932	100.0	3,670	41.1	5,262	58.9	2	21	100.0	20	95.2	1	4.8
1963	³ 141	9,095	100.0	3,961	43.6	5,134	56.4	2	28	100.0	15	53.6	13	46.4
1964	⁴ 160	9,375	100.0	4,135	44.1	5,240	55.9	1	9	100.0	7	77.8	2	22.2
1965	⁵ 173	9,021	100.0	4,404	48.8	4,617	51.2	1	31	100.0	17	54.8	14	45.2
1966	⁶ 192	8,181	100.0	4,177	51.0	4,009	49.0	1	25	100.0	20	80.0	5	20.0

¹ The Universities of Minnesota and North Carolina offer programs for graduate nurses in their schools of nursing and public health. Each school is counted separately.

² In addition, 3 institutions had no enrollments in 1962.

³ In addition, 8 institutions had no enrollments in 1963.

⁴ In addition, 6 institutions had no enrollments in 1964.

⁵ In addition, 7 institutions had no enrollments in 1965.

⁶ In addition, 10 institutions had no enrollments and 25 had no graduations in 1966.

Source: American Nurses' Association. *Facts About Nursing: A Statistical Summary*, New York, The Association, Annual Eds.: 1960, p. 91; 1961, pp. 111, 112; 1962-1963, p. 111; 1964 p. 116; 1965, p. 111; 1966, p. 105; 1967, pp. 125, and 126.

Table H-27.—Number of approved¹ programs of practical nursing in the United States, South Dakota, and bordering States; selected years, 1954-66

State	1954	1956	1958	1960	1962	1964	1966
50 States and District of Columbia	290	408	517	653	727	883	957
South Dakota	1	1	2	3	3	3	3
Bordering States:							
North Dakota	2	2	2	3	3	3	3
Iowa	2	4	6	8	11	14	16
Minnesota	10	14	20	22	22	23	25
Montana	1	1	1	2	4	7	7
Nebraska	0	1	2	3	3	4	4
Wyoming	0	1	0	1	1	2	2

¹ Accredited by State agency where licensure provision was in force, and by National Association for Practical Nurse Education where no licensure provisions existed.

Sources: U.S. Department of Health, Education, and Welfare. *Health Manpower Source Book, Section 2, Nursing Personnel*, Public Health Service Pub. 263, Revised January 1966, p. 78. Washington, U.S. Government Printing Office, 1966.

National League for Nursing. *State-Approved Schools of Nursing—L.P.N./L.V.N.*, p. 68. New York, The League, 1967.

Table H-28.—Number of enrollments, admissions, and graduations in programs of practical and vocational nursing; United States, South Dakota, and bordering States; 1963-64 and 1964-65

Location	1963-64				1964-65			
	Pro-grams	Enroll-ments	Admis-sions	Gradu-ations	Pro-grams	Enroll-ments	Admis-sions	Gradu-ations
United States	¹ 948	33,128	34,131	22,761	² 1,011	33,877	36,489	24,331
South Dakota	3	120	112	83	3	122	177	116
Bordering States:								
North Dakota	3	188	231	135	3	129	235	175
Iowa	14	405	403	349	16	462	390	353
Minnesota	23	774	882	716	25	888	875	667
Montana	7	132	157	86	7	114	87	59
Nebraska	4	218	203	128	4	233	231	161
Wyoming	2	35	40	26	2	37	49	28

¹ Includes in addition to the 913 programs in existence on October 15, 1964, 35 closed programs which admitted 111 students, graduated 270. Includes also the administrative control of 40 programs which did not return the questionnaire.

² Includes in addition to the 984 programs in operation on October 15, 1965, 27 closed programs which admitted 256 students, grad-

uated 190. Includes also the administrative control of 43 operating and 4 closed programs which did not return the questionnaire.

Note: Admissions and graduations from September 1 to August 31. Enrollments as of October 15, 1964 and 1965.

Source: National League for Nursing. *State-Approved Schools of Practical and Vocational Nursing: 1964*, p. 54; *1965*, p. 62.

Table H-29.—Number of admissions to approved schools of practical nursing; United States, South Dakota, and bordering States; selected years, 1954-66

State	1954	1956	1958	1960	1962	1964	1966
50 States and District of Columbia	12,075	15,410	20,445	22,870	26,381	33,665	38,755
South Dakota	45	47	75	100	119	112	127
Bordering States:							
North Dakota	35	62	73	77	146	231	261
Iowa	32	84	115	155	224	403	499
Minnesota	335	405	642	703	652	882	810
Montana	10	14	20	38	68	157	148
Nebraska	0	61	77	103	130	203	278
Wyoming	0	16	0	15	...	40	54

Sources: U.S. Department of Health, Education, and Welfare. *Health Manpower Source Book, Section 2, Nursing Personnel, Public Health Service Pub. 263, Revised January 1966, p. 79.* Washington, U.S. Government Printing Office, 1966.
National League for Nursing. *State-Approved Schools of Nursing—L.P.N./L.V.N.* p. 69. New York, The League, 1967.

Table H-30.—Number of graduations from approved schools of practical nursing; United States, South Dakota, and bordering States; selected years, 1954-66

State	1954	1956	1958	1960	1962	1964	1966
50 States and District of Columbia	7,109	10,607	12,350	16,340	17,881	22,510	25,335
South Dakota	32	37	34	136	100	83	106
Bordering States:							
North Dakota	36	36	54	70	93	135	181
Iowa	25	78	92	139	178	349	426
Minnesota	258	340	439	572	607	716	763
Montana	8	11	13	17	33	86	75
Nebraska	0	46	33	79	90	128	187
Wyoming	0	0	0	6	...	26	27

Sources: U.S. Department of Health, Education, and Welfare. *Health Manpower Source Book, Section 2, Nursing Personnel, Public Health Service Pub. 263, Revised January 1966, p. 80.* Washington, U.S. Government Printing Office, 1966.
National League for Nursing. *State-Approved Schools of Nursing—L.P.N./L.V.N.* p. 69. New York, The League, 1967.

Table H-31.—Performance of practical nurse graduates of South Dakota schools on first-time licensing examinations; South Dakota; 1958-66

Fiscal year (July 1-June 30)	Total examinations	Passed	
		Number	Percent
1958-59	62	62	100.0
1959-60	95	95	100.0
1960-61	94	93	98.9
1961-62	104	103	99.0
1962-63	98	97	99.0
1963-64	98	97	99.0
1964-65	103	103	100.0
1965-66	111	111	100.0

Source: South Dakota Board of Nursing. *Report of the South Dakota Board of Nursing for the Biennial Period Ending June 30.* Mitchell, South Dakota, The Board, Biennial Eds.: 1960, p. 10; 1962, p. 12; 1964, p. 13; 1966, p. 13.