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IDENTIFIERS	*Wisconsin

ABSTRACT

This study, conducted in response to the requirements of Wisconsin's State Advisory Council for Vocational Education as delineated in the Vocational Amendments of 1968, focuses specifically on the impact of Federal vocational education funds on State health occupations education programs. The six chapters deal respectively with: (1) the identification and description of State organizations and agencies concerned with health delivery services and health manpower, (2) health manpower data, including employment projections, (3) a rural health survey in Barron County, (4) programmatic efforts in health occupations, (5) a discussion of these activities at the secondary level, and (6) professional development concerns. Recommendations of the advisory council are included. Numerous tables and maps present the data. (AG)

A Reassessment of Wisconsin's Allied Health Occupations Education Programs

1972

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Study Director
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Center for Studies in Vocational and Technical Education

Conducted for the
Advisory Council for Vocational and Technical Education

1972

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PREFACE

The Wisconsin State Board of Vocational, Technical, and Adult Education and its staff can be justly proud of their accomplishments in expanding and upgrading the capacity for training health workers at less than the baccaleaureate level in quality programs and facilities. The Department of Public Instruction has become a leader, at least on a pilot basis, in providing occupational exploratory types of programs in the area of health occupations.

The State Advisory Council, in response to the public's interest in making optimum health services available to all citizens and recognizing that paramount to meeting this goal is the providing of well-educated health manpower, has chosen to have a second study conducted in this area. The Council has a vested interest, reflecting the purpose of the 1968 Vocational Amendments, to maximize opportunities for large numbers of youth and adults who wish to prepare for health occupations. Optimally, youth who reside in any area of the state should have this opportunity.

Numerous professional, governmental, and lay groups have a prime concern in the total health area and, therefore, the need to undertake a study of this nature has been precipitated. While this study was conducted in response to the requirements of the Advisory Council as delineated in the Vocational Amendments of 1968 and is concerned somewhat specifically with the impact of federal vocational education funds, it must be placed in the perspective of numerous other responsible agencies. Obviously, Wisconsin will meet the challenge of providing adequate health care to all only if all available resources and personnel can be focused toward a common goal.

The study includes the following chapters: Chapter I attempts to set in focus the complexity of the structure in which health occupations' education exists. Agencies in addition to the State Board of Vocational, Technical, and Adult Education are identified and described. This information, hopefully, will assist all agencies and persons involved in health delivery services.

Chapter II describes, qualifies, and quantifies health manpower. No pretense is made for its being a manpower report, but general commentary is provided on the role of manpower forecasting in health occupations' education.

The Advisory Council's interest in rural areas stimulated a comprehensive examination of the health resources and needs in one rural county in Wisconsin. Chapter III synthesizes the data relative to Barron County which was chosen in response to an invitation to contribute to a comprehensive study-effort and project in that county. Generalizations to other areas with similar district character can be assumed qualitatively.

Chapter IV gives visibility to the program and program development efforts in health occupations in Wisconsin. The health occupations' program development efforts and exploratory activities in the secondary schools of Wisconsin are described in Chapter V. Chapter VI addresses professional development concerns. The recommendations of the Wisconsin Advisory Council conclude the report.

Merle E. Strong, Director
Center for Studies in Vocational
and Technical Education.

ACKNOWLEDGEMENTS

A study of this nature could not have been accomplished without the contributory and supportive assistance of many individuals, associations, and agencies. The cooperation without exception was outstanding and reinforcing.

Special appreciation is expressed to the staff of the State Board of Vocational, Technical, and Adult Education who were always willing to furnish available information and consultation. The cooperation of the staff of the Department of Public Instruction is acknowledged. A special word of thanks is conveyed to the staff and directors of the vocational districts who responded graciously to a questionnaire which required obviously considerable time to complete.

Gratitude is extended to persons from the following agencies for their assistance in collecting information:

Areawide Health Planning Agencies
Department of Health and Social Services
Department of Regulation and Licensing
Governor's Health Planning and Policy Task Force
Governor's Health Policy and Program Council
Wisconsin Hospital Association
Wisconsin Regional Medical Program

Special recognition is due two consultants: Mrs. Barbara Killen, Coordinator of Occupational Education and Placement, General College, University of Minnesota, whose expertise in health manpower and education provided direction and guidance for the study; and, Mrs. Marilyn McCarty, Health Occupations Coordinator, ADVOTECH 18, who was responsible for the Barron County survey and contributed substantially to the total study.

The Study Director is indebted particularly to Daniel Jarosik, a doctoral candidate and Dr. Shirley Heck, a recent University of Wisconsin graduate, for their excellent and dedicated work in gathering statistics and other information and for assistance in organizing, editing, and expediting the reproduction of this report.

The Study Director wishes to acknowledge the fine support and cooperation of the Advisory Council Members, particularly the sub-committee chaired by Mrs. Margaret Neilsen and later by Mr. James Cleary. Besides the above mentioned representatives, the sub-committee consisted of the following members:

Mr. Frederick Bronson
Mr. George Hall
Mr. Theodore W. Harris
Mr. Norman P. Mitby
Dr. Robert Rudiger

A tribute of gratitude is extended to the members of the Advisory Council for their dedicated work, insights, and assistance in preparing the final recommendations.

Merle E. Strong
Study Director

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ADMINISTRATIVE DILEMMA

This study focuses on the role of the State Board of Vocational, Technical, and Adult Education; its staff; and, the activities of its fifteen districts as they relate to the preparation of health workers. It becomes exceedingly apparent, however, that it is not feasible to view activities in the health manpower area for which the Board of Vocational, Technical, and Adult Education has responsibility without looking at the complex framework within which professional vocational educators must operate.

An interesting and perplexing situation confronts program developers and administrators who seek to provide services or training in health-related areas because of the numerous agencies and organizations which are involved. Some of the agencies and organizations in Wisconsin which are relevant to or involved in the delivery of health services or health-services education and training are listed in Table I. Many of these agencies and organizations exert a degree of leadership or control over health education and training and/or utilization of health personnel. The dilemma for administrators and program directors is the identification of which agencies could be asked for help, information, funds or whatever; which agencies must be asked for permission to even consider a program; and, which agencies must be involved if faculty is to be approved. The list boggles the mind!

TABLE I

ORGANIZATIONS AND AGENCIES INTERESTED IN HEALTH DELIVERY AND HEALTH MANPOWER

Areawide Comprehensive Health Planning Agencies

Department of Health and Social Services

- Division of Aging
- Division of Business Management
- Division of Corrections Executive Division

- Division of Family Services
- Division of Health
- Division of Mental Hygiene
- Division of Vocational Rehabilitation

Department of Regulation and Licensing

- Chiropractic Examining Board
- Dentistry Examining Board
- Hearing Aid Dealers and Fitters Examining Board
- Medical Examining Board
  - Physical Therapists Examining Board
  - Podiatrists Examining Board
- Board of Nursing
  - Division of Nurses
    - Examining Council on Registered Nurses
    - Examining Council on Licensed Practical Nurses
- Nursing Home Examining Board
- Optometry Examining Board
- Pharmacy Examining Board
- Pharmacy Internship Examining Board
- Psychology Examining Board
- Veterinary Examining Board

Governor's Health Policy and Program Council

Governor's Health Planning and Policy Task Force

Office of Economic Opportunity

State Board of Vocational, Technical and Adult Education

University of Wisconsin

- Medical School
- School of Nursing
- Pharmacy School

University of Wisconsin Extension Division

- Health Sciences Unit

Wisconsin Federation of Licensed Practical Nurses (WFLPN)

Wisconsin Health Council, Inc.

Wisconsin Hospital Association (WHA)

Wisconsin Nurses Association (WNA)

Wisconsin Regional Medical Program (WRMP)

Table II lists most of the licensing, accrediting, or certifying bodies which affect directly health education programs in Wisconsin. One or more of these bodies, usually more, are involved in program development and control.

TABLE II

LICENSING, ACCREDITING, AND CERTIFYING AGENCIES AFFECTING HEALTH EDUCATION PROGRAMS

American College of Radiology

American Dental Assistant's Association Certification Committee

American Dental Association Council on Dental Education

American Dental Association Council on National Board Examination

American Medical Assistant's Association Certification Committee

American Medical Association Council on Medical Education

American Medical Association Department of Allied Medical Professions and Services

American Medical Association Society of Clinical Pathologists

American Medical Record Association

American Occupational Therapy Association

American Society of Clinical Pathologists

American Society of Medical Technologists

American Society of Radiologic Technologists

Commission on Institutions of Higher Education-North Central Association of Colleges and Secondary Schools

Joint Commission of Hospitals and Agencies

National League of Nursing

Wisconsin Dentistry Examining Board

Wisconsin Department of Regulation and Licensing-Division of Nurses

Wisconsin State Board of Nursing

Wisconsin State Board of Vocational, Technical and Adult Education

Since the involvement of these agencies is contingent upon the organizational and operational objectives of the various agencies, a brief resume of some of the organizations is included here. The list is not exhaustive but is illustrative of both the diversity and commonality that exist among the multivarious goals. One wonders about the overlap or possible lack of information on important resources that results from such a complex distribution of services. When such resources are spread over a large network of agencies and organizations, it is only natural that an educational planner might lose sight of valuable input into his educational program. Administrators on all levels of program development, then, must be aware of every contributory agency in the health education spectrum. If not, that particular program will suffer.

AREA HEALTH EDUCATION CENTERS (AHEC)

The Carnegie Commission on Higher Education issued its report in October of 1970 entitled, HIGHER EDUCATION AND THE NATION'S HEALTH. Among its recommendations for health manpower education is one suggesting the development of 126 Area Health Education Centers across the nation.

The health education centers are a consortia of existing clinical experiences providing opportunities for students along with continuing education for all levels of health professionals and paraprofessionals. The Governor's Health Planning and Policy Task Force has given consideration to such centers. A working paper* of the Task Force lists the following as goals of the (AHEC)'s:

> To implement health service and health manpower policy through the development and coordination of regional educational and training programs.

*Memorandum, May 1, 1972, to the Health Task Force Members.

To promote optimum use of health workers through the creation of flexible educational programs which allow retraining, career changes and manpower mobility.

To insure that regional health educational programs are oriented to specific skill requirements for providing the health services needed within the region.

To develop and coordinate public educational programs and activities to health to insure more effective public use of the regional health system.

To encourage recruitment and retention of health workers to the region through excellence of educational opportunities and continuing educational support.

To insure the quality of the health education program in the region and to improve or eliminate ineffective or duplicated programs.

To identify and encourage commonalities between the health education programs of different health professions and occupations.

COMPREHENSIVE HEALTH PLANNING

"The fulfillment of our national purpose depends upon promoting and assuring the highest level of health attainable, for every purpose, in an environment which contributes positively to healthful individual and family living." With these words, Public Law 89-749 authorized federal support for Comprehensive Health Planning.

The goal of CHP is to give every citizen in Wisconsin equal access to high quality health services regardless of race, creed, or place of residence, and plan so that these services will be provided according to his physical, mental, and social needs, in an environment conducive to healthful living.

Areawide comprehensive health planning focuses on the people of an area and the circumstances and actions that contribute to or interfere with their physical and mental health and the healthfulness of their environment. Comprehensive health planning differs from functional or specialized health planning in its focus on all the people's total health needs rather than on those related to a given

problem, such as mental illness or air pollution; or to a particular type of service, such as personal health care or sanitation; or to a specific population group, such as children, workers or the poor. The achievement of agreement about priorities for health services, the long-range directions that these should take, and organizational or institutional responsibilities is an essential objective of comprehensive health planning efforts.

DIVISIONS OF HEALTH AND MENTAL HYGIENE

The following divisions depict the organizational structure of the Department of Health and Social Services, Divisions of Health and of Mental Hygiene. These are the legal arms of the Wisconsin State Government.

DIVISION OF HEALTH

Bureau of Comprehensive Health Planning

Bureau of Preventable Diseases

- Section Communicable Diseases
- Section Chronic Diseases
- Section Laboratory Evaluation
- Section Multiphasic Case Finding

Bureau of Medical Facilities and Services

- Section Hospitals and Related Facilities and Services
- Section Medicare Certification
- Section Emergency Health Services
- Section Patient Care Practices

Bureau of General Administration

- Section Administrative Services
- Section Funeral Directing and Embalming
- Section Barbering
- Section Cosmetology
- Section Planning and Evaluation

Bureau of Health Statistics

- Section Vital Records

Section Statistical Services

Bureau of Local Health Services

Bureau of Community Health Services

Section Maternal and Child Health
Section Dental Health
Section Community Health Education
Section Nutrition
Section Child Behavior and Development
Section Public Health Nursing

Bureau of Environmental Health

Section Occupational Health
Section Radiation Protection
Section Hotels and Restaurants
Section Plumbing and Fire Protection Systems
Section Milk Certification
Section Planning, Recreation, and Environmental Services

DIVISION OF MENTAL HYGIENE

Bureau of Administration

Section Central Files
Section Financial Services
Section Office Manager
Section Payroll
Section Personnel

Bureau of Alcoholism

Section Drug Abuse
Section Program Development

Bureau of Community Resources

Coordinated Information Center on Mental Retardation
Section Education - Information
Section Management Resources
Budget Management Analyst
Section Manpower and Training
In-Service Training
Recruiting and Stipends

Bureau of Mental Health

Section Activity Therapy
Section Children's Services
Section County Mental Hospitals

Section Nursing Services
Section Patient Transfers
Section Social Services
Section State Hospitals
Section Volunteer Services

Bureau of Mental Retardation

Section Community Local Services
Section Community Residential Services
Section Day Care Programs
Section Foster Grandparent Program
Section Institution Educational Services
Section Title I Projects

Bureau of Planning, Evaluation-Research

Section Evaluation and Research
Section Information Systems Development
Section Information Systems Operation
Section Planning

DEPARTMENT OF REGULATION AND LICENSING

The Department of Regulation and Licensing was created by the Reorganization Bill which became Chapter 75 of the Laws of 1967, effective August 1, 1967. This bill brought together approximately fourteen examining boards who had been operating as independent agencies. Today, there are seventeen boards of which more than half deal directly with the field of health occupations. Their function is somewhat represented by the goals set forth by the Division of Nursing in the BIENNIAL REPORT 1969-1971* published by the Department of Regulation and Licensing.

GOALS

Administration: (1) to coordinate all activities within the Division of Nurses, and (2) to serve the public and practi-

*BIENNIAL REPORT 1969-1971, State of Wisconsin, Department of Regulation and Licensing, October, 1971, p. 42.

tioners in matters relating to nursing education, service and practice.

Education: (1) to continue to provide quality leadership for nursing education; (2) to assist in further upgrading and expansion of undergraduate nursing education programs; (3) to encourage potential leaders in nursing education and service to obtain advanced preparation; (4) and, to give guidance in the development of graduate education programs in nursing.

Registration and Licensure: to grant certificates and licenses only to those who are safe nursing practitioners.

Law Enforcement: to protect the public from persons (1) who are not competent to practice professional or practical nursing, or (2) who seek to defraud the public by offering correspondence and other unrecognized courses in nursing.

GOVERNOR'S HEALTH POLICY AND PROGRAM COUNCIL

Patrick J. Lucey, the Governor of the State of Wisconsin, in May of 1971, commissioned a task force charged with the responsibility of looking hard and objectively at the facts concerning the health of the people of Wisconsin. In his special message to the Legislature of May 18, 1971, Governor Lucey said:

> We must develop sound plans for an improved system of health care for Wisconsin. We must set our priorities and develop the policies by which we will accomplish this goal. We must do this together -- Government (both the Legislature and the Executive), the health professions, the educational system and the people.

As Chairman of the Task Force, in his letter of transmittal of the Preliminary Report dated November, 1971, David Carley said that the Governor's Health Planning and Policy Task Force has dedicated itself to "...an effective coalition among the various 'publics' in Wisconsin; a coalition of private citizens, health professionals, governmental workers, politicians, educators, and many others..."

The approximately 45 members of the task force have been split into eight groups studying the following areas of major health concern:

Personal Health Services
Environmental Health Services
Public Policy for Health
Health Planning
The Financing of Health Services
Health Education of the Public
The Education of Health Workers
Research for Health and the Health System

The Task Force has the responsibility of completing its mission after eighteen months when the Governor's Health Policy and Program Council will begin to implement the recommendations of the Task Force.

OFFICE OF ECONOMIC OPPORTUNITY

The principal thrust of the Office of Economic Opportunity (OEO) is to improve the economic level of the problem areas and of disadvantaged people. This agency relates illness to poverty and, thus, is trying innovative ways to improve health. Congress is considering moving the community health centers, initiated and operated under OEO auspices, to the Department of Health, Education, and Welfare sponsorship. At the state level, the OEO program is operated under the Department of Local Affairs and Development.

OEO programs supplement planning by helping to identify health problems. Community action agencies' efforts are similar to some work done by public health agencies but again supplement the efforts of public health. Cooperation and coordination of these programs are necessary and are being developed.

STATE MANPOWER PLANNING COUNCIL

Governor Patrick J. Lucey, in November of 1971, created the State Manpower Planning Council which took over the responsibilities delegated previously to CAMPS (Cooperative Area Manpower Planning System). Area Manpower Planning Boards were created in the districts as outlined in Figure 2. A Technical Assistance Committee is in the process of being formed which will have representatives from the following agencies concerned with manpower needs in the State of Wisconsin:

Manpower Training Services
Work Incentive Program
Job Corps
Department of Health, Education, Welfare
Office of Economic Opportunity
Housing and Urban Development

The goals of the State Manpower Planning Council are as follows:

To establish state-wide objectives, priorities, and policies.

To determine organizational responsibilities and performance standards related to the implementation of manpower planning policy.

To develop the State Manpower Plan on an annual basis.

To assess the effectiveness of state manpower programs.

To make recommendations to the Governor on manpower planning programs.

UNIVERSITY OF WISCONSIN - EXTENSION HEALTH SCIENCES UNIT

The Health Sciences Unit has, through its departmental and program units, the following major areas of emphases:

Continuing education for the professional.
Work with the institutions of health care.

Work with persons supportive of health care.
Community health - both physical and environmental.*

The Unit offers a variety of courses and services each year, employing a wide variety of resources, methods and media of continuing professional education. It serves approximately 14,000 persons yearly. The Unit, through its departments and program units, works closely and collaboratively with the professional schools and several faculties of The University of Wisconsin System, with other resources from the Wisconsin system of higher education, and with countless local, state and federal health and education agencies. Instruction and leadership come not only from the unit itself, but also, from the professional community in both the state and the nation.

In addition to continuing professional education, the departments, program units, and the Unit as a totality conduct various health service delivery demonstrations and projects by contract with state and federal agencies. Specific information is available to granting and funding groups upon request.

HEALTH SCIENCES UNIT

Departments: Department of Postgraduate Medical Education
Department of Nursing
Extension Services in Pharmacy

Program Units: Community Health
Continuing Education in Mental Health
Health Facilities Administration

WISCONSIN ASSOCIATION LICENSED PRACTICAL NURSES

The Wisconsin Association Licensed Practical Nurses has the following goals:

*Transcribed from University of Wisconsin-Extension, Health Sciences Unit, CONTINUING EDUCATION IN THE HEALTH PROFESSIONS AND RELATED SCIENCES, 1972-1973 Offerings Bulletin.

To preserve and foster the ideal of comprehensive care for the ill and aged.

To associate together all licensed practical nurses and groups of licensed practical nurses or persons of equivalent titles.

To secure recognition and effective utilization of the skills of licensed practical nurses.

To promote the welfare and interests of licensed practical nurses.

To improve standards of practice in practical nursing.

To speak for licensed practical nurses and interpret their aims and objectives to other groups and the public.

To cooperate with other groups concerned with better patient care.

To serve as a clearinghouse for information on practical nursing.

To further the continued improvement in the education of licensed practical nurses.

To organize leadership training programs for licensed practical nurses.

To promote the effective functioning of constituent state and local associations.

WISCONSIN HEALTH COUNCIL

The Wisconsin Health Council is a non-profit corporation which is "organized for the exclusive purpose of enhancing the welfare of the people of the State of Wisconsin through programs designed to assist in the alleviation of health problems. This purpose shall be attained through the promotion of community health activities and organizations and the dissemination of information related to the health sciences."*

*ARTICLES OF INCORPORATION OF THE WISCONSIN HEALTH COUNCIL, INC., Article III, Section 1., Purposes.

The Wisconsin MEDIHC (Military Experience Directed Into Health Careers) Program is one of the programs for which the Wisconsin Health Council, Inc., has assumed operational responsibility. The Wisconsin MEDIHC Program received referrals from the Department of Defense and from other agencies, organizations, and institutions throughout the state. It seeks to provide a focal point for health related occupational and educational counseling and job placement, especially, for former military medics/corpsmen. Services of the program are available, however, to any veteran interested in the civilian health fields.

WISCONSIN HOSPITAL ASSOCIATION

The Wisconsin Hospital Association was founded in 1920 with a function ..... "to promote the welfare of the people of the State of Wisconsin, insofar as this may be done by the development of hospitals and dispensaries of the state in number and location."*

Today, the Wisconsin Hospital Association is a voluntary organization of 179 hospitals and related institutions in Wisconsin working to improve hospital services and health care delivery for Wisconsin citizens. The Wisconsin Hospital Association also functions as a state constituent of the American Hospital Association, and works closely with the AHA in recommending federal legislation, and activity involving other significant national developments affecting Wisconsin hospitals. In view of the many educational programs being offered by various agencies, the Wisconsin Hospital Association emphasizes a coordinating function rather than a strong role in program development.

*Article II of the Constitution and By-laws of the Wisconsin Hospital Association, adopted at the first meeting of the Association on September 16, 1920, at Hotel Pfister, Milwaukee, Wisconsin.

WISCONSIN REGIONAL MEDICAL PROGRAM

The Regional Medical Programs were created by Congress in 1966. Public Law 89-239 states their function is to "afford to the medical profession and the medical institutions of the nation, through ...cooperative arrangements, the opportunity of making available to their patients the latest advances in the diagnosis and treatment of heart disease, cancer, stroke, and related diseases."

The Wisconsin Regional Medical Program is a private, non-profit corporation whose purpose is to improve the health care of Wisconsin residents. Some of the presently funded programs of the Wisconsin Regional Medical Program are: Dial Access (Nurse), Radiology, Cancer Review and Emendation, Tissue Typing, Renal Disease, Nurse Utilization, Health Manpower Development, Outreach Program, Nurse Associate--Physician Team, and the 16th Street Community Health Center.

The Wisconsin Regional Medical Program receives financial support directly from the federal government. The WRMP along with the HP have cross memberships in many activities. The WRMP is designed facilitate the application of new knowledge from the fields of research and education to patients.

ADMINISTRATIVE IMPLICATIONS

Granted that all these agencies might function effectively, and have important contributions to make in facilitating, controlling, or evaluating health education and training ...how does anyone sort out all the interrelationships, conflicts, areas of responsibility and what useful purpose would such a clearer understanding serve? The problems of uncoordinated and sometimes conflicting directions of policy makers, leaders, planners, and controllers are discussed in an article prepared by Sar Levitan, Garth Mangum, and Ray Marshall published in MANPOWER, November, 1971. They advance the idea that we may be fortunate that

there is no "superboard" or federal policy for Manpower. The possible errors made by the many different groups involved tend to cancel one another out and, although we are forced to operate within a cumbersome and puzzling system which doesn't move very swiftly and uniformly, at least we aren't going very fast in a totally wrong direction. We are circling around in a general direction. There seems a troublesome element of truth in the analogy.

Health Service training and delivery systems are being urged to give adequate representation to consumer groups as well. Why not, everyone else has something to say about training programs. Planning agencies have little if any power to implement or control. Some seek to be change agents by putting seed money into programs which could or would not otherwise begin. Others try to identify and coordinate the multitude of resources and controls involved in service delivery of one sort or another. This is a necessary function and will take its share of effort and energy. How can administrators operate effectively with so many bases to touch? Undoubtedly, they soon learn which bases are crucial and which can be ignored. The potential danger is that important resources may be ignored. Perhaps there is an important role for development of an operational road map for program development for each category of health occupations.

Organizations and agencies have divided the State of Wisconsin into districts. There is evidence of limited agreement between agencies as to where district boundaries belong. Maps indicating the areas under the jurisdiction or leadership of eight organizations are included in Figures 1 through 8. Note how often the geographical boundaries established for Area Health Planning, Vocational-Technical Education, Wisconsin Hospital Association, Public Health Administration, and Community Mental Health Catchment areas coincide.

Figure 1

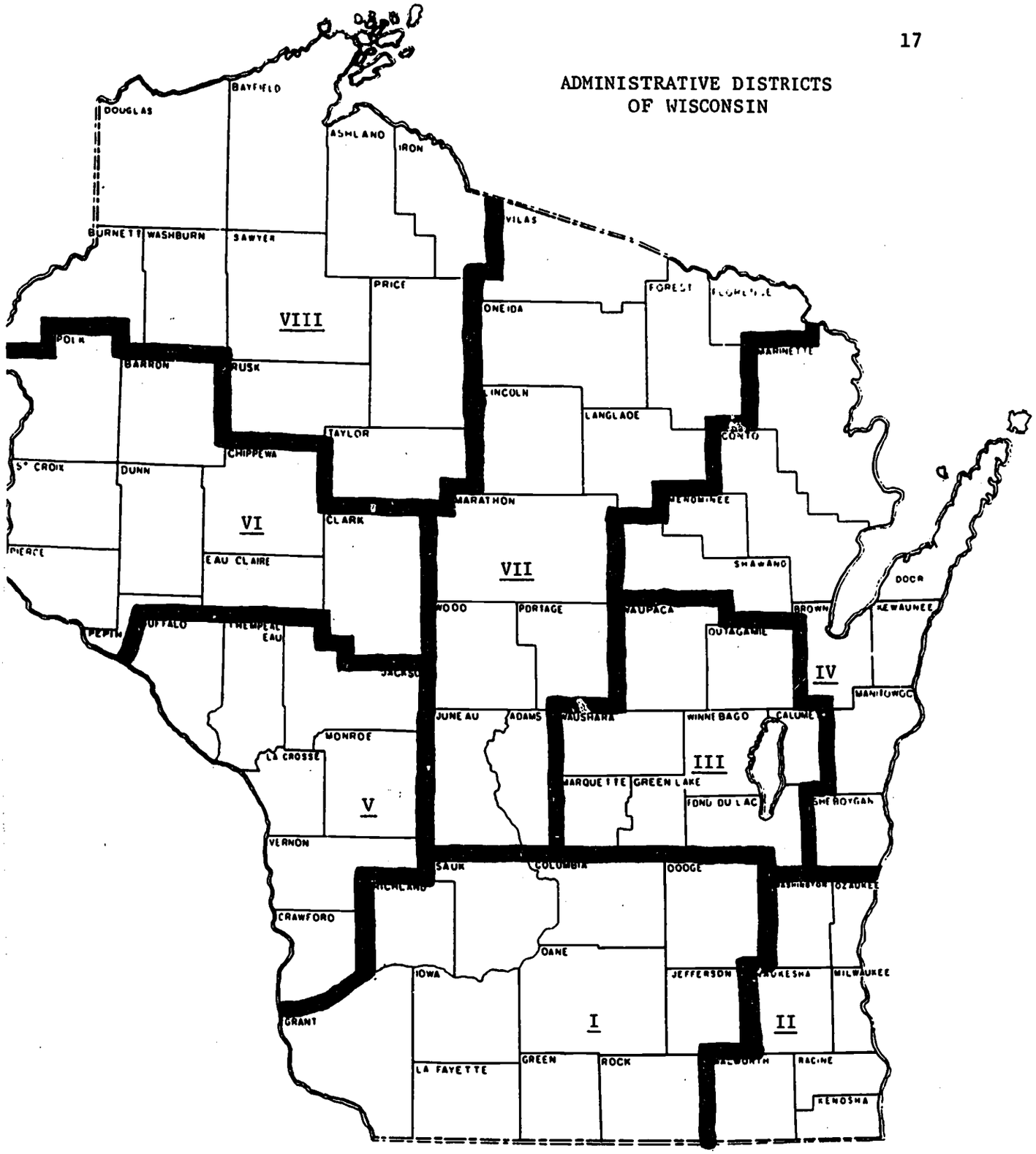
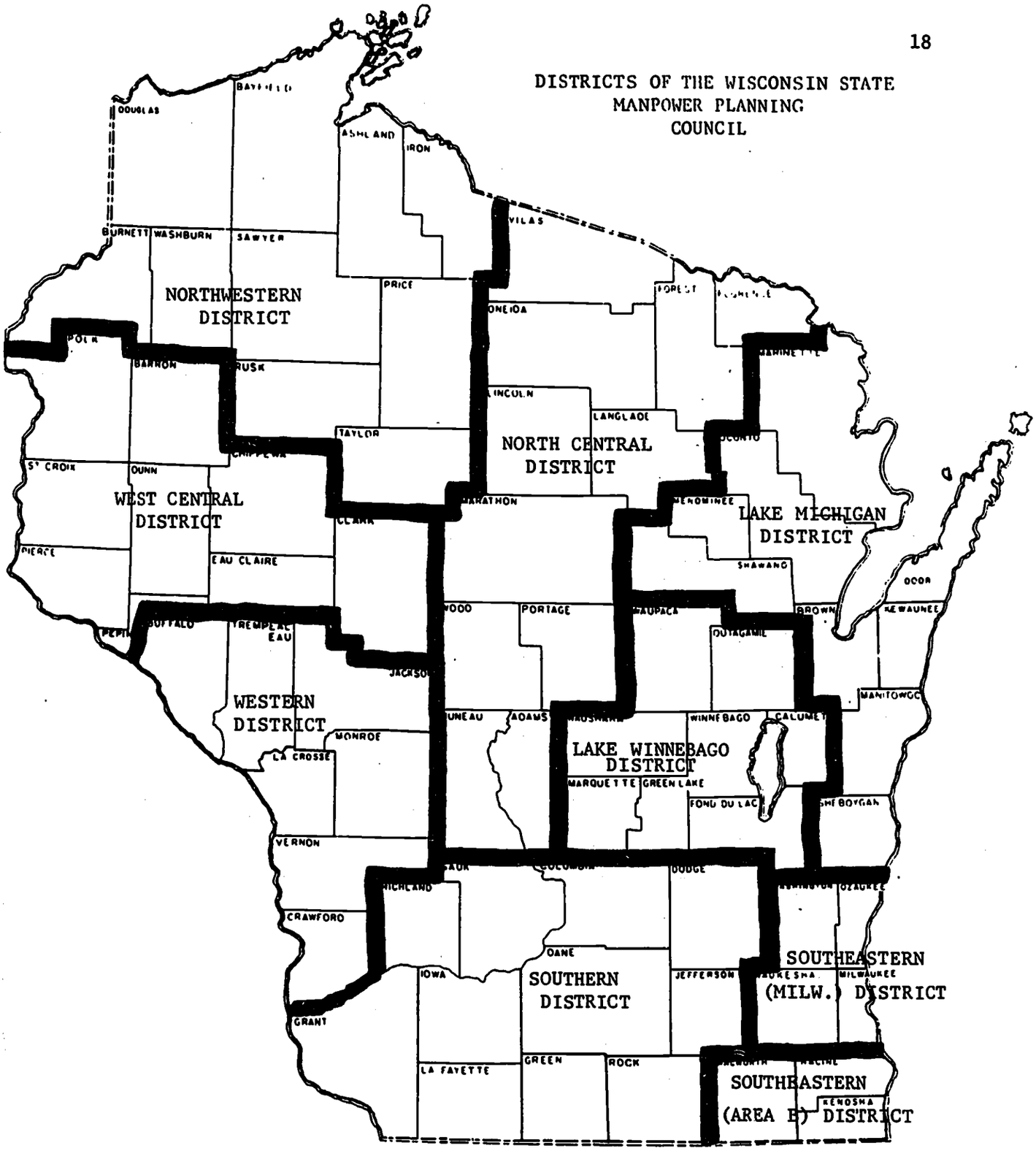

ADMINISTRATIVE DISTRICTS
OF WISCONSIN
DOUGLAS
BAYFIELD
ASHLAND
IRON
BURNETT
WASHBURN
SAWYER
VILAS
PRICE
VIII
ONEIDA
FOREST
FLORENCE
MARINETTE
POLK
BARRON
RUSK
LINCOLN
LANGLADE
TAYLOR
CONTO
CHIPPEWA
ST. CROIX
DUNN
MARATHON
MENOMINEE
VI
CLARK
PIERCE
EAU CLAIRE
VII
SHAWANO
DOOR
WOOD
PORTAGE
WAUPACA
BROWN
KEWAUNEE
PEPIN
BUFFALO
TREMPEALEAU
OUTAGAMIE
IV
JACKSON
MANITOWOC
JUNEAU
ADAMS
WAUSHARA
WINNEBAGO
CALUMET
MONROE
LA CROSSE
III
MARQUETTE
GREEN LAKE
V
FOND DU LAC
SHEBOYGAN
VERNON
SAUK
COLUMBIA
DODGE
RICHLAND
OZAUKEE
CRAWFORD
DANE
IOWA
JEFFERSON
WAUKESHA
MILWAUKEE
GRANT
I
II
LA FAYETTE
GREEN
ROCK
WALWORTH
RACINE
KENOSHA

Figure 2


DISTRICTS OF THE WISCONSIN STATE
MANPOWER PLANNING
COUNCIL
NORTHWESTERN
DISTRICT
NORTH CENTRAL
DISTRICT
WEST CENTRAL
DISTRICT
LAKE MICHIGAN
DISTRICT
WESTERN
DISTRICT
LAKE WINNEBAGO
DISTRICT
SOUTHERN
DISTRICT
SOUTHEASTERN
(MILW.) DISTRICT
SOUTHEASTERN
(AREA E) DISTRICT
DOUGLAS
ASHLAND
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BUFFALO
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EAU
OUTAGAMIE
MANITOWOC
JUNEAU
ADAMS
WINNEBAGO
CALUMET
MONROE
LA CROSSE
MARQUETTE
GREEN LAKE
FOND DU LAC
VERNON
DODGE
CRAWFORD
DANE
IOWA
JEFFERSON
GRANT
LA FAYETTE
GREEN
ROCK
RACINE
KENOSHA

Figure 3

AREAWIDE COMPREHENSIVE HEALTH
PLANNING AGENCIES
DISTRICTS

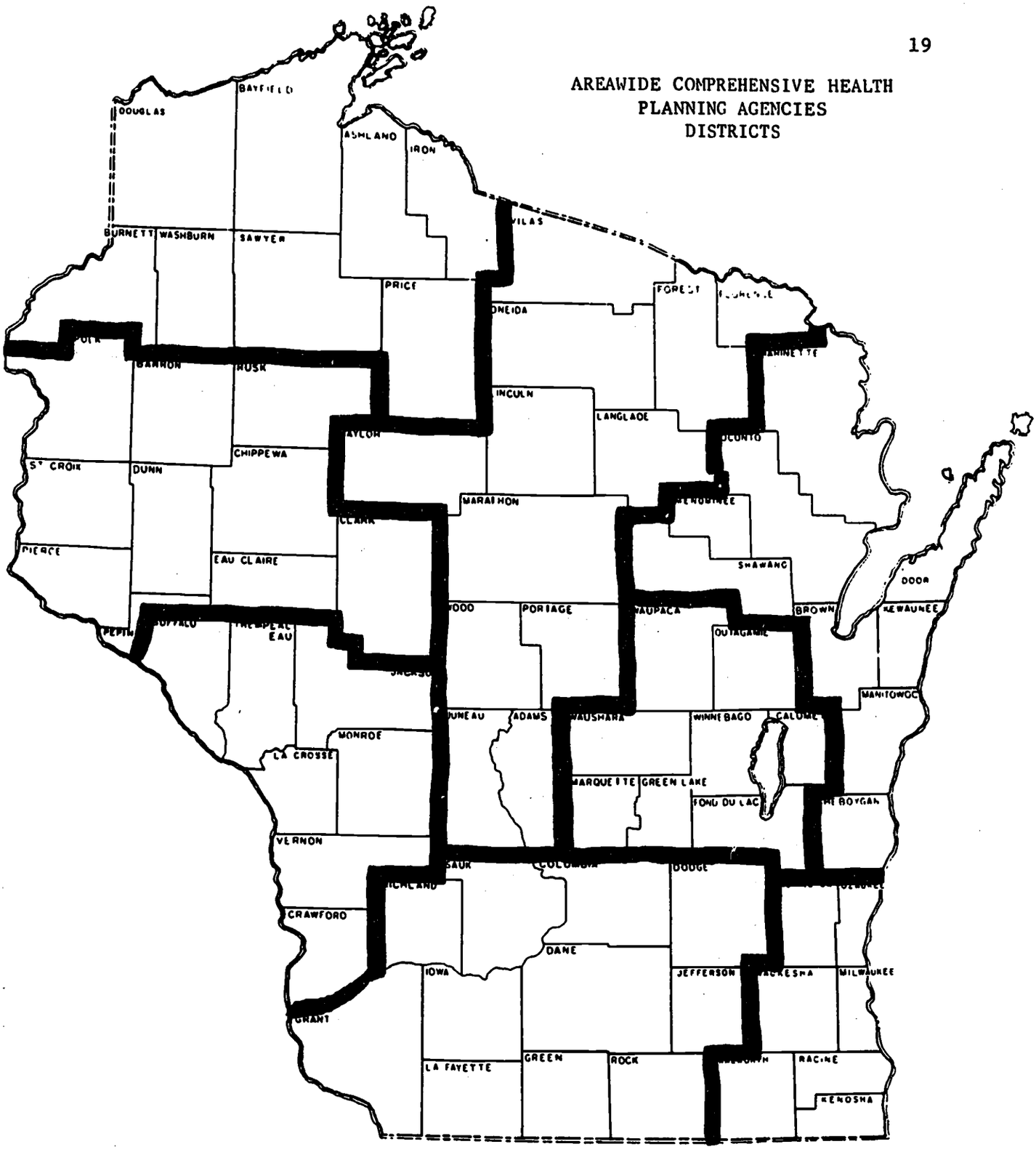


Figure 4

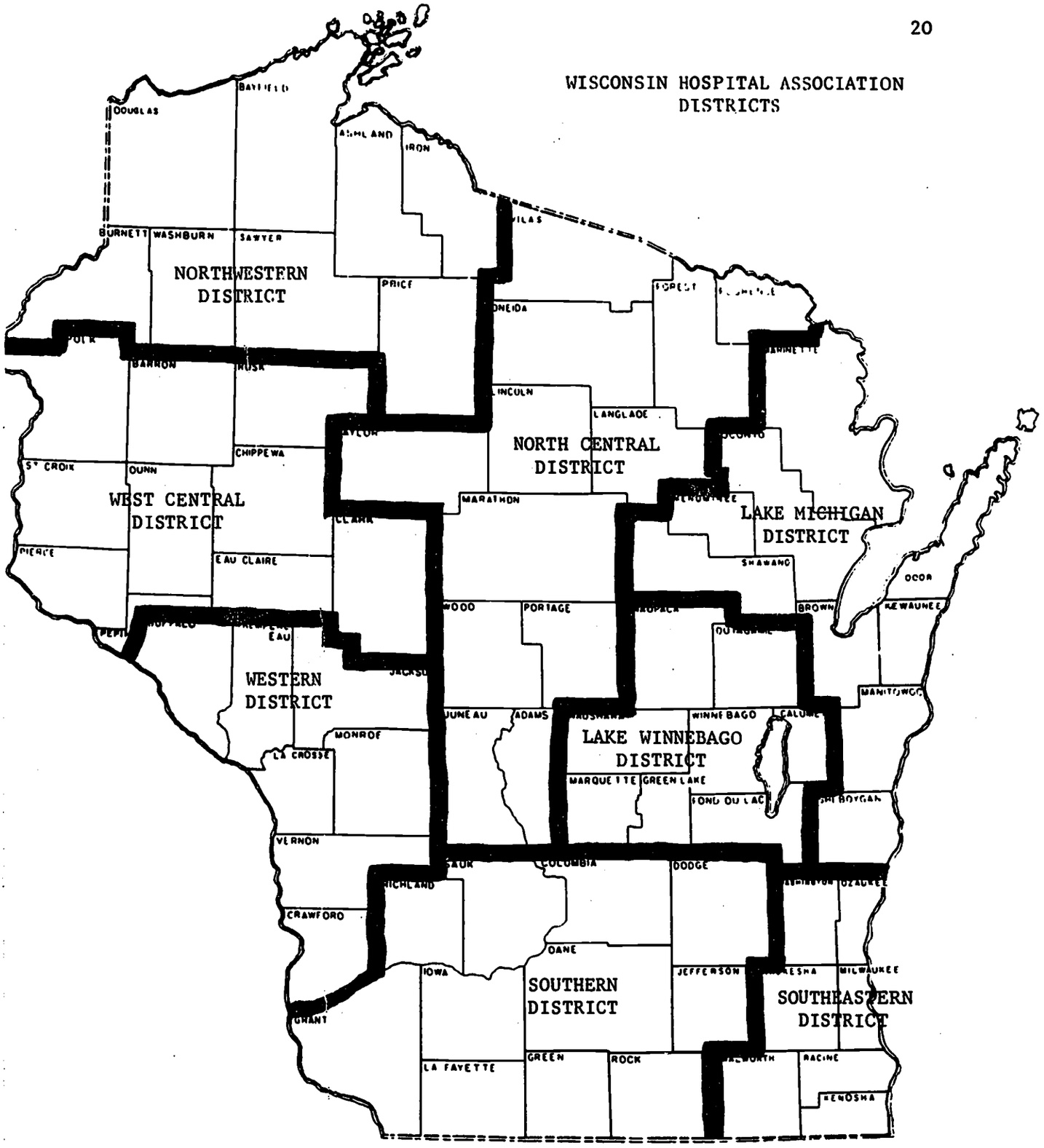

WISCONSIN HOSPITAL ASSOCIATION
DISTRICTS
NORTHWESTERN
DISTRICT
NORTH CENTRAL
DISTRICT
WEST CENTRAL
DISTRICT
LAKE MICHIGAN
DISTRICT
WESTERN
DISTRICT
LAKE WINNEBAGO
DISTRICT
SOUTHERN
DISTRICT
SOUTHEASTERN
DISTRICT
DOUGLAS
BURNETT
WASHBURN
SAWYER
PRICE
ONEIDA
VILAS
FOREST
LANGLADE
LINCOLN
MARATHON
BARRON
RUSK
CHIPPEWA
ST CROIX
DUNN
PIERCE
EAU CLAIRE
CLARK
WOOD
PORTAGE
BROWN
KEWAUNEE
MANITOWOC
JUNEAU
ADAMS
WINNEBAGO
MONROE
LA CROSSE
MARQUETTE
GREEN LAKE
FOND DU LAC
SHEBOYGAN
VERNON
COLUMBIA
DODGE
RICHLAND
CRAWFORD
DANE
IOWA
JEFFERSON
WAUKESHA
MILWAUKEE
GRANT
LA FAYETTE
GREEN
ROCK
RACINE
KENOSHA

Figure 5 .

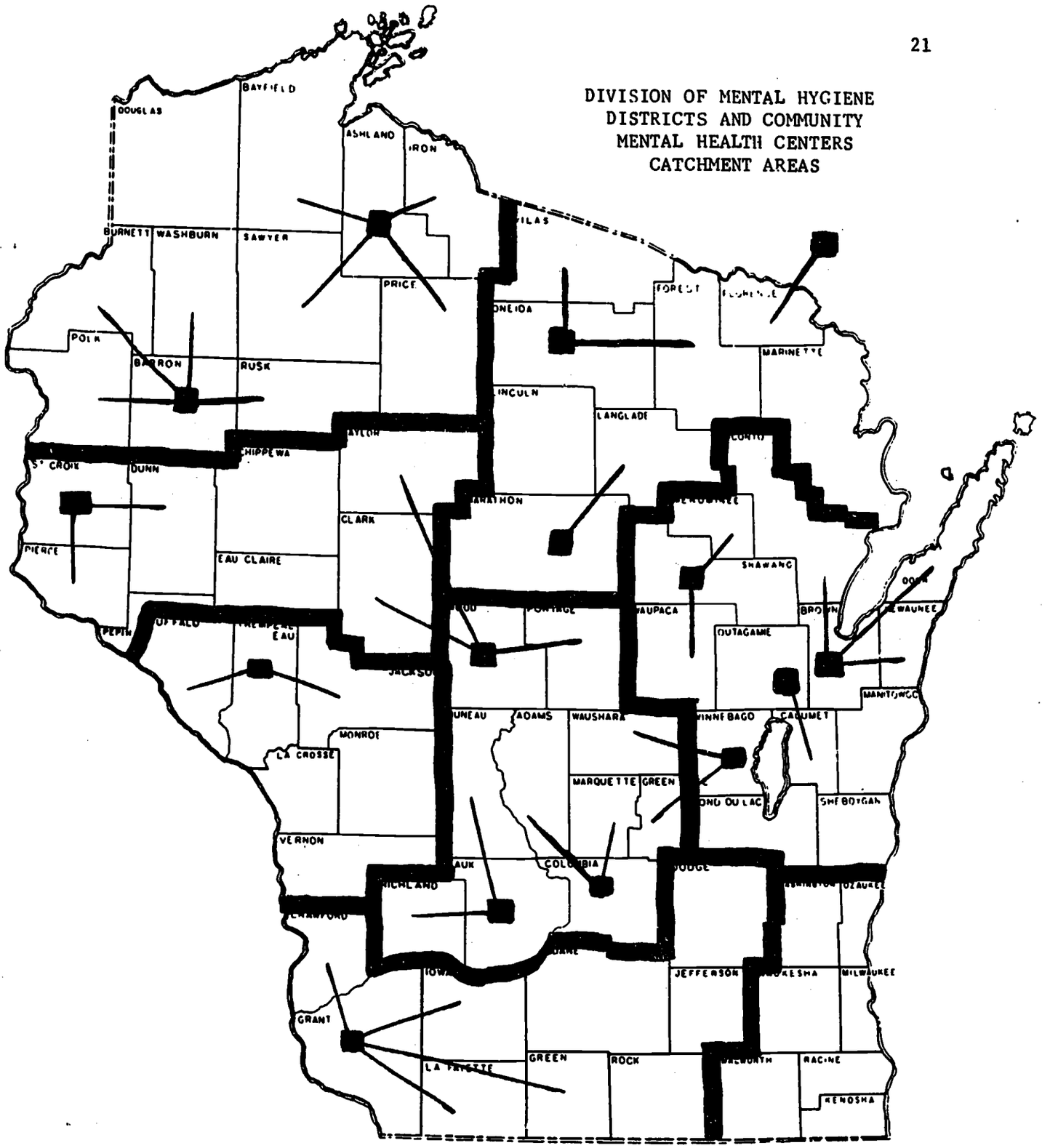

DIVISION OF MENTAL HYGIENE
DISTRICTS AND COMMUNITY
MENTAL HEALTH CENTERS
CATCHMENT AREAS
BAYFIELD
DOUGLAS
ASHLAND
IRON
BURNETT
WASHBURN
SAWYER
PRICE
ONEIDA
FOREST
POLK
BARRON
RUSK
MARINETTE
LANGLADE
CHIPPEWA
ST. CROIX
DUNN
CLARK
PIERCE
EAU CLAIRE
SHAWANO
WAUPACA
OUTAGAMIE
BROWN
PEPIN
MONROE
LA CROSSE
WAUSHARA
WINNEBAGO
CALUMET
MARQUETTE
GREEN
SHEBOYGAN
VERNON
COLUMBIA
GRANT
JEFFERSON
MILWAUKEE
GREEN
ROCK
RACINE
KENOSHA

Figure 6

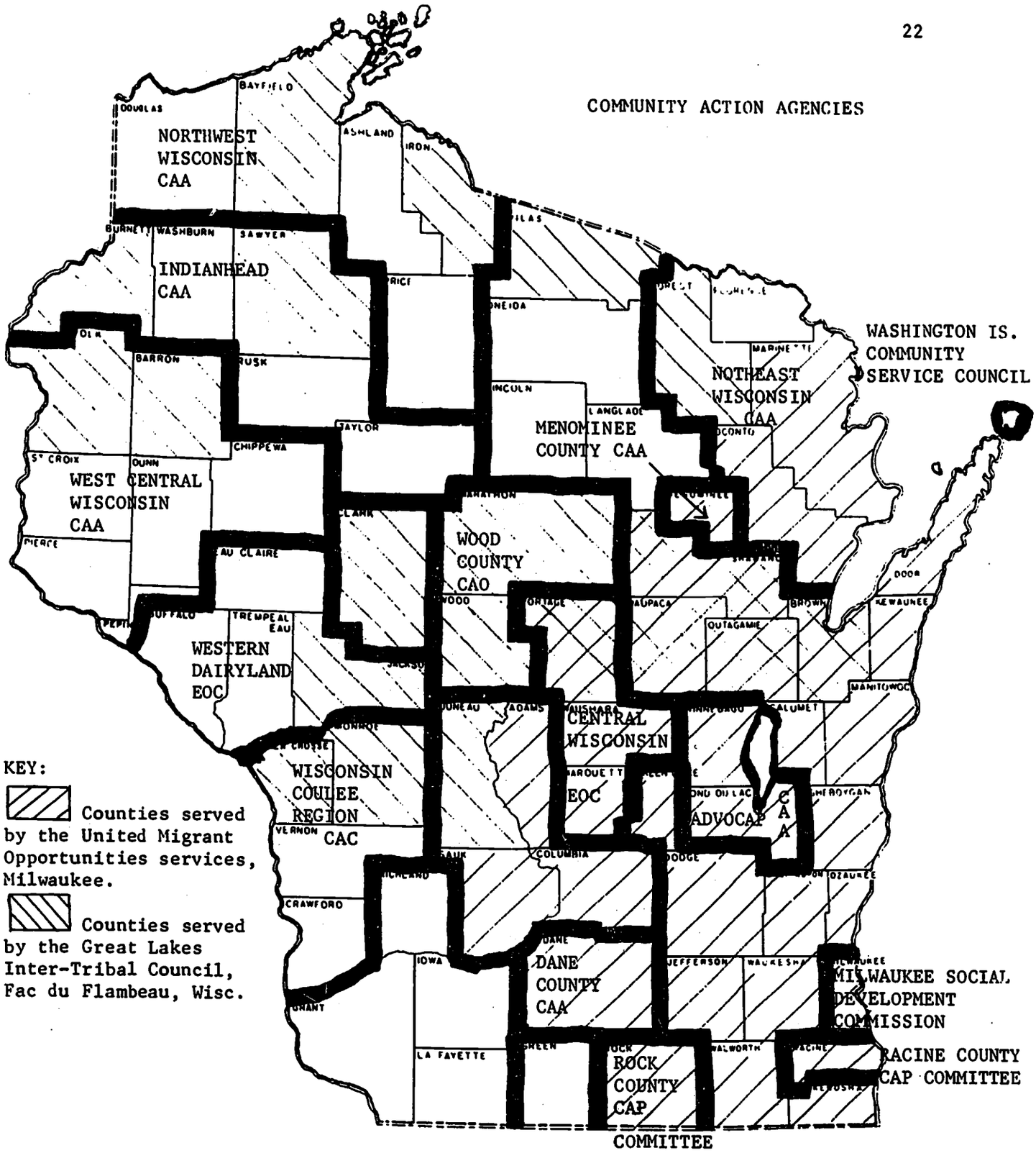

COMMUNITY ACTION AGENCIES
NORTHWEST WISCONSIN CAA
INDIANHEAD CAA
WEST CENTRAL WISCONSIN CAA
WESTERN DAIRYLAND EOC
WISCONSIN COULEE REGION CAC
WOOD COUNTY CAO
MENOMINEE COUNTY CAA
NORTHEAST WISCONSIN CAA
WASHINGTON IS. COMMUNITY SERVICE COUNCIL
CENTRAL WISCONSIN EOC
ADVOCAP C A A
DANE COUNTY CAA
ROCK COUNTY CAP COMMITTEE
MILWAUKEE SOCIAL DEVELOPMENT COMMISSION
RACINE COUNTY CAP COMMITTEE
KEY:
Counties served by the United Migrant Opportunities services, Milwaukee.
Counties served by the Great Lakes Inter-Tribal Council, Fac du Flambeau, Wisc.

Figure 7

VOCATIONAL, TECHNICAL, AND ADULT EDUCATION DISTRICTS IN WISCONSIN

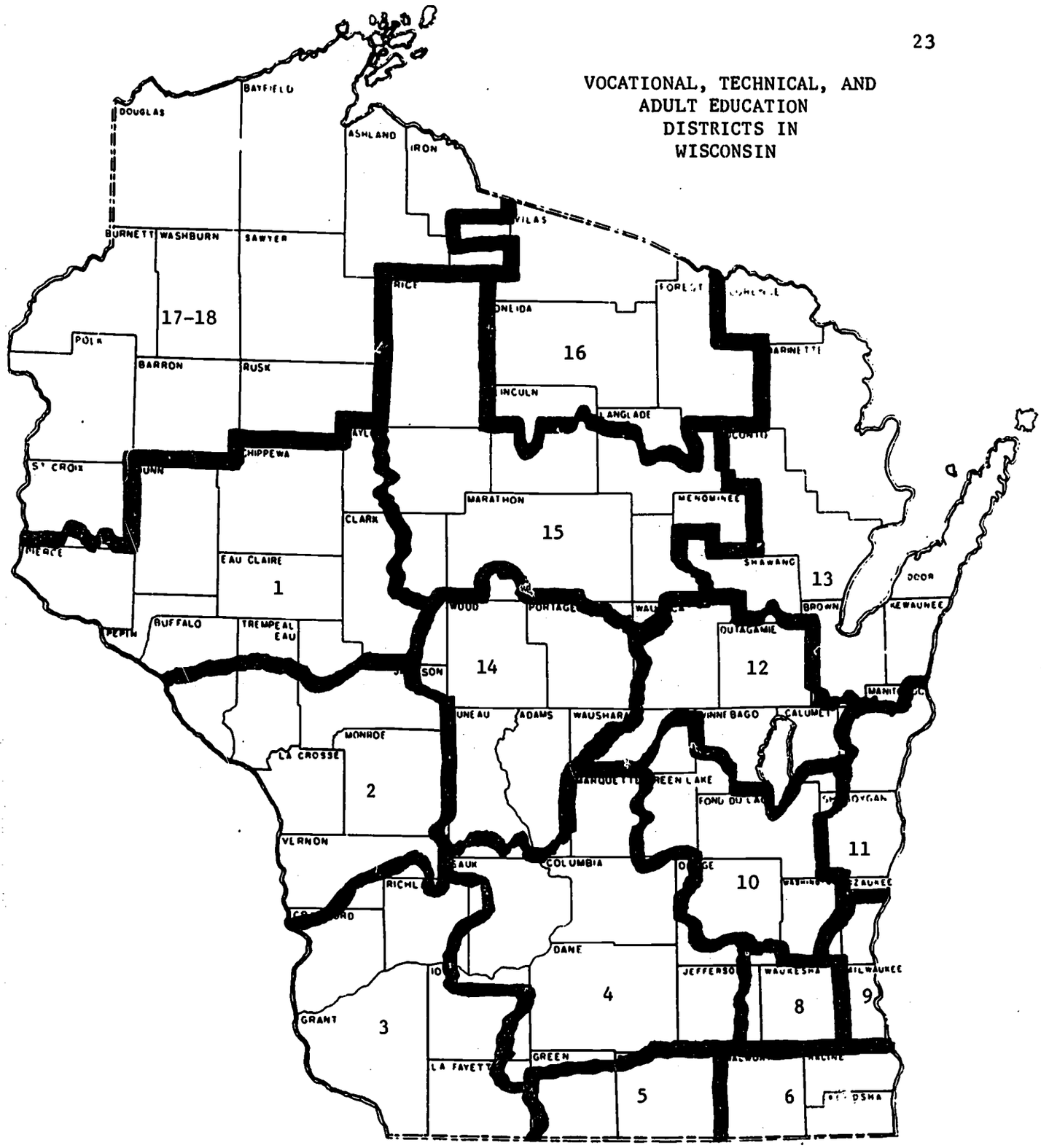
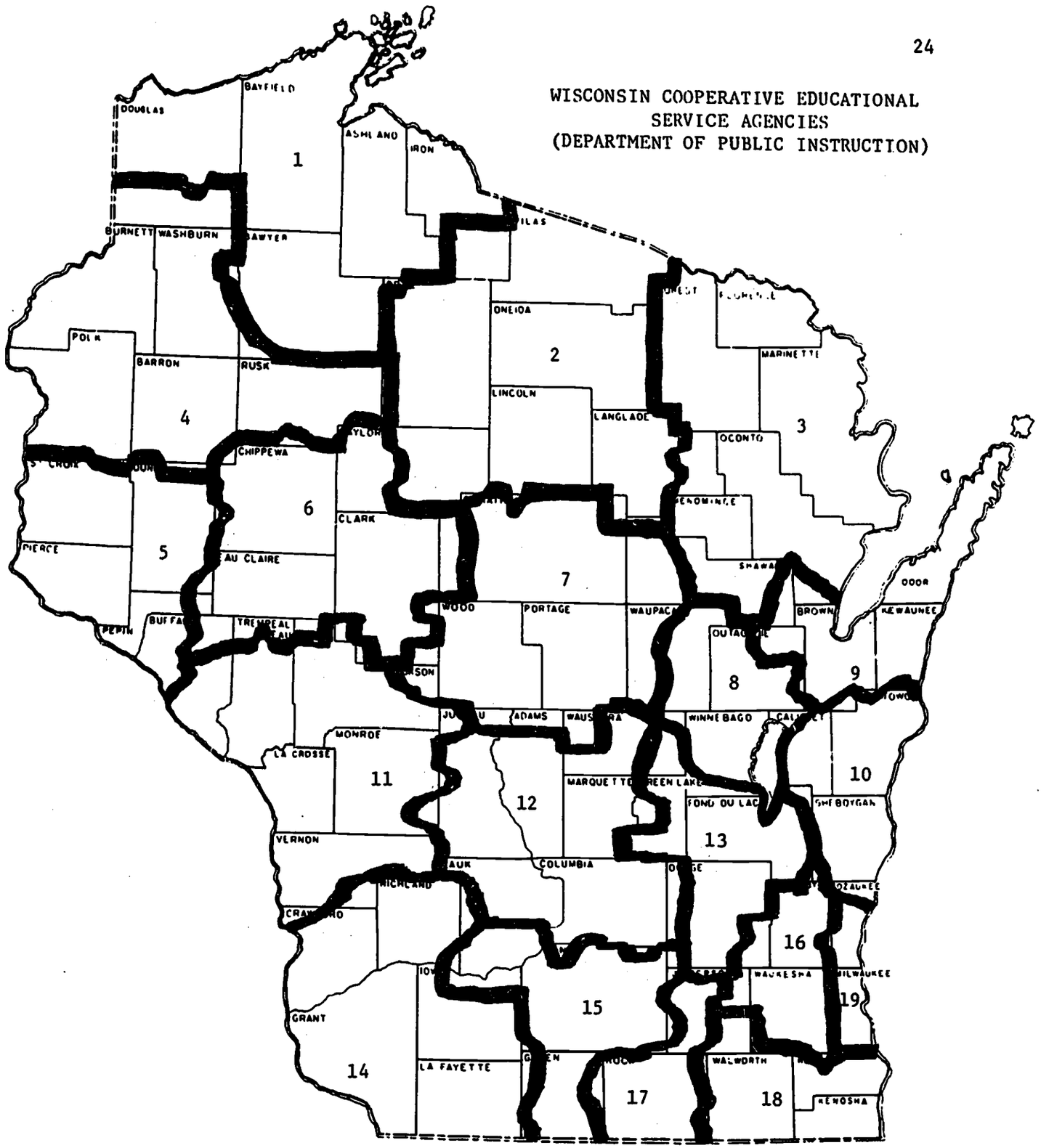


Figure 8

WISCONSIN COOPERATIVE EDUCATIONAL
SERVICE AGENCIES
(DEPARTMENT OF PUBLIC INSTRUCTION)



One is amazed upon inspection of the maps presented in this chapter. Shawano County is served by three VTAE districts as well as three Community Action Agencies. Perhaps such a situation seems trivial, but one can only speculate as to its feasibility when it comes to program development for health-care occupations.

The recent reorganization of the state administrative districts has guided itself toward the right direction. It should be noted that the Wisconsin Hospital Association redistricted recently to follow the districting Areawide Health Planning Agencies. Such actions are commendable, but, as of now, insufficient to offer any solutions to the "Administrative Dilemma".

CHAPTER II

MANPOWER

This section makes no pretention of being a manpower report. It is, however, a concern of this assessment to speak to the benefits and limitations that are involved implicitly in all such projections. One often hears that the Allied Health Profession will be the single largest employer within the next five years. Table III portrays almost a 300% increase in numbers of students in federally-funded Vocational-Technical Education Health programs across the nation during the last five years.[1]

TABLE III

FEDERALLY-FUNDED VOCATIONAL-TECHNICAL EDUCATION HEALTH PROGRAMS
(1965 - 1970)

Program	Numbers Expressed in Thousands					
	FY 1970	FY 1969	FY 1968	FY 1967	FY 1966	FY 1965
Health	198	175	141	115	84	67
Secondary	32	23	21	17	10	9
Post-Secondary	163	92	65	54	36	21
Adult	64	60	55	44	37	37

[1]MANPOWER REPORT OF THE PRESIDENT, transmitted to the Congress, March, 1972, (Washington, D.C.: U.S. Government Printing Office, Stock Number 2900-0145), p. 273.

The Wisconsin State Employment Service calls Medical and Health Services, "the greatest growth industry group among all industries."[2]

There are many agencies--federal, state, district, and local--that have for their responsibility the enumeration of health workers and projection of needs of health workers. The Wisconsin State Advisory Council does not want to add their name to that list, but intelligent program planning relies and depends upon adequate projections of needs and future job placement for graduates of allied health programs.

Manpower reports consist basically of two parts: identification of present health workers by occupation and location; and, the projection of forecasting of additional workers who might be needed in the future. Both of these categories have problems related to them, and this report addresses itself to some of these difficulties.

One might deduce that a manpower forecaster checks current employed health workers, calculates trends, and then predicts with great accuracy how many dental assistants, registered nurses, and health personnel will be needed for the next ten or twenty years. In the State Department of Health and Social Services, the Bureau of Health Statistics exists whose job is similar to this description. A major obstacle to a complete survey is the inability to identify all the health workers in the State of Wisconsin. Hospital surveys tend to identify hospital workers, nursing home surveys tend to identify nursing home workers, and so forth. This approach fails to identify health workers both in clinics and doctors' offices and assumes also that job titles hold sacred for all types of institutions. This is to say that a particular worker with a certain job title in Facility A may bear little relationship to a worker with an identical job title in Facility B. At the

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[2]WISCONSIN MANPOWER PROJECTIONS 1960 - 1968 - 1975, Bureau of Program Development and Research, Wisconsin State Employment Service, A Division of the Department of Industry, Labor, and Human Relations, April, 1970, p. 22.

present time, it is beyond the resources of the Bureau of Health Statistics to account for such variation.

An alternative to the above-mentioned approach is to survey licensing, certifying, and professional organizations to determine the numbers associated with these groups. But again problems are implicit with this method. First of all, not all practitioners belong to these professional organizations. In addition, a number of these organizations feel it is in their best interests to keep their membership lists secret, or at least most difficult to obtain. This policy must be altered in order to go validly on to the second part of manpower reporting, namely, that of projecting future need.

A welcome exception to the rather dismal picture painted in the previous paragraphs must be noted in this report. Through the cooperation of the Bureau of Health Statistics and the Division of Nursing of the Department of Regulation and Licensing, an exhaustive and comprehensive listing of Trained Practical Nurses and Registered Nurses was compiled.[3] This report can only endorse such cooperation and trusts that future joint efforts might result in more reliable data on which new programs might meet the future need.

Even if one were to gain accurate statistics concerning health workers employed at the present time, it is only the first half of manpower reporting. In order to plan adequately for the future, manpower projections are essential. But the problems involved here are even more complex.

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[3]REGISTERED NURSES BY COUNTY OF EMPLOYMENT AND COUNTY OF RESIDENCE, WISCONSIN, 1970 and TRAINED PRACTICAL NURSES BY COUNTY OF EMPLOYMENT AND COUNTY OF RESIDENCE, WISCONSIN, 1970. Data collected by: Department of Regulation and Licensing, Division of Nursing, Data tabulated by Department of Health and Social Services, Division of Health, Bureau of Health Statistics, Section of Statistical Services.

How does one determine "need"? The Bureau of Health Statistics identifies need as "budgeted, unfilled positions." Others would talk about an "adequate health delivery system." This is a value judgment based on some arbitrary ratio such as 157 squirrels per 100,000 peanuts. Although such an example might appear facetious, many manpower projections rely on such judgments. Nowhere does one find a definition of "adequate" related to service needs based upon morbidity and mortality rates of a given population. These ratios fail to take into consideration such things as preventive diagnostics.

Perhaps, more in health than in any other service industry, "need" and "demand" are clouded and confused by interest groups' biases. A given district might have a well-documented need for say twenty doctors, but as long as the money is not present to fund these positions, there is no demand.

> The concept of demand has proved even more troublesome than the concept of supply. Too often, projections have tended to confuse "demand" (the number of jobs that can be financed with current or future funds) with the "need" (the number of persons in a field who will be required to produce a given level or amount of service judged to be desirable). The distinction is between social ideals (what people feel ought to be done) and economic realities (what people are able to pay for).[4]

If one can identify "demand," manpower forecasting has done a great service. The Wisconsin State Advisory Council, however, is of the opinion that the State Vocational System must go beyond "demand" and attempt to deal with "need."

The difficulties involved in such a value judgment are many. This report hopes to demonstrate some of these while not pretending to offer concrete solutions. Reference was made earlier to a survey

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[4]John K. Folger, Helen S. Astin, and Alan E. Bayer, HUMAN RESOURCES AND HIGHER EDUCATION, (New York: Russell Sage Foundation, 1970), p. 29.

concerning registered and trained practical nurses in the State of Wisconsin.[5] Table IV enumerates the numbers of these nurses by county of employment along with the population for each county.[6] Table V demonstrates for each county the proportion of these nurses to the population along with an "Index of Ruralness" attributed to the counties by the 1970 Census Report. Figures 9-13 represent graphically the data for the entire state.

TABLE IV

POPULATION OF COUNTIES AND DISTRIBUTION OF L.P.N.'S AND R.N.'S IN COUNTIES OF THE STATE OF WISCONSIN

County	Number of LPN's Employed in County	Number of RN's Employed in County	Population of County
Adams	6	14	9,234
Ashland	28	77	16,743
Barron	28	96	33,955
Bayfield	5	21	11,683
Brown	293	669	158,244
Buffalo	3	23	13,743
Burnett	8	14	9,276
Calumet	21	39	27,604
Chippewa	47	176	47,717
Clark	13	52	30,361
Columbia	61	117	40,150
Crawford	14	48	15,252
Dane	512	2,079	290,272
Dodge	78	187	69,004

[5] cf. 3.

[6] ADVANCE REPORT ON 1970 CENSUS OF POPULATION IN WISCONSIN, Document No. BSP-IS-71-1(3), Prepared by: State of Wisconsin, Department of Administration, Bureau of State Planning, Information Systems Section, Madison, Wisconsin, January, 1971.

TABLE IV (cont'd.)

POPULATION OF COUNTIES AND DISTRIBUTION OF L.P.N.'S AND R.N.'S IN COUNTIES OF THE STATE OF WISCONSIN

County	Number of LPN's Employed in County	Number of RN's Employed in County	Population of County
Door	14	49	20,106
Douglas	237	142	44,657
Dunn	18	64	29,154
Eau Claire	90	435	67,219
Florence	0	2	3,298
Fond du Lac	190	368	84,567
Forest	4	13	7,691
Grant	39	159	48,398
Green	22	139	26,714
Green Lake	13	39	16,878
Iowa	10	49	19,306
Iron	3	7	6,533
Jackson	12	43	15,325
Jefferson	77	195	60,060
Juneau	8	33	18,455
Kenosha	372	343	117,917
Kewaunee	12	36	18,961
LaCrosse	223	592	80,468
Lafayette	2	22	17,456
Langlade	10	56	19,220
Lincoln	12	75	23,499
Manitowoc	75	308	82,294
Marathon	33	333	97,457
Marinette	43	81	35,810
Marquette	5	7	8,865
Menomonee	0	3	2,607
Milwaukee	1,766	5,078	1,054,063
Monroe	39	132	31,610
Oconto	29	54	25,553
Oneida	18	94	24,427

TABLE IV (cont'd.)

POPULATION OF COUNTIES AND DISTRIBUTION OF L.P.N.'S AND R.N.'S IN COUNTIES OF THE STATE OF WISCONSIN

County	Number of LPN's Employed in County	Number of RN's Employed in County	Population of County
Outagamie	141	379	119,356
Ozaukee	22	92	54,421
Pepin	6	17	7,319
Polk	34	85	26,666
Portage	38	136	47,541
Price	11	35	14,520
Racine	270	610	170,838
Richland	9	47	17,079
Rock	91	480	131,970
Rusk	12	51	14,238
St. Croix	38	101	34,354
Sauk	35	150	39,057
Sawyer	12	28	9,670
Shawano	27	59	32,650
Sheboygan	103	367	96,660
Taylor	5	38	16,958
Trempealeau	21	73	23,344
Vernon	13	63	24,557
Vilas	6	39	10,958
Walworth	24	163	63,444
Washburn	11	33	10,601
Washington	43	153	63,839
Waukesha	242	740	231,365
Waupaca	29	130	37,780
Waushara	4	31	14,795
Winnebago	280	652	129,931
Wood	67	379	65,362
State Totals	6,101	17,755	4,417,731

TABLE V

RATIOS OF L.P.N.'S AND R.N.'S PER POPULATION IN WISCONSIN'S COUNTIES AND INDEX OF RURALNESS BY COUNTIES

County	1 LPN per Population	1 RN per Population	Index of Ruralness
Adams	1,539	660	100.0%
Ashland	598	217	42.6
Barron	1,213	354	78.6
Bayfield	2,817	556	100.0
Brown	540	237	18.4
Buffalo	4,581	598	100.0
Burnett	1,160	663	100.0
Calumet	1,314	708	55.3
Chippewa	1,015	271	65.5
Clark	2,335	584	90.0
Columbia	658	343	71.1
Crawford	1,089	318	63.7
Dane	567	140	22.8
Dodge	885	369	54.2
Door	1,436	410	66.3
Douglas	188	314	26.7
Dunn	1,620	456	61.3
Eau Claire	747	155	30.8
Florence	---*	1,649	100.0
Fond du Lac	445	230	42.9
Forest	1,923	592	100.0
Grant	1,241	304	67.2
Green	1,214	192	58.2
Green Lake	1,298	433	68.6
Iowa	1,931	394	83.1
Iron	2,178	933	100.0
Jackson	1,277	356	78.6
Jefferson	780	308	47.8
Juneau	2,307	559	81.2
Kenosha	317	344	28.5
Kewanee	1,580	527	63.5
LaCrosse	361	136	25.1
Lafayette	8,728	793	100.0
Langlade	1,922	343	53.1
Lincoln	1,958	180	45.0
Manitowoc	1,097	267	39.8

* Ratio cannot be computed since this county does not employ any LPN's.

TABLE V (con't.)

RATIOS OF L.P.N.'S AND R.N.'S PER POPULATION IN WISCONSIN'S COUNTIES AND INDEX OF RURALNESS BY COUNTIES

County	1 LPN per Population	1 RN per Population	Index of Ruralness
Marathon	2,953	293	50.4
Marinette	810	430	56.6
Marquette	1,773	1,266	100.0
Menomonee	---*	869	100.0
Milwaukee	597	208	00.0
Monroe	811	239	62.3
Oconto	881	473	71.9
Oneida	1,357	260	66.4
Outagamie	846	315	31.4
Ozaukee	2,474	592	32.5
Pepin	1,220	431	100.0
Pierce	1,904	444	76.6
Polk	784	314	100.0
Portage	1,251	350	50.6
Price	1,320	415	79.7
Racine	633	280	23.9
Richland	1,898	363	70.2
Rock	1,450	275	25.1
Rusk	1,187	279	74.2
St. Croix	904	340	71.6
Sauk	1,116	260	68.0
Sawyer	806	345	100.0
Shawano	1,209	553	80.1
Sheboygan	938	263	39.9
Taylor	3,392	446	79.6
Trempealeau	1,112	320	100.0
Vernon	1,889	390	84.8
Vilas	1,826	281	100.0
Walworth	2,644	389	61.3
Washburn	964	321	100.0
Washington	1,485	417	53.0
Waukesha	956	313	19.8
Waupaca	1,303	291	64.6
Waushara	3,699	477	99.7
Winnebago	464	199	21.8
Wood	976	172	47.8

* Ratio cannot be computed since this county does not employ any LPN's.

Figure 9

POPULATION OF COUNTIES AND DISTRIBUTION OF LPN'S AND RN'S IN COUNTIES IN THE STATE OF WISCONSIN

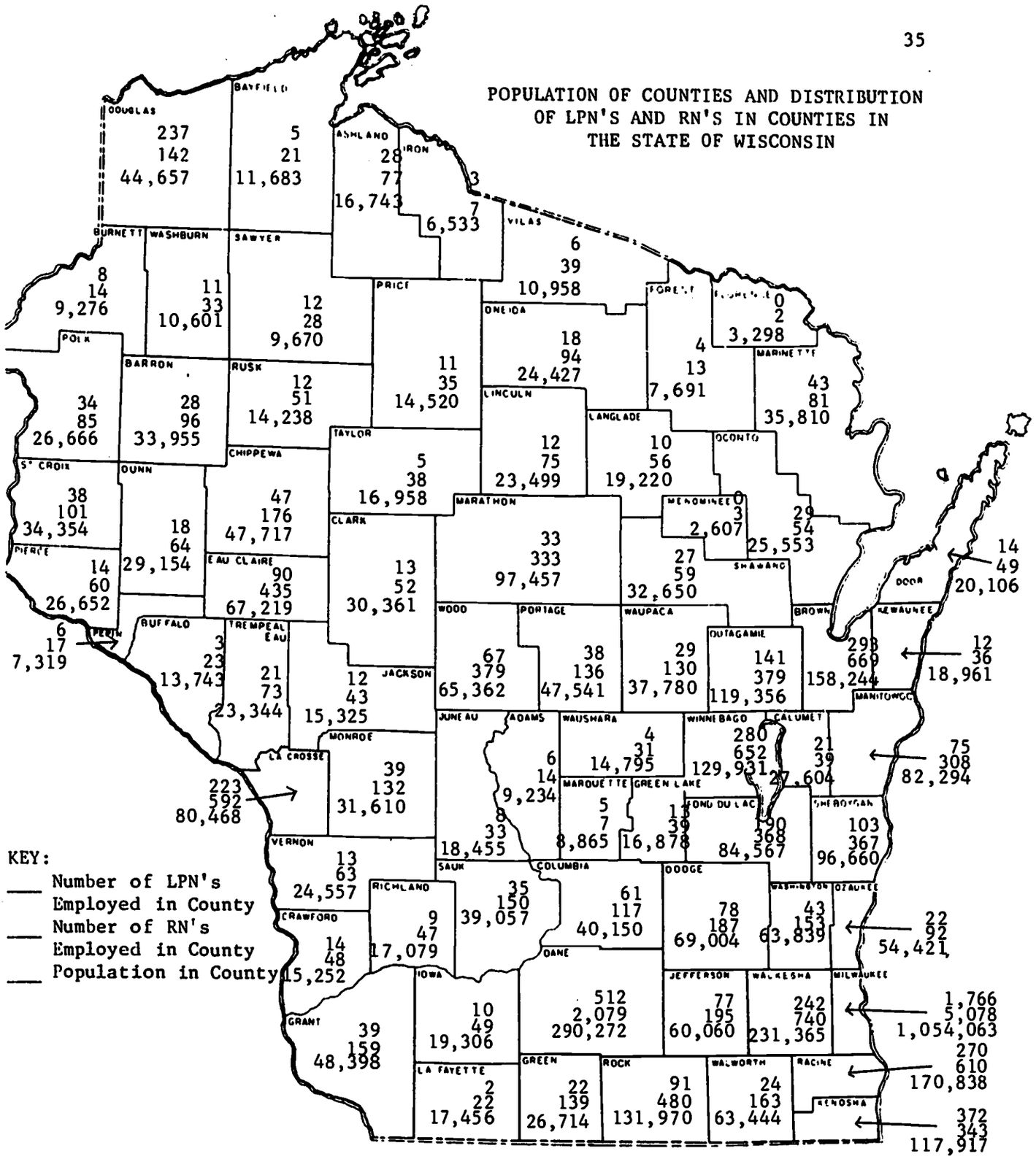
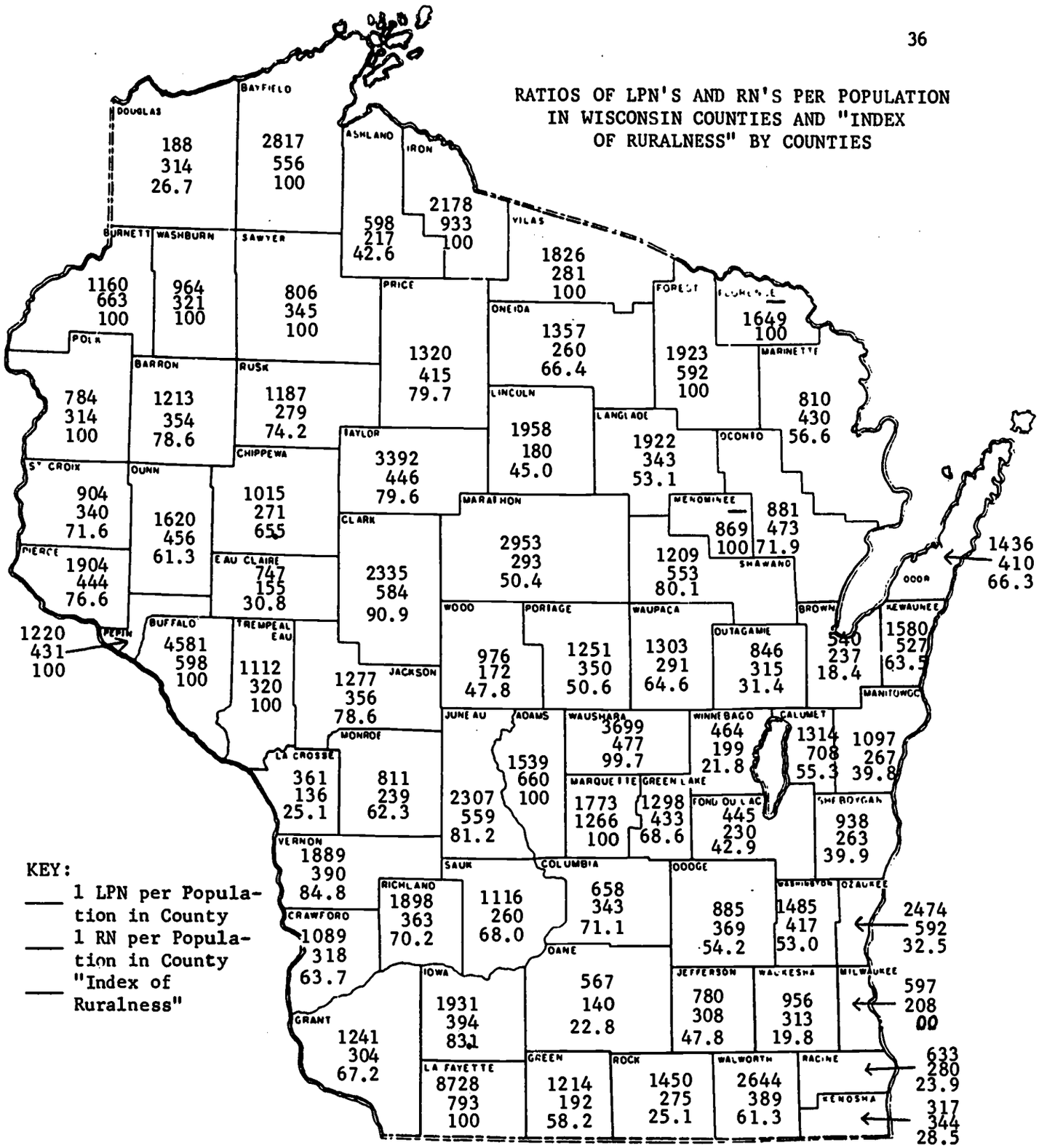


Figure 10

RATIOS OF LPN'S AND RN'S PER POPULATION IN WISCONSIN COUNTIES AND "INDEX OF RURALNESS" BY COUNTIES



KEY:

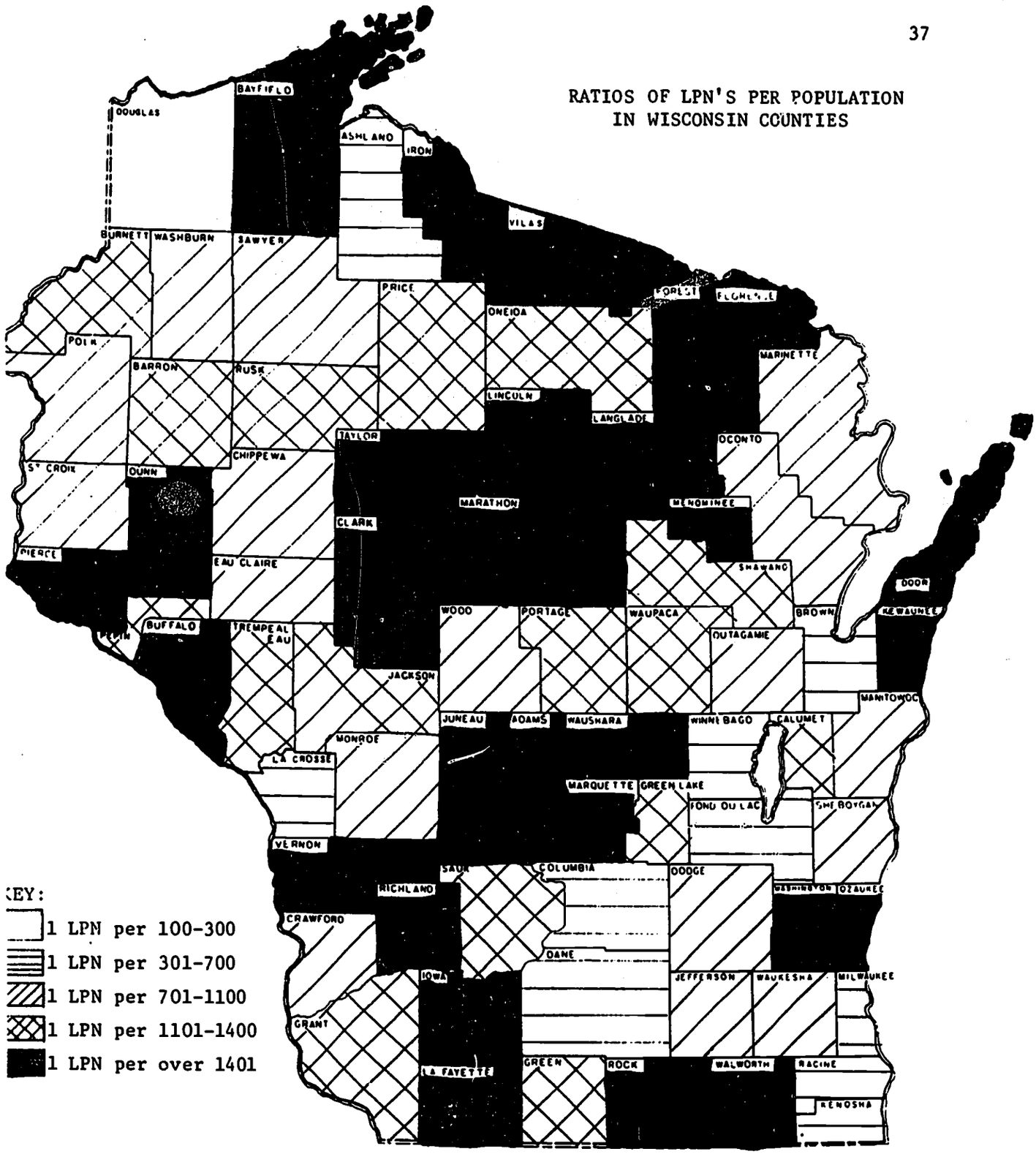
___ 1 LPN per Population in County

___ 1 RN per Population in County

___ "Index of Ruralness"

Figure 11

RATIOS OF LPN'S PER POPULATION
IN WISCONSIN COUNTIES



KEY:

- 1 LPN per 100-300
- 1 LPN per 301-700
- 1 LPN per 701-1100
- 1 LPN per 1101-1400
- 1 LPN per over 1401

Figure 12

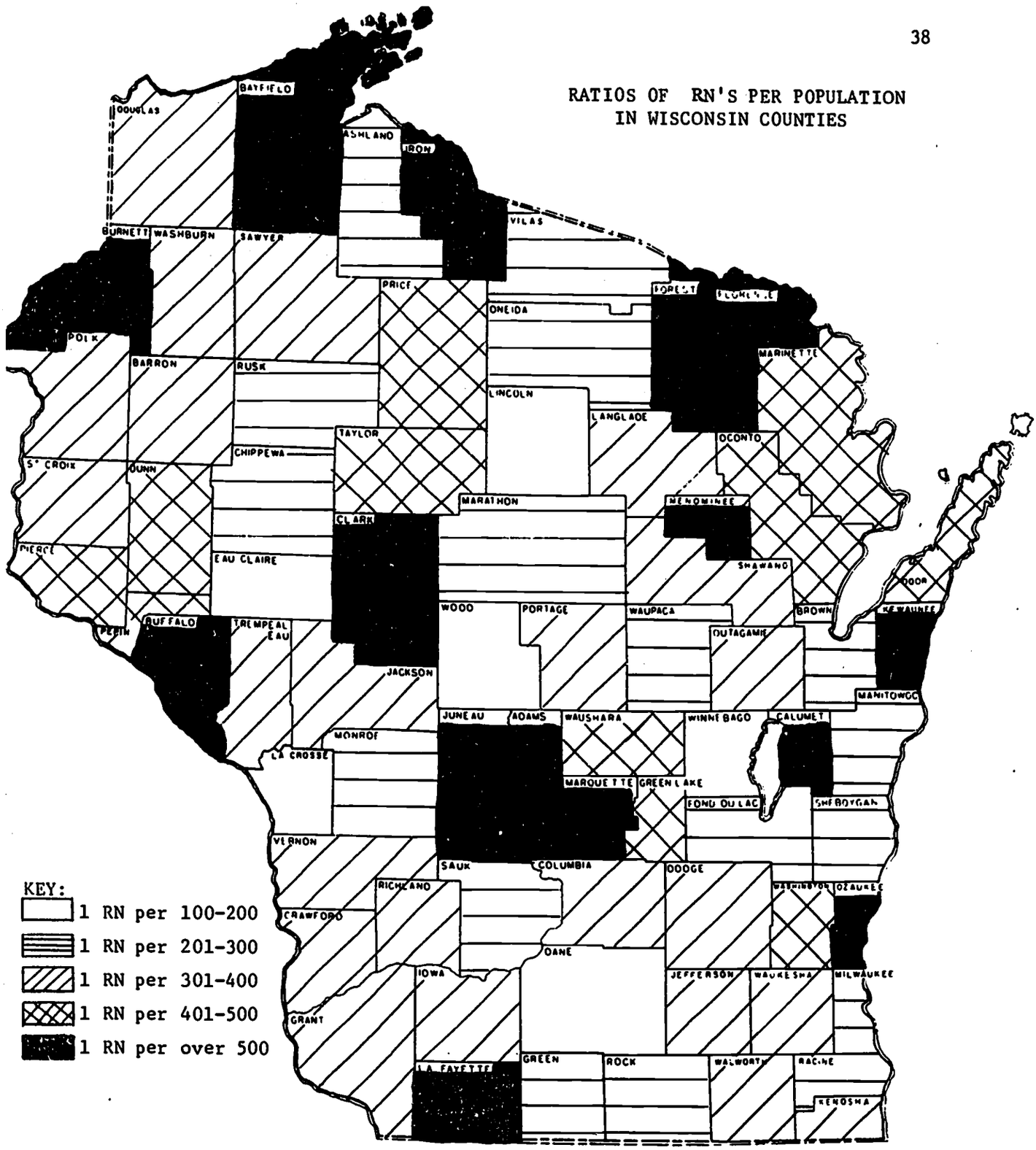
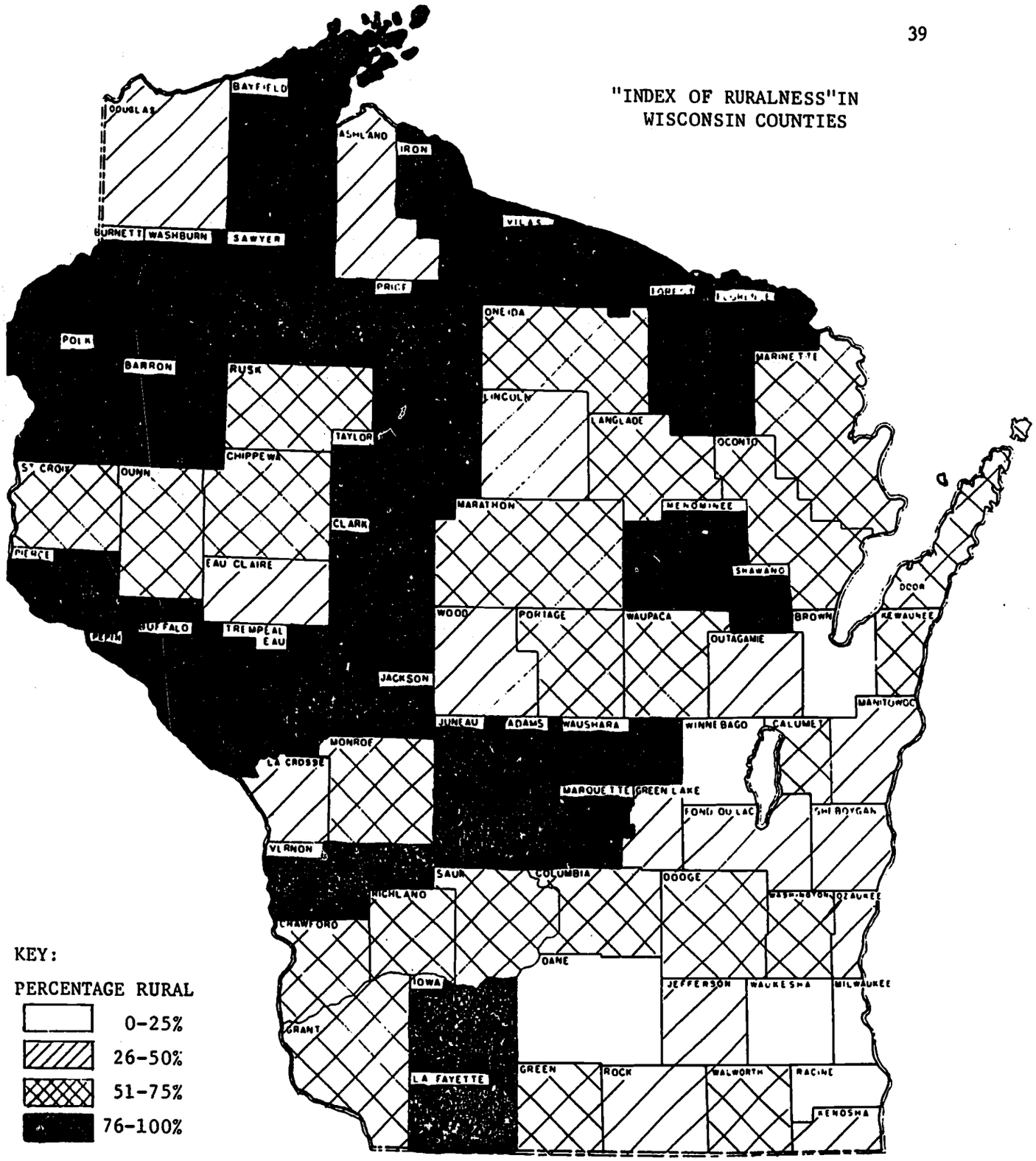

RATIOS OF RN'S PER POPULATION
IN WISCONSIN COUNTIES
KEY:
1 RN per 100-200
1 RN per 201-300
1 RN per 301-400
1 RN per 401-500
1 RN per over 500
DOUGLAS
BAYFIELD
ASHLAND
IRON
VILAS
BURNETT
WASHBURN
SAWYER
PRICE
FOREST
FLORENCE
ONEIDA
POLK
BARRON
RUSK
MARINETTE
LINCOLN
LANGLADE
TAYLOR
OCONTO
ST CROIX
DUNN
CHIPPEWA
MARATHON
MENOMINEE
CLARK
PIERCE
EAU CLAIRE
SHAWANO
DOOR
WOOD
PORTAGE
WAUPACA
BROWN
KEWAUNEE
PEPIN
BUFFALO
TREMPEALEAU
OUTAGAMIE
JACKSON
MANITOWOC
JUNEAU
ADAMS
WAUSHARA
WINNEBAGO
CALUMET
MONROE
LA CROSSE
MARQUETTE
GREEN LAKE
FOND DU LAC
SHEBOYGAN
VERNON
SAUK
COLUMBIA
DODGE
RICHLAND
WASHINGTON
OZAUKEE
CRAWFORD
DANE
IOWA
JEFFERSON
WAUKESHA
MILWAUKEE
GRANT
LAFAYETTE
GREEN
ROCK
WALWORTH
RACINE
KENOSHA

Figure 13

"INDEX OF RURALNESS" IN
WISCONSIN COUNTIES



KEY:

PERCENTAGE RURAL

- 0-25%
- 26-50%
- 51-75%
- 76-100%

These data were gathered from reliable sources and compilations were made with care. The maps and tables represent a disparity among numbers of nurses as they are distributed throughout the state. But does such information substantiate the claim that some areas are in "need" of nurses? Columns 1 and 2 were correlated with column 3 in Table V. A correlation analysis determined a significant positive correlation of .45 and .55 respectively between the number of nurses per population and the rurality index.

Critics of the above approach would say one cannot only focus on nurses. Professionals and other allied health occupations must be taken into consideration in order to examine the total picture of the health delivery system.

	LPN	RN
Rurality Index	.45	.55

The above data have not been presented to "prove" that a shortage of nurses exists. Perhaps such a distribution does more to provide adequate health care to the residents of the State of Wisconsin than any other distribution. Disparity in numbers cannot be taken as proof that such a shortage exists. While agreeing with the perception that the total picture is a valid goal to be sought, it is a contention that all too often the "total picture" approach is slanted too easily by some groups in the state eager to look after their own self-interests.

Using the above example, there is a great disparity in the distribution of nurses in Wisconsin. A sufficient correlation exists to state that the more rural areas of the state have less nurses per population than do the urban areas. The question remains, however, can one attack the value judgment to these statistics to state there is a shortage of nurses in the rural areas of the state? Many other intervening factors enter into this decision, some economical, others political,

still others philosophical, or the "social ideals" mentioned previously.[7] How does one take into consideration "crisis" medicine where severe cases are exported to larger, urban hospitals?

The nursing situation has been presented because, as was stated previously, more is known at this time about nurses than any other allied health worker group. Other extraneous factors such as wealth and location of nursing schools could influence the distribution of nurses throughout Wisconsin. Nursing, then, has been presented to display the problem of manpower projections. It is an art and a science; both contribute to its difficulty. But effort in this area cannot be stifled because of the difficulty involved.

Difficulties in the technique are not the only problems in manpower forecasting. Unexpected events are a fact of life; no one should realize this more than the health professional. Some new concepts on the horizon dictate action with which even the best manpower projections could not cope.

"Career mobility" has been advanced as a practical solution to the problems presented in health manpower. The March, 1972, MANPOWER REPORT OF THE PRESIDENT states:

> To meet the growing requirements for allied and supporting personnel expected in the 1970's, it will also be necessary to re-evaluate and probably revise current State licensure, registration, and certification laws which hamper the upward mobility and the effective use of such personnel. Recent research underlines the lack of flexibility in present licensing standards for health workers, particularly with respect to the substitution of experience for education. This makes it very difficult for lower echelon workers, no matter how competent, to climb the occupational ladder. Thus, to become an RN a licensed practical nurse generally has to discount completely her experiences and training and go through the same training

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[7] Op. cit., Talger, Astin and Bayer, p. 29.

> course as is required for a totally inexperienced person. Several programs formed for the sole purpose of providing the additional education licensed practical nurses need to become RN's have been deluged with applications.[8]

All concerned with Allied Health Occupation Education should make "career mobility" a high priority in Wisconsin.

Responsive, reliable manpower forecasting is a continual necessity. It cannot and should not be done for the sake of "protecting" a given profession or occupation. This is not to imply that manpower projections will mean instant success for the educational planner. Experts state that future events such as National Health Insurance might alter radically the present health delivery system. Technological developments in chemotherapy might do likewise. The continued emphasis on "preventive" medicine as opposed to "acute care" medicine has drastic implications for manpower projections. Peculiar demographic characteristics in Wisconsin such as an increase in vacationers could indicate a developing need for emergency service for cardiac condition, acute gall bladder, and accidents. Such developments are not posed as insurmountable restraints to manpower forecasting in the area of health occupations. It is suggested that continued research, cooperative in nature, be undertaken by the responsible agencies so the best possible health services are available for the citizens of Wisconsin.

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[8]Op. cit., MANPOWER REPORT OF THE PRESIDENT, p. 137.

CHAPTER III

RURAL HEALTH SURVEY

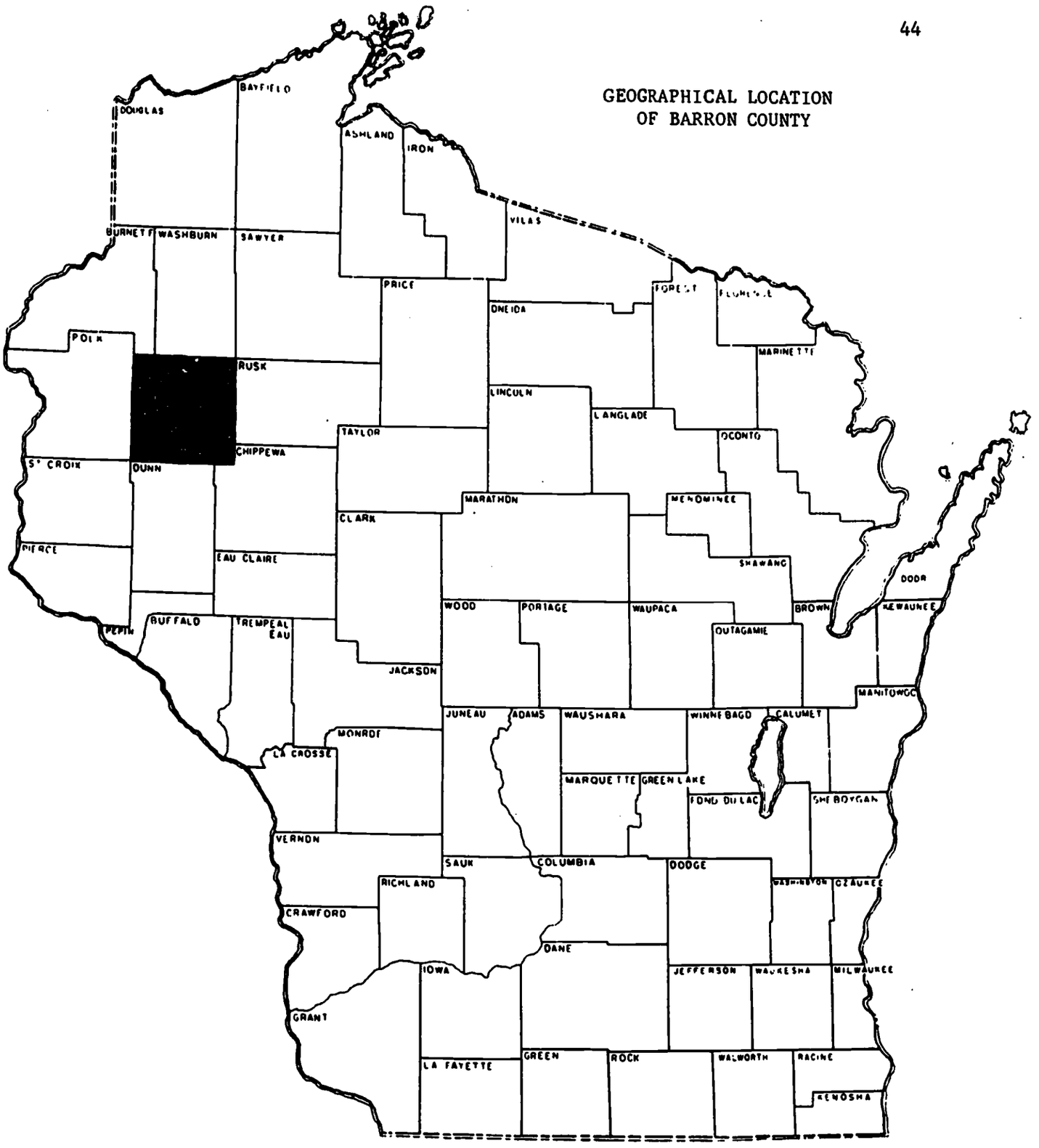
The provision of adequate health manpower to meet the health needs of rural areas precipitates the urgency to evaluate present and emerging health situations in rural areas. A relationship exists between the health manpower need and the opportunities available for health occupations' training for residents in a rural area. In an effort to assess realistically the factors related to health services and training in a rural area, Barron County was selected for an intensive review of health services, health manpower, and health education needs. While the design for collecting the data for the Barron County does not allow for statistical generalizations to all rural areas, it can be assumed that a certain degree of commonality exists between the Barron County data and other counties with similar district character.

Geographical and Demographic Data of Barron County

Barron County is a rural northwestern Wisconsin county located in the center of the area known as Indianhead Country. The area is approximately 30 miles square and contains 866 square miles devoted chiefly to agriculture, forestry, and recreation. Figure 14 depicts the location of Barron County and its position relative to the outlying counties. The county is representative of other counties in many northern, western, and south-western sections of the State of Wisconsin.

Population trends are important factors to consider in the projection of future health manpower needs. The Barron County Overall Economic Development Plan, 1972, reported some statistics that are of prime significance to health occupations' program planning. According to the Overall Economic Development Plan Report, the population in Barron County is decreasing slowly with a 2.2 percent decrease from 1950 to 1970. Table VI gives visibility to the population trend. Predictions are that

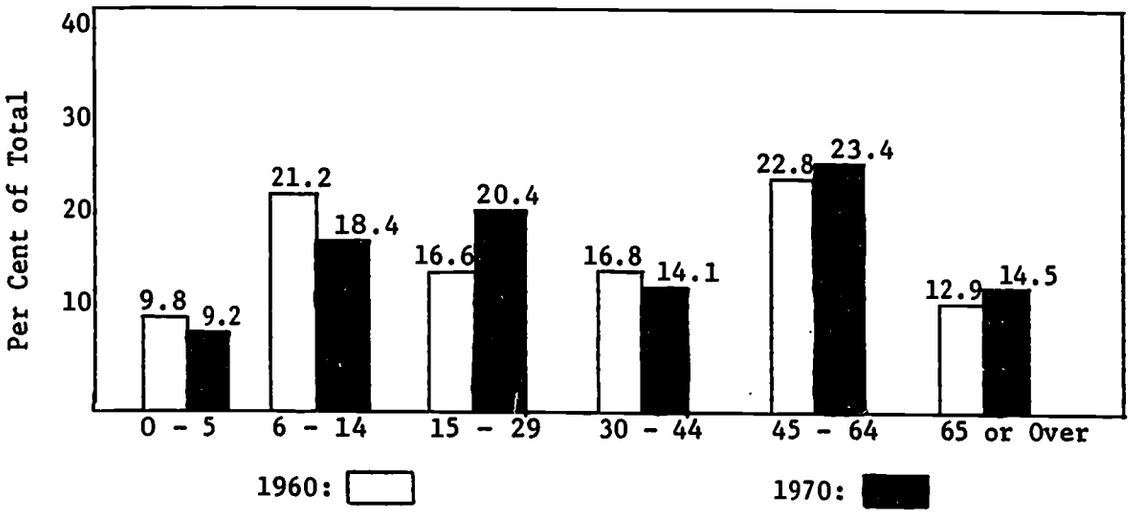
Figure 14


GEOGRAPHICAL LOCATION
OF BARRON COUNTY
DOUGLAS
BAYFIELD
ASHLAND
IRON
VILAS
BURNETT
WASHBURN
SAWYER
PRICE
ONEIDA
FOREST
FLORENCE
MARINETTE
POLK
BARRON
RUSK
LINCOLN
LANGLADE
OCONTO
TAYLOR
CHIPPEWA
ST CROIX
DUNN
MARATHON
MENOMINEE
CLARK
PIERCE
EAU CLAIRE
SHAWANO
DOOR
WOOD
PORTAGE
WAUPACA
BROWN
KEWAUNEE
PEPIN
BUFFALO
TREMPEALEAU
OUTAGAMIE
JACKSON
MANITOWOC
JUNEAU
ADAMS
WAUSHARA
WINNEBAGO
CALUMET
MONROE
LA CROSSE
MARQUETTE
GREEN LAKE
FOND DU LAC
SHEBOYGAN
VERNON
SAUK
COLUMBIA
DODGE
RICHLAND
CRAWFORD
DANE
IOWA
JEFFERSON
WAUKESHA
MILWAUKEE
GRANT
LA FAYETTE
GREEN
ROCK
WALWORTH
RACINE
KENOSHA

this trend will level off around 1990 to a stable population of approximately 32,300. The Overall Economic Development Plan indicated further that urban population increased around 380 over the 1950 - 70 interim while rural population decreased by 1,123 during this same period. A dramatic decrease in live births has been calculated as 906 in 1950 to 500 in 1969. Table VI indicates also an increase in population groups aged 0 - 14 and 45 - 65. A decrease in the work force available in the county is evident in the graphical representation of the 15 - 45 age group.

TABLE VI

AGE GROUPS OF POPULATION IN BARRON COUNTY



The planning of present and future health services and training programs in Barron County must take into account the preponderence of the very young and the aging in the population. Both jobs and training opportunities in health occupations may decrease the out-migration of young and middle-aged adults.

Another contributory factor to consider in assessing manpower needs and planning health occupations' programs is the income level of the residents in the selected district. Table VII charts the 1970 family incomes for the residents in Barron County.

TABLE VII

1970 FAMILY INCOME FOR RESIDENTS IN BARRON COUNTY

INCOME*	NO. OF FAMILIES	PERCENT OF ALL FAMILIES
0 - 999	1,552	12.7%
1,000 - 1,999	1,765	14.5%
2,000 - 2,999	1,316	10.8%
3,000 - 3,999	1,009	8.3%
4,000 - 4,999	860	7.1%
5,000 - 5,999	773	6.3%
6,000 - 6,999	826	6.8%
7,000 - 7,999	749	6.2%
8,000 - 8,999	657	5.4%
9,000 - 9,999	528	4.3%
10,000 - Over	2,157	17.6%
	12,192	100.0%

* Data obtained from Barron County Overall Economic Development Plan, 1972

The data regarding income levels indicate that 38 percent of the 12,192 families in Barron County had annual incomes of less than $3,000 in 1970; an additional 15.4 percent of the families had incomes ranging from $3,000 to $5,000. More than half of the Barron County families (53.4 percent) had incomes below $5,000 in 1970.

The family income figures reported in the Madison Capital Times, July 17, 1972, serve as a thought-provoking comparison to the Barron County figures cited above. The United States Census Bureau Labor Statistics reported that 51.7 percent of United State's family incomes

exceeded $10,000 in 1971. In Barron County, not only were 53 percent of the family incomes below $5,000 but only 17.6 percent of the families received an annual income of $10,000 or above. This would indicate that this rural county in 1970 was generally more economically depressed than the average district in the United States. No significant industrial or other change has been predicted that would indicate a significant increase in family income in 1971 or for the immediate future.

Survey of Health Facilities and Services

The Barron County health survey was conducted in June, 1972. A survey instrument was prepared as a guide to give direction to the data discussed during personal visits to all of the county's health agencies. The instrument is located in Appendix B. Interviews were scheduled with twenty administrators of health agencies and other key people involved in health care and training in Barron County. Some information was collected via telephone discussions. The data collected during these interviews provide the basic thrust of the three sections of the following report: health facilities and services; manpower; and, health education needs.

Hospitals and Nursing Homes

Figure 15 locates the availability of hospitals and nursing homes in Barron County. There are 11 hospitals and nursing homes in Barron County: 1 hospital, 2 hospital-nursing homes, and 8 nursing homes. Two of the nursing homes are personal care homes; 8 nursing homes, including the 2 associated with hospitals, are skilled care homes. One of the hospital-based nursing homes is an approved extended care facility. The largest health agency which is a combined hospital-nursing home, has a bed capacity of 101 beds. Other health agencies range downward in size to the smallest, namely, a nursing home with 17 beds.

Figure 15

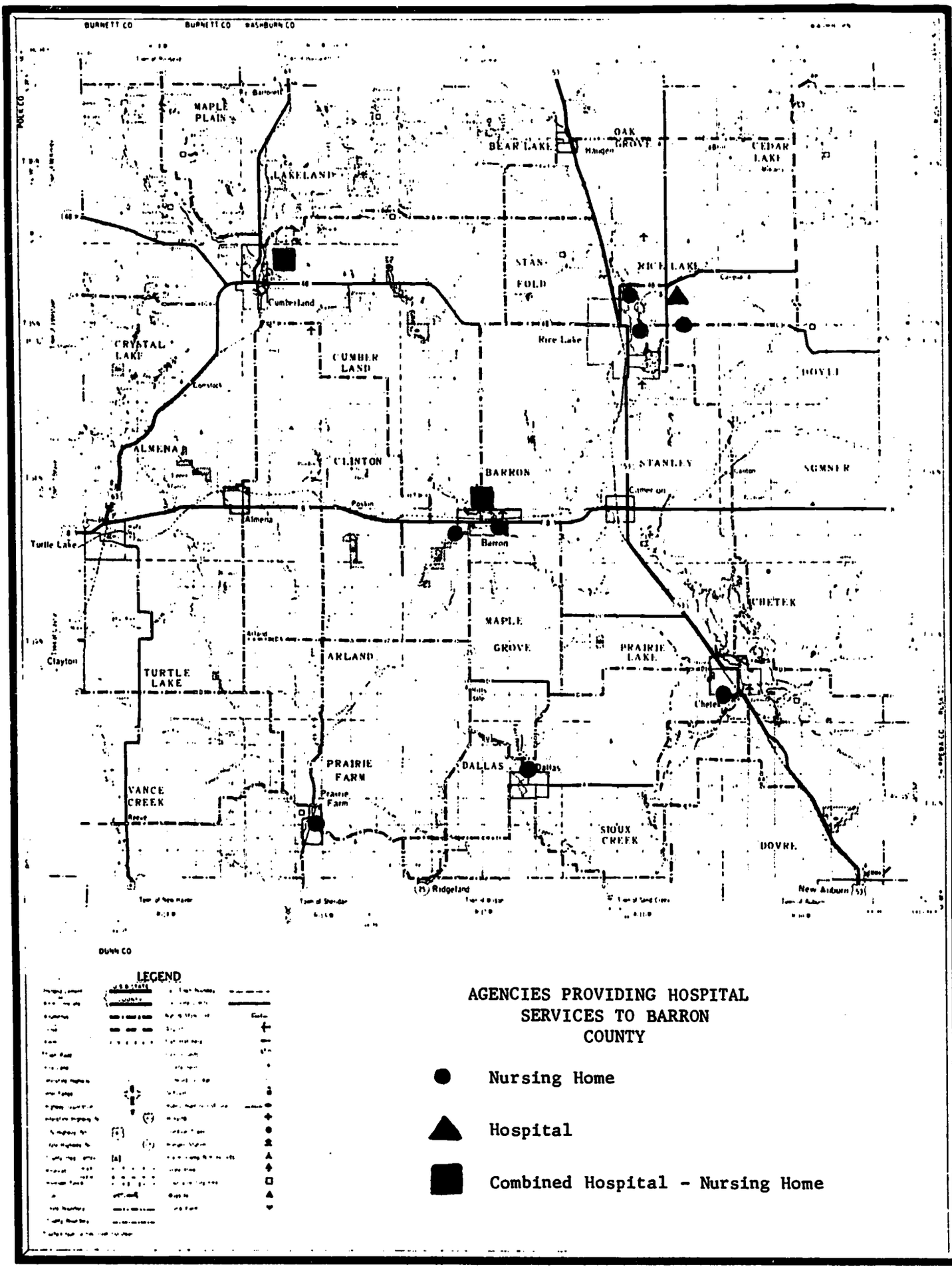

BURNETT CO
BURNETT CO
WASHBURN CO
MAPLE PLAIN
LAKELAND
BEAR LAKE
OAK GROVE
CEDAR LAKE
STANFOLD
RICE LAKE
Cumberland
CRYSTAL LAKE
CUMBERLAND
Rice Lake
DOVRE
ALMENA
CLINTON
BARRON
ST. STANLEY
SUMNER
Almena
Barron
Turtle Lake
CHETEK
MAPLE GROVE
Clayton
ARLAND
PRAIRIE LAKE
TURTLE LAKE
Chetek
PRAIRIE FARM
DALLAS
Prairie Farm
Dallas
VANCE CREEK
SIOUX CREEK
DOVRE
Ridgeland
New Auburn
DUNN CO
LEGEND
AGENCIES PROVIDING HOSPITAL SERVICES TO BARRON COUNTY
Nursing Home
Hospital
Combined Hospital - Nursing Home

Table VIII enumerates the existing health facilities in Barron County.

TABLE VIII

EXISTING HEALTH FACILITIES IN BARRON COUNTY

	No. of Facilities	Med.-Surg. Beds	Pediatric	Obstetric	Cardiac Intensive Care	Total Hospital Beds
Hospitals	3	115	8	14	3	140

	No. of Facilities	Personal Care	Skilled Care	Total Nursing Home Beds
Nursing Homes	10	51	490	541

Grand Total of Hospital & Nursing Home Beds
681

Hospital services are provided for Barron County residents by three agencies. The three agencies have a capacity of 140 beds: 115 are general medical-surgical; 8 are pediatric; 14 are obstetric; and, 3 are cardiac intensive care beds. Occupancy rates for these three agencies vary from 68 percent to 90 percent for the medical surgical beds but decrease to 25 percent and 50 percent for the obstetric beds. Occupancy rates are related directly to the hospital's active medical staff. The lowest rate was reported by the hospital which lost doctors' services due to retirement and poor health. Replacement recruitment has been in progress for the past six months.

There are ten nursing homes in Barron County; two of these are associated with hospitals. These agencies provide a total capacity of 541 beds for nursing home care: 51 beds for personal care; and, 490 for skilled care. One skilled care home of twenty-two beds will be closing in the summer of 1972. Reasons stated were related to problems in completing nursing home administrator licensure requirements and renovations necessary to meet physical plant licensure standards. The occupancy rates of the nursing homes range from 78 percent to 100 percent with a 90 - 100 percent range for six of the ten nursing homes.

Three agencies reported plans for building or remodeling. Cumberland Hospital has scheduled remodeling of the dietary area. Barron Hospital has planned renovations including sprinkling system, fire barriers, and smoke controls. Lakeside Methodist Hospital at Rice Lake has planned major construction to begin this year which will include service area expansion. Two new doctors' clinics are in planning stages. The Barron and Cumberland Hospitals reported plans for expanded clinics to be built adjacent to the present hospital facility.

Psychiatric Care

Out-patient psychiatric care is provided for Barron County residents by Northern Pines Guidance Clinic. The clinic serves four other counties. In addition to mental health care, the clinic offers consultation services to other agencies and community education as part of a prevention service. For acute psychiatric care, patients are referred to St. Croix County Hospital, Dunn County Hospital, and the psychiatric units in Eau Claire, or Twin City Hospitals.

Dental Health Service

Dental health services in the county are provided by twenty dentists and one orthodontist. The nearest additional orthodontist services are available in Superior, Eau Claire, Marshfield, and the Twin Cities.

Public Health Service

Barron County Public Health services include consultation visits with referrals for services, immunization clinics, hearing and vision screening for schools, and educational programs for nursing personnel and the public. A Home Nursing Care program has been developed to provide direct home care and education for the patient and the patient's family. There have been a limited number of visits to hospital and nursing home patients and their families to facilitate continuity of care after discharge.

The public health service in the spring of 1972 included coordination of the Division of Health Multiphasic Health Screening Mobile throughout the county. A concentrated effort to reach all county residents for screening was made. Examination reports were mailed to residents and their physicians. The public health nurses were informed of these reports and assumed responsibility for visits to residents to encourage further diagnosis and treatment.

Additional health services, outside the health agencies, are provided by 6 optometrists, 7 chiropractors, and 21 pharmacists.* Emergency ambulance services are provided by each of the three hospitals and by two fire departments in the southern part of the county. In addition, members of the county sheriffs' staff and local police departments provide emergency care at accident scenes.

A rural health program is sponsored by West Cap, the West Central Wisconsin Community Action Program. It operates two mobile health units. Barron County is served as part of a seven county effort designed to locate and serve health needs of the poverty level population. One unit provides health screening including vision, hearing, blood pressure, blood and urine, as well as health education; the other unit offers dental care and education. Many referrals are made from the screening bus

* Health Manpower by County - Wisconsin 1967-70 Bureau of the Statistics.

to area doctors with provision for care and services such as eyeglasses and prescription refills. The particular emphasis at the present time is the provision of Family Planning Services which include health examinations by physicians, surgical prodedures, and contraceptive devices. Service to twenty-eight alcoholics has been provided. Financial assistance was given to support the care of eight alcoholics who were treated at Douglas County Hospital.

Screening and referral are considered major contributions of the West Cap Mobile Health Unit. Doctors reported that referral patients are often not new to them. They are persons who have been checked previously but "did not choose to return for care." One can only speculate as to why the patients did not choose to return after the preliminary visit. Cost of medication and devices such as eyeglasses or braces may well be the deterrent to health care for poverty level residents. Perhaps, a realistic contribution of the rural health program would be to supply the financial assistance needed for purchase of drugs, medical devices, and transportation to and from the health service centers. To maximize the services of the mobile unit, alternative solutions to implement the suggestions and prescriptions of the doctors need to be created.

Health Manpower

Doctors' Offices and Clinics

Twenty-two physicians serve Barron County. This includes one Board approved surgeon who performs surgical procedures at all three hospitals. Eleven physicians and one optometrist staff the three clinics included in the survey. Nurses, technicians and office assistants are employed also in these three clinics. Table IX summarizes the differentiated staffing of the three clinics visited.

TABLE IX

PERSONNEL EMPLOYED IN DOCTORS' CLINICS IN BARRON COUNTY

RNs	4	Total Nursing	6
LPNs	2		
Lab. Technician	1	Total Technical	2
X-Ray Technician	1		
Insurance Clerk	2	Total Clerical	11
Bookkeeper, Office Manager	3		
Receptionist	4		
Secretary	1		
Credit Control	1		

There is no immediate opening for employees in the three clinics, but anticipated annual turnover would necessitate employment of one new medical office assistant in each office. Trained medical assistants with nursing, technical, and clerical skills would be employed if available.

Hospitals, Nursing Homes, Public Health Agencies

Table X depicts the current nursing employment (1972) in Barron County.

TABLE X

CURRENT NURSING EMPLOYMENT IN BARRON COUNTY
(1972)

	RN		LPN		NA*		Ward Clerk
	Full	Part	Full	Part	Full	Part	
Hospital	20	17	9	6	49	36	7

* Includes orderlies.

TABLE X (cont'd.)

CURRENT NURSING EMPLOYMENT IN BARRON COUNTY
(1972)

	RN		LPN		NA*		Ward Clerk
	Full	Part	Full	Part	Full	Part	
Nursing Homes	9	13	3	14	112	58	1
Public Health	1	5	0	0	1	0	0
Sub Total	30	35	12	20	161	94	8
TOTAL	65		32		255		8

* Includes orderlies.

Sixty-five registered nurses are employed in the 12 agencies; 30 full-time registered nurses; and, 35 part-time registered nurses. There are openings presently for eight registered nurses. Administrators project a need for 13 additional registered nurses in 1973 and 16 additional ones in 1974. A supervisory public health nurse will be needed due to the pending retirement of the present incumbent.

Table XI displays a projection of nursing staff needs in hospitals, nursing homes, and public health services for the next two years. Twelve full-time and twenty part-time licensed practical nurses are employed in the eleven facilities. None are employed presently in public health services. Five licensed practical nurse openings were reported as of June, 1972. A one-year projection need of 9 licensed practical nurses and a two-year projection need of 10 additional licensed practical nurses have been predicted.

Nursing assistants, including orderlies, comprise the largest group of nursing staff personnel (255 in the county). One hundred sixty-one are full-time employees and 94 are part-time employees.

TABLE XI

PROJECTION OF NURSING STAFF NEEDS

	Registered Nurses			Licensed Practical Nurses			Nursing Assistants*			Ward Clerk		
	1972	1973	1974	1972	1973	1974	1972	1973	1974	1972	1973	1974
Hospitals	4	7	7	2	4	4	0	12	12	1	1	1
Nursing Home	3	6	7	3	5	5	3	23	27	0	1	1
Public Health	1	0	2	0	0	0	0	0	1	0	0	0
TOTALS	8	13	16	5	9	9	3	35	40	1	2	2

* Includes orderlies.

No immediate unfilled positions were reported in the county, largely due to the fact that on-the-job training is provided by most agencies for suitable applicants whenever new employees are needed. Seven of the eight ward clerks are employed in the hospitals. There is a need presently for one ward clerk. A need for two ward clerks in the hospitals is projected for the two succeeding years. The nursing homes have not yet utilized the ward clerk and have indicated little interest or need for such employees in the near future.

Technical Services

Table XII enumerates the personnel employed presently and the number needed to perform the technical and therapeutic services. The health agencies utilize the majority of technician level workers to staff the X-ray, laboratory, and operating rooms. There are four medical technologists and six laboratory assistants. There was one opening for a laboratory technician reported in June, 1972. Projected needs for the biennium 1973 and 1974 include the following: one laboratory technician in 1973 and 1974; one X-ray technician in 1973 and two in 1974; and, one medical technologist by 1974.

Therapeutic Services

Limited therapeutic services, such as, physical therapists, physical therapist aides, occupational therapists, occupational therapist aides, speech, audiology, social workers, are available to nursing home patients. One hospital reported a consultant physical therapist and expectations for some expansion of physical therapist services. Interest in consultant physical therapist services was expressed by the other hospitals.

The 1971 Division of Health Annual Surveys of Nursing Homes and Hospitals included a report of services available for physical therapy, occupational therapy, speechtherapy, and audiology. Only one nursing home and one combined hospital-nursing home provide physical therapy

TABLE XII

DISTRIBUTION AND NEED OF TECHNICAL AND THERAPEUTIC SERVICES

	Hospitals				Nursing Homes				Totals			
	Employed	Needed	One Yr. Need	Two Yr. Need	Employed	Needed	One Yr. Need	Two Yr. Need	Employed	Needed	One Yr. Need	Two Yr. Need
Technical Services												
X-ray Technician	6	0	1	2	0	0	0	0	6	0	1	2
Medical Technologist ASCP	4	0	0	1	0	0	0	0	4	0	0	1
Laboratory Technician	6	1	1	1	0	0	0	0	6	1	1	1
OR Technician	5	0	0	0	0	0	0	0	5	0	0	0
Therapeutic Services (Consultant only)												
Licensed Physical Therapist*	1	0	1	0	1	0	1	1	2	0	1	1
Physical Therapy Assistant**	1	0	2	2	1	0	0	1	2	0	3	3
Physical Therapy Aide	0	0	0	0	2	0	0	1	2	0	0	1
Registered Occupational Therapist*	0	0	0	0	1	1	1	1	1	1	1	1
Certified Occupational Therapy Ass't.**	0	0	0	0	0	0	0	0	0	0	0	0
Activity Aide	0	0	0	0	7	1	2	2	7	1	2	2
Speech Pathologist	0	0	0	0	0	0	0	0	0	0	0	0
Speech Therapist (BS, BA)	0	0	0	0	0	0	0	0	0	0	0	0
Audiologist	0	0	0	0	0	0	0	0	0	0	0	0
Social Worker (ACSW/MSW)	1	leaving	1	1	0	0	0	0	1	0	1	1
Other Social Workers	1	0	0	0	0	0	0	0	1	0	0	0

* Consultant part-time employment.

** "Assistant" and "aide" term used interchangedly by survey respondents

TABLE XII (cont'd.)

DISTRIBUTION AND NEED OF TECHNICAL AND THERAPEUTIC SERVICES

	Hospitals				Nursing Homes				Totals			
	Employed	Needed	One Yr. Need	Two Yr. Need	Employed	Needed	One Yr. Need	Two Yr. Need	Employed	Needed	One Yr. Need	Two Yr. Need
Other Services												
Qualified Dietitian*	2	0	0	0	3	0	1	1	5	0	1	1
Home Economist (Food/nutrition*)	1/2	0	0	0	0	0	0	0	1/2	0	0	0
Food Services Supervisor (Trained)	3	0	1	1	4	0	0	0	7	0	1	1
Food Service Aides	25	0	6	6	29	1	8	9	54	1	14	15
Housekeeping Aides	12	0	2	2	21	1	4	5	33	1	6	7
Laundry	0	0	0	0	6	0	1	1	6	0	1	1
Maintenance	7	0	0	0	7	0	1	1	14	0	1	1
Record Room Administrator*	1-2	0	0	0	0	0	0	0	2	0	0	0
Accredited Record Technician	1	0	0	0	0	1	0	0	1	1	0	0
Record Library Aide	4	0	1	1	0	0	0	0	4	0	1	1
Business Office Personnel Clerical-Receptionist Office Manager Bookkeeper	21		1	1	6	0	1	1	27	0	3	3
Medical Secretary	1	0	2	2	1	0	0	0	2	0	2	2

* Consultant part-time employment.
** "Assistant" and "aide" term used interchangedly by survey respondents.

services. A consultant physical therapist and on-the-job trained physical therapy aides or assistants provide these services.

One nursing home reported the availability of occupational therapy services. The personnel consists of one part-time consultant and no occupational therapy aides or assistants. The activity aide is associated with this service. Seven activity aides are presently employed. A need for one activity aide now and two additional aides in each of the next two years has been projected for the nursing homes. The hospitals, however, did not report a need for either occupational therapy or activities personnel in present or future plans.

The Division of Health Annual Survey requested information regarding activity programs and social services. Although eight agencies reported planned activity programs, only three reported having a paid director for such a program. One paid director is a registered occupational therapist; the others are high school graduates with some formal training in working with people. Formally organized 'social services' programs are almost non-existent in the health agencies. The one prepared social worker hired by a hospital nursing home in the county is leaving and replacement is not planned. Planned programs were reported by two agencies although only one district has a paid director. It is speculated that in cases where paid directors were not reported, county social services, volunteer activity directors, clergy, or directors of nursing provide some programming.

The availability of speech therapy or audiology services were not reported by the health agencies. "Audiology" services are provided in a single hospital by a technician trained to do hearing examinations.

Other Services

Five consultant dietitians and seven trained food service supervisors are employed by the hospitals and nursing homes to supervise fifty-four food service aides. There are no vacant positions at present, but

an annual turnover of approximately fourteen workers is reported. Another large group of thirty-three employees provide housekeeping services. Annual openings range between six and seven.

One consultant record room administrator is employed and one accredited record technician. Record library aides are employed in four agencies. There are twenty-seven business office personnel with job titles such as receptionists, clerk, office manager, and bookkeeper. Two medical secretaries are employed. Predictions, based on past turnover, indicate a need for three persons in business office employment and two as medical secretaries.

Throughout the survey, administrators were found to be reluctant to project needs, in spite of turnover considerations, planned construction, and discussions of new services. Repeatedly, the comments were, "we don't have turnover--we have a stable staff." One hospital-nursing home administrator stated that he hired only six persons last year. Since the total employees number slightly over one hundred, this is an unusual example of stability in employee turnover.

Mental Health Care

Staff members of the mental health clinic include 1 psychiatrist, 1 psychologist, 5 psychiatric social workers, and 4 mental health aides. At the present time, there is no need for new staff members at the clinic. A school psychologist offers some diagnostic and counseling service to Barron County school children as a part of the Cooperative Educational Service Agencies (CESA).

Dental Services

There are 20 dentists in Barron County supported by two dental hygienists and dental and/or office assistants in each office. In the two offices visited there were three dental assistants and two receptionist/office workers. A dental hygienist serves two offices in the Barron County. The majority of dental assistants are trained on-the-job.

There is a great need for more practicing dentists, since no new patients are being admitted by some dentists.

Emergency Services

Manpower for the two hospital ambulance services is provided by hospital staff members, sometimes called from a scheduled duty shift and other times on a "call" basis. In one hospital, "ambo-medics" have received emergency medical training. They staff three emergency vehicles. The other services are manned by volunteer firemen on a call basis. Personnel are apparently adequate in number, but would benefit from advanced emergency service training. Emergency service is provided frequently by members of the county sheriffs' staff and other law enforcement personnel who respond to and are often the first present at traffic accidents and other emergency situations. Discussion with the county sheriff revealed that the nine full-time members of the sheriff's department have had standard and advanced first-aid training.

Five Barron County cities have paid police departments of varying sizes and the other communities have part-time and volunteer law enforcement personnel. In all cases, there has been limited first-aid-emergency training for personnel.

Health Agency Inservice Education

A review of existing health education and training served as a component part of the Barron County survey. Present and future health education needs as perceived by health agency administrators were studied. All hospitals and nursing homes reported that inservice education is being offered to their employees. Great variety exists in the direction, depth, and breadth of the programs. The health education programs are developed without consultation assistance from an educational organization.

One hospital-nursing home employs an education director who is a registered nurse with a Bachelor of Science Degree in secondary education.

She has been allocated one-half time to coordinate the total staff's inservice program. In another hospital the administrator coordinates an inservice committee which was organized recently to evaluate and plan for staff education needs. The committee is comprised of representatives of various hospital departments who identify and facilitate class presentations. A general duty registered nurse has been assigned the responsibility to devote two to three days per month for staff inservice education. The remaining nine agencies assign responsibility for inservice education to their directors of nurses. One director of nurses stated she could use "half-time for inservice development" but that with all her other responsibilities, her greatest problem is "no time" for adequate inservice planning and presentation. Similar situations exist, perhaps, in the other agencies. The University Extension Department of Nursing conducted an inservice education workshop for hospital and nursing homes. The program was designed to assist directors in program development. Several directors attended.

Inservice programs vary from a casual "get-together at coffee" type discussion to regularly scheduled meetings once or twice a month. Two of the largest nursing homes maintain well-planned programs and have presented such subjects as cardio pulmonary and mouth to mouth resuscitation, fire safety, films on chronic brain syndrome and tranquilizers, rehabilitation techniques utilizing dental, occupational therapy and physical therapy consultants, and a human relations class series. The teleconference programs are available and scheduled for all staff at one hospital.

Present inservice needs identified by directors include instruction in temperature, pulse, respiration, and blood pressure procedures, medication aide training, basic body structure and function review, human relations and communications, understanding the mentally retarded, care of the geriatric and others.

Preliminary plans have been completed with the Division of Health consultants to make rehabilitation classes available to some of the county health agencies. The Barron County public health nurse has developed a

series of diabetic care classes for RN's, LPN's and Nursing Assistants to be offered in July and August, 1972, in four locations. The classes are designed for all hospitals' and nursing homes' employees.

Commendable efforts are being made by the health agencies to meet the continuing education needs of their staff. Excellent resources are being tapped at the community, county, and state levels. Consultation services and resource information, however, could be disseminated by an inservice consultant who might serve as a liaison person for several agencies.

Other Educational Offerings

Emergency medical care training has been offered in Cumberland. The hospital administrator's concern for this type of service resulted in the development of a sixty-hour course for police, fire, and ambulance personnel. The administrator coordinated specialists for instruction using doctors, nurses, dentists, and lawyers in the program. Plans for the current year include the addition of the chief of Emergency Services from Ramsey County Hospital to the instructional team. Participants in the course this year will include hospital emergency room personnel and additional ambulance, police and fire personnel. The course was recognized by the Rice Lake Vocational School. Accordingly, a certificate is offered by the vocational school to persons completing the course.

The Northern Pines Guidance Clinic administration provides education for mental health aides prepared to complement and extend the professional staffs' services. They have also made available, in cooperation with the Vocational School, training sessions for persons involved in the education of the retarded child. Public education has been a concern of the clinic staff and efforts to provide information regarding chemical dependency, mental health, and mental retardation are being made. Classes in understanding child behavior have been established successfully by the clinic for parents.

Preparatory Education Requests

The health agency administrators are not familiar generally with hiring trained personnel in the aide-assistant level of employment. They have accepted the continuing challenge of preparatory training for the nursing assistants, orderlies, rehabilitation assistants, ward clerks, emergency ambulance service workers, food service workers, housekeeping workers, and many of the receptionist-clerical office employees. The response to questions regarding preparatory training indicated that basic training for aides, especially the nursing assistant personnel, would be of great value to them.

The survey revealed that extremely limited coordination of health personnel preparatory or continuing education exists between the county's educational organizations. The area vocational schools located in Rice Lake and Eau Claire provide some trained nursing assistants as new employees, and Rice Lake Vocational School offers inservice nursing assistant classes to present employees of some agencies. The Barron County two year campus at Rice Lake was not reported as meeting presently any of the immediate educational needs for health personnel.

A report provided by the Vocational, Technical, and Adult Education--District 17 relative to the continuing education offered in 1971-72 serving the Barron County area is presented in Table XIII.

TABLE XIII

HEALTH COURSES OFFERED BY VTAE DISTRICT 17
FIELD SERVICES DIVISION
BARRON COUNTY AREA

FIRST SEMESTER, 1971-72 SCHOOL YEAR

COURSE	Course Number	#Students	#Hours	LOCATION
Emergency First Aid	816-482	15	20	Ladysmith

TABLE XIII (cont'd.)

HEALTH COURSES OFFERED BY VTAE DISTRICT 17
FIELD SERVICES DIVISION
BARRON COUNTY AREA

COURSE	Course Number	#Students	#Hours	LOCATION
Nursing Ass't.	510-481	18	180	Spooner
	SECOND SEMESTER, 1972-72 SCHOOL YEAR			
First Aid	816-482	17	10	Shell Lake
Advanced First Aid	816-482	14	18	Shell Lake
Standard First Aid	816-482	13	10	Chetek
Emergency Ass't. Training	510-481	15	7 sessions	Spooner
Emergency First Aid	816-482	22	20	Ladysmith
First Aid	816-482	13	12	Birchwood
First Aid	816-482	28	10	Dallas
Nursing Assistant	510-481	13	180	Spooner
Nursing Assistant	510-481	20	180	Spooner

A need for both preparatory and continuing education for health occupations' personnel was reported by administrators of all health agencies and other health personnel viewed. A summary of those requests is listed below in order of priority and repetition.

Preparatory Education Requests

Nursing Assistants
Practical Nursing
Rehabilitation Assistants
Physical Therapy Aides
Occupational Therapy Aides
Activities Aides
Emergency Care Technicians
Medical Assistants

Continuing Education Requests

The majority of paraprofessionals employed in Barron County have been trained on the job. In every contact made in the 1972 survey, an immediate need for continuing education and training to upgrade all levels of health workers was expressed. The following types of training and groups of workers are listed in order of expressed priority:

Subject	Target Group
Rehabilitation Techniques	Nursing Assistants, LPN's
Care of Stroke Patient	Nursing Assistants, LPN's
Care of Diabetic	Nursing Assistants, LPN's
Foot Health	Ambulance Operators, Emergency Room Staff, Police and Sheriff Departments, Firemen
Emergency Care	
Communications-Human Relations	All staff
Activities-Occupational Therapy	RN's, LPN's, Nursing Assistants
Supervisory Training	RN's, Department Heads
Environmental Health	Housekeeping, Food Service, Maintenance
Medical Terminology	Medical Office Assistants in clinics and health agencies
Administrator, Medical Staff-Trustee Relationships	Hospital Boards, Administrators Medical Staffs
Care of the Mentally Retarded	RN's, LPN's, Nursing Assistants, Other
Nursing Home Administration	Present and Potential Administrators
Refresher Courses	LPN's
Workshops on New Aspects of Dental Assisting	Dental Assistants and Hygienists

Areas of concern in health education for the public included the following:

Expectant Parent
Family Planning
Stroke in the Family
Diabetes in the Family
Alcoholism & Drug Abuse

The vocational education system has the potential to meet the above requests for continuing education, either independently or in coordination with other agencies. Such training would supplement that given by health agencies.

Summary and Conclusion

The report based on present services, manpower, and education in Barron County can be regarded as quite typical of a rural Wisconsin county. To support this assumption, one can refer to a 1969 study of Health Occupations reported in Study of District 18, A Wisconsin Vocational, Technical and Adult Education District.[1] The report of District 18 deals with similar small health agencies offering limited services, with a number of professional and technical service needs. The 1969 study reported educational efforts in the four rural counties, and pointed out needs and recommendations for the future. Many of those needs and recommendations have similarity to those presented for Barron County and may be assumed to be applicable to other rural areas of Wisconsin.

The health services available now in Barron County are quite adequate in some respects and in need of extensive expansion in others.

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[1]Merle E. Strong, STUDY OF DISTRICT 18, A WISCONSIN VOCATIONAL, TECHNICAL, AND ADULT EDUCATION DISTRICT (Center for Studies in Vocational and Technical Education: The University of Wisconsin, Madison, 1969).

As can be expected, health professionals are in constant demand, particularly to provide specialized medical, dental, nursing and technical services. The need for trained para-professionals and continued education for all is imperative. Hopefully, more health prefessionals will become available to rural areas; however, this hope may be only that. The educational system must recognize its responsibility not only to the preparation of new workers but to the continued educational development of present health manpower, both at the professional and para-professional level.

The county's population trend toward increases in the 0 to 14 and 45 to 65 and over age-groups, with concurrent decreases in the 15-45 age-groups, lends support to the service needs indicated in the June, 1972 research.

Rehabilitation and emergency services were the two areas mentioned most frequently in need of expansion. Occupational and physical therapists, speech and hearing consultants, and activity directors are members of the rehabilitation "team" that were reported needed by some agencies. Seven of the agencies reported a need for expanded training of present nursing personnel in rehabilitation techniques.

Although not specifically mentioned, other valuable contributors to rehabilitation care include social workers, dentists, podiatrists, and mental health workers. These workers tend to provide a more complete rehabilitation service, with emphasis on social and psychological needs, rather than completely medical. In view of Barron County's increasing older population, it is suggested that attention be given to expanding rehabilitation service for county residents. A coordinated county-wide effort to provide a "specialist" in rehabilitation would be especially valuable to provide out-patient service which is not available now to county residents.

Emergency services were noted in the survey as areas of great concern. A high percentage of those charged with giving emergency care are not fully or adequately prepared. Many of them are volunteers which complicates the problem of providing training. Suggestions were made

that a county-wide salaried rescue squad service be implemented as a partial answer to emergency service needs. The squad could actually be part of an enlarged county sheriff's staff with additional training and could be made responsible for safety and health precautions at all public group meetings (festivals, etc.). A pattern for excellent emergency service in Barron County could well serve as an example to many other counties of Wisconsin.

The study of Barron County dictates the need for continuous self-evaluation. Although a certain degree of commonality may exist among the areas with similar district character, the unique emerging needs call for continuous assessment and re-evaluation at the local level. The evaluation, however, must find its locus within the global framework of emerging health trends and manpower data. The identification of appropriate needs becomes imperative for meeting the health needs of both today's and tommorrow's citizens.

CHAPTER IV

PROGRAM DEVELOPMENT

Program development is considered within both a quantitative and qualitative dimension in this chapter. Quantitative data include enrollments from 1969 through 1972 for each health occupation program. Programs offered on a district-wide basis are charted. Qualitative data include the information collected via a questionnaire sent to the local district administrators throughout Wisconsin. Innovations, constraints, and reactions to suggestions regarding program development by the district administrators form the basic thrust of the qualitative data.

A brief description of the objectives of the various health occupations' programs and a tabulation of the enrollments from 1969-1972 are presented in Table XIV. The program approval date is listed also. Table XV lists all the health programs by districts. Table XVI displays a partial listing of programs being developed and/or feasibility being studied.

TABLE XIV

PROGRAM DESCRIPTIONS AND ENROLLMENTS
1969-1972

NURSING, TECHNICAL — 2 YEAR PROGRAM: ASSOCIATE DEGREE

Prepares a person for general-duty nursing under the nurse supervisor or physician, or with other members of the health team.

Districts	Enrollments			Program Approval Date
	1971-72	1970-71	1969-70	
4	--	--	--	
6	--	--	--	
9	345	286	211	1/68
15	83	70	40	1/68

TABLE XIV (Cont.)

NURSING, PRACTICAL — 1 YEAR PROGRAM: DIPLOMA

Prepares a person to give direct nursing care under the supervision of a nurse or physician.

Districts	Enrollments			Program Approval Date
	1971-72	1970-71	1969-70	
1	25	0	0	5/70
2	79	65	72	1/68
4	151	126	106	1/68
6	148	139	158	1/68
8	113	105	78	1/68
9	169	178	175	1/68
10	60	57	50	1/68
11	55	57	58	1/68
12	71	75	67	1/68
13	59	63	60	1/68
14	43	41	32	1/68
17	60	73	65	1/68

NURSING, ASSISTANT — 6 WEEKS-SEMESTER: DIPLOMA

Prepares a person to perform simple tasks involved in the personal care of individuals receiving nursing services.

Districts	Enrollments *	Program Approval Date
	1971-72	
1	140	5/71
2	244	10/70
3	103	10/70
4	206	
5	175	11/71
6	143	5/71
8	176	
9	172	
10	194	5/71
11	179	11/71
12	173	5/70
13	210	11/71
14	77	
17	93	5/71
18	70	10/70

*Enrollments are not included for years 1969-70 because short term programs are conducted intermittently throughout the year.

TABLE XIV (Cont.)

OPERATING ROOM ASSISTANT — 1 YEAR PROGRAM: DIPLOMA

Prepares a person to serve as a general technical assistant on the surgical team in the operating suite.

Districts	Enrollments			Program Approval Date
	1971-72	1970-71	1969-70	
2	23	17	13	2/69
4	10	28	0	1/68
6	17	16	0	5/70
8	28	32	14	12/68
9	29	24	0	5/70
10	13	0	0	5/70
12	11	0	0	5/71
13	27	28	25	1/68
14	--	--	--	5/72
15	2	--	--	11/71

SCHOOL HEALTH AIDE — 50 HOUR PROGRAM: VOCATIONAL DIPLOMA

Prepares persons to assist professional school personnel with selected activities and duties which constitute an integral part of the school health program. These tasks are performed under supervision of the school administration in consultation with the public health or school nurse or health officer.

Districts	Enrollments			Program Approval Date
	1971-72	1970-71	1969-70	
12	0			5/70

WARD CLERK — 1 SEMESTER PROGRAM: DIPLOMA

Prepares for a variety of clerical duties utilizing knowledge of systems and reports, including copying data, and compiling records and reports; tabulating and posting data in record books; providing information and conducting interviews; operating office machines; and handling mail and correspondence.

Districts	Enrollments			Program Approval Date
	1971-72	1970-71	1969-70	
2	15	29	0	5/70
3	16	0	0	10/70
5	11			5/71
6	*	*	*	*
8	16	15	12	9/69
10	--	--	--	--
12	14			5/71
18	14			5/71

TABLE XIV (Cont.)

DENTAL ASSISTANT — 2 SEMESTER PROGRAM: DIPLOMA

Prepares a person to assist the dentist at the chairside in the dental operatory, to perform reception and clerical functions, and to carry out selected dental laboratory work.

Districts	Enrollments			Program Approval Date
	1971-72	1970-71	1969-70	
2	32	35	29	1/68
4	33	34	34	1/68
6	30	23	24	1/68
9	48	51	48	1/68
11	28	28	18	9/69
13	36	36	26	1/68

DENTAL HYGIENIST — 2 YEAR PROGRAM: ASSOCIATE DEGREE

Prepares a person to provide services to patients such as performing complete oral prophylaxis, applying medication, and providing dental health education services, both for chair-side patients and in community health programs, under the supervision of the dentist.

Districts	Enrollments			Program Approval Date
	1971-72	1970-71	1969-70	
4	24	27	27	2/67
9	25			1/71

DENTAL LABORATORY TECHNICIAN — 2 YEAR PROGRAM: ASSOCIATE DEGREE

Prepares a person to execute the work in producing restorative appliances required for the oral health of the patient as authorized by the dentist.

Districts	Enrollments			Program Approval Date
	1971-72	1970-71	1969-70	
9	40	23		5/68

MEDICAL LABORATORY ASSISTANT — 12-15 MONTHS PROGRAM: DIPLOMA

Prepares a person to work under the supervision of medical technologists, clinical pathologists, or physicians to perform routine clinical laboratory procedures.

Districts	Enrollments			Program Approval Date
	1971-72	1970-71	1969-70	
1	47			4/69
4	18	24	18	1/68

TABLE XIV (Cont.)

MEDICAL LABORATORY TECHNICIAN — 2 YEAR PROGRAM: ASSOCIATE DEGREE

Prepares students for an intermediate position in medical laboratories. The technician performs more complex and technical procedures than the laboratory assistnat but does not assume the educational and supervisory tasks of the medical technologist.

Districts	Enrollments			Program Approval Date
	1971-72	1970-71	1969-70	
1	0			5/71
2	26	13		11/69

OCCUPATIONAL THERAPY ASSISTANT — 2 YEAR PROGRAM: ASSOCIATE DEGREE

Prepares a person to assist the professional occupational therapist in implementing the plan of therapy for a patient as prescribed by a physician.

Districts	Enrollments			Program Approval Date
	1971-72	1970-71	1969-70	
4	29	27	26	10/68
12	15			5/71

PHYSICAL THERAPY ASSISTANT — 2 YEAR PROGRAM: ASSOCIATE DEGREE

Prepares a person to assist the professional physical therapist in implementing the plan of therapy for a patient as prescribed by a physician.

Districts	Enrollments			Program Approval Date
	1971-72	1970-71	1969-70	
9	--	--	--	1/71

RADIOLOGIC TECHNICIAN — 24 MONTH PROGRAM: ASSOCIATE DEGREE

Prepares the student to function as an assistant to radiologists and physicians in diagnostic and therapeutic radiography.

Districts	Enrollments			Program Approval Date
	1971-72	1970-71	1969-70	
1	0	0	0	1/71
2	0	0	0	1/71
15	0	0	0	11/71

TABLE XIV (Cont.)

OPTOMETRIC ASSISTANT — 1 YEAR PROGRAM: VOCATIONAL DIPLOMA

Prepares a person to assist an optometrist in making tests to determine defects in vision, preparing and fitting eyeglasses or contact lenses, administering corrective eye exercises, or other treatment that does not require drugs or surgery.

Districts	Enrollments			Program Approval Date
	1971-72	1970-71	1969-70	
11	25	15	21	1/68

WATER-WASTEWATER TECHNICIAN — 2 YEAR PROGRAM: ASSOCIATE DEGREE

Prepares a person, under supervision of a professional sanitarian, to investigate public and private establishments to determine compliance with or violation of public sanitation laws and regulations.

Districts	Enrollments			Program Approval Date
	1971-72	1970-71	1969-70	
9	36	12		1/68

ENVIRONMENTAL HEALTH TECHNICIAN — 2 YEAR PROGRAM: ASSOCIATE DEGREE

Prepares a person to assist sanitary engineers, scientists, physicians, and veterinarians to gather data on, inspect, and evaluate facilities, and industries concerned with the public, such as water supply, the food industry, and sewage disposal facilities and plants.

Districts	Enrollments			Program Approval Date
	1971-72	1970-71	1969-70	
9	24			1/68

INHALATION THERAPIST TECHNICIAN — 2 YEAR PROGRAM: ASSOCIATE DEGREE

Prepares a person to perform procedures and operate and maintain equipment used in supporting respiratory functions, including the administration of oxygen and other sustaining gases, as directed by a physician.

Districts	Enrollments			Program Approval Date
	1971-72	1970-71	1969-70	
4	33	33		11/69
9	40	32	20	7/68

TABLE XIV (Cont.)

ELECTROENCEPHALOGRAPH TECHNICIAN — 1 YEAR PROGRAM: DIPLOMA

Prepares a person to operate electrical equipment which records brain waves on a graph to be used by a medical practitioner in diagnosing brain disorders.

Districts	Enrollments			Program Approval Date
	1971-72	1970-71	1969-70	
2	10	0	0	5/71

MEDICAL ASSISTANT — 2 SEMESTER PROGRAM: DIPLOMA

Prepares a person to perform functions and follow procedures concerned with diagnosis and treatment of patients in a physician's office.

Districts	Enrollments			Program Approval Date
	1971-72	1970-71	1969-70	
2	32	34	45	1/68
4	39	37	41	1/68
5	33	0	0	5/71
6	29	29	20	1/68
8	30	21	19	5/68
9	47	51	50	1/68
11	32	28	29	1/68
13	36	36	26	1/68
14	23	20	21	--
18	--	--	--	5/72

MEDICAL RECORDS TECHNICIAN — 2 YEAR PROGRAM: ASSOCIATE DEGREE

Prepares a person to assist the medical record librarian in maintaining medical records, reports, disease indexes and statistics.

Districts	Enrollments			Program Approval Date
	1971-72	1970-71	1969-70	
1				5/71
2	11			1/71

TABLE XV

HEALTH PROGRAMS BY DISTRICTS IN THE STATE OF WISCONSIN

District 1

Medical Lab Assistant
Medical Lab Technician
Medical Record Technician
Nursing Assistant
Nursing, Practical
Radiologic Technician

District 2

Dental Assistant
Electroencephalograph Technician
Medical Assistant
Medical Lab Technician
Medical Record Technician
Nursing Assistant
Operating Room Assistant
Nursing, Practical
Radiologic Technician
Ward Clerk

District 3

Nursing Assistant
Ward Clerk

District 4

Dental Assistant
Dental Hygienist
Inhalation Therapist Technician
Medical Assistant
Medical Lab Assistant
Nursing Assistant
Nursing, Technical
Occupational Therapy Assistant
Operating Room Assistant
Nursing, Practical

District 5

Medical Assistant
Nursing Assistant
Ward Clerk

District 6

Dental Assistant
Medical Assistant
Nursing Assistant
Nursing, Technical
Operating Room Assistant
Nursing, Practical
Ward Clerk

District 8

Medical Assistant
Nursing Assistant
Operating Room Assistant
Nursing, Practical
Ward Clerk

TABLE XV (Cont.)

District 9

Dental Assistant
Dental Hygienist
Environmental Health Technician
Inhalation Therapist Technician
Medical Assistant
Medical Lab Assistant
Medical Lab Technician
Nursing Assistant
Nursing,Technical
Operating Room Assistant
Physical Therapy Assistant
Nursing,Practical
Water and Wastewater Technician

District 10

Nursing Assistant
Operating Room Assistant
Nursing,Practical
Ward Clerk

District 11

Dental Assistant
Medical Assistant
Nursing Assistant
Optometric Assistant
Nursing,Practical

District 12

Nursing Assistant
Occupational Therapy Assistant
Operating Room Assistant
Nursing,Practical
School Health Aide
Ward Clerk

District 13

Dental Assistant
Medical Assistant
Nursing Assistant
Operating Room Assistant
Nursing,Practical

District 14

Medical Assistant
Nursing Assistant
Operating Room Assistant
Nursing,Practical

District 15

Nursing,Technical
Operating Room Assistant
Radiologic Technician

District 16

None

District 17

Nursing Assistant
Nursing,Practical

District 18

Medical Assistant
Nursing Assistant
Ward Clerk

TABLE XVI

PROGRAMS BEING DEVELOPED AND/OR FEASIBILITY BEING STUDIED

Dental Hygiene	District 13
Dental Laboratory Technician	District 10
Medical Laboratory Technician	Districts 4 and 14
Medical Record Technician	Districts 5 and 14
Nursing, Technical	Districts 5, 12, and 13
Nursing, Practical	Districts 3 and 5
Occupational Therapy Assistant	Districts 9 and 13
Orthopedic Assistant	District 12
Inhalation Therapist	District 14
Physical Therapy Assistant	Districts 1, 13 and 14
Radiologic Technician	Districts 12 and 14
Ward Clerk	District 1
Water and Wastewater Technician	District 13

Chapter II of this report enumerated many of the restraints and possible deficiencies of manpower reporting. This is reflected in the responses to the first question on a questionnaire sent to the district directors. Sixteen out of the seventeen district directors responded to the questionnaire sent to the district directors. This survey attempted to identify the difficulties that district directors had in determining manpower needs. It is a requirement in the development of health occupations' programs to list and document the need for graduates of such programs. Therefore, it seemed crucial to examine what kind of manpower needs' studies were required by the State Board of Vocational, Technical, and Adult Education and to examine some of

the difficulties that the district directors have with this requirement. Most of the district directors responded that they had completed manpower studies recently in the area of health occupations. Many expressed also the need for additional manpower data to support the continuation, expansion, and development of programs.

As was stated in Chapter II, manpower projecting is indeed difficult. National and state figures provide little help in documenting a need for individual districts to develop a program. Therefore, each district must, on its own initiative, instigate and conceptualize what they deem necessary in a manpower needs' study.

The questionnaire mailed to the districts requested available manpower reports that the directors might have. Many were returned to the staff and were found to be of good quality. The fact remains, however, that they addressed the problem differently. It would seem advisable that manpower needs' studies using a uniform approach and format be completed by the districts. This would entail cooperative efforts on the part of state office staff and district administration to develop a feasible form for initiating and completing manpower needs' studies.

Again, this report wants to emphasize the fact that national and state studies have little significance to the district director in the stage of planning a manpower study. All too often in the past, national and state trends have been cited as cause for health occupations' programs to be initiated in the district. While not emphasizing the need for statewide coordination in this respect, individual districts have to establish a viable alternative to the common disarray one experiences in the field today.

This report realizes the delicate intricacies involved in one district receiving approval for a health occupation program whereby that program could serve two, three, or four districts. Yet, it is the responsibility of each individual district to be able to support need for program implementation.

Another concern mentioned by district directors in response to these questions concerning manpower needs' studies was the identification

of the need of task analysis studies. By this term, one is directed to the fact that all too often in the state, persons whose aid is required to complete such manpower studies do not have the precise operationalized definitions related to the various health occupations. It would be advisable to initiate such a statewide venture as specific task analysis studies to determine more precisely what skills are expected of the various health occupations. In this way, health manpower studies might become more significant to the level where to say "x" number of emergency services technicians needed in one district is the same as saying "x" number of emergency services technicians are needed in another.

There is a need, then, for such task analysis studies to be articulated across districts. This report endorses also the concept of cooperatively prepared manpower study forms to be used by all districts in preparing their manpower studies. It is only in the use of such uniformed forms that "need" will be truly documented to the satisfaction of those in the position of approval.

As stated previously, sixteen of the seventeen districts responded to this questionnaire. The directors were asked to itemize the new programs in health occupations that they felt should be developed in their districts. From the sixteen districts, the directors itemized fifty-eight programs which should be implemented. This means that, on the average, the directors thought four more programs should be operating within every district at the present time. The reasons they are not operating at the present time are discussed later in this chapter, but this report feels that it's significant that a number of programs which are not as yet operating in any Wisconsin Vocational-Technical School were cited. The following is a list of these programs that the district directors thought should be implemented in their schools but have not been included in any vocational curriculum in the state:

Activities Aide
Dietetic Technician
Emergency Care Aide

Home Health Aide
Mental Health Center Aide
Mental Health Technician
Nuclear Medicine Technician
Orthopedic Assistant
Pharmacy Technician
Psychiatric Aide
Rehabilitation Aide

A task analysis will be necessary in order to draw up job descriptions for these occupations and to develop curriculum for health occupations' programs in these areas. It is interesting to note that a few members of the staff on this health assessment had the opportunity to meet with Dr. Harvey A. Stevens who was appointed recently as program administrator for the Center on Mental Retardation and Human Development at The University of Wisconsin-Madison. Dr. Stevens expressed the wish and the hope that articulation would begin soon with staff in the vocational system so that program development might begin in the area of mental health aide, psychiatric assistants, etc. Dr. Stevens was of the opinion that right now these programs need the consideration of task analysis in order to operate. It is only through such cooperation that future programs in health occupations will have any meaning.

Vocational education has long endorsed the idea of advisory councils. This is to their credit and commendation. However, the time has come that advisory councils can no longer be individual members of the community with some expertise, but rather formal organizations and agencies whose goals and policies determine the future of the health worker. It is, therefore, the concern of this report that any new programs be initiated only upon the proper completion of a task analysis study satisfactory to all concerned. All concerned does not imply a few people in key situations. As was discussed in the chapter entitled, "Administrative Dilemma", many organizations are involved in the health care delivery system in the State of Wisconsin. All of these people are necessary in the evolution of program development.

This year's questionnaire asked the district directors to identify the greatest perceived restraints or major deterrents in developing new and/or expanding present health occupation training programs in their districts. Their responses were similar to the ones obtained in last year's district directors' questionnaire. The problems itemized as major restraints by at least three districts in developing health programs last year were gaining North Central accreditation, lack of financing, lack of qualified faculty, securing State of Wisconsin Vocational Board approval, finding adequate facilities for clinical practices, the requirements of professional organizations, and securing State Board of Nursing approval. Upon examining this year's responses to the questionnaire one can determine readily that few of these problems have been resolved. This report will speak briefly to each of these problems. North Central accreditation seems to be a problem that is disappearing gradually. The great majority of the districts today are in the various processes of North Central accreditation. Others have tentative or pending plans to become involved.

The expense of the health occupation program can be well documented. In the majority of educational programs, on-the-job experience is gained on the completion of the in-school program; conversely, in health programs this experience must be given as part of the school program. This makes for an expensive program as well as creating many problems in administration and supervision. Innovative and creative approaches in health occupations' education are a necessity in order that fiscal constraints do not price health programs out of the district. Some of these creative and innovative approaches are discussed later in this section.

The lack of qualified faculty is a problem expressed by the majority of district directors. Some of the responses from the district directors are quoted as follows:

> The major problem here is not only clinically prepared faculty, but well-versed in principles and methods in general education.
>
> There is a difficulty in attracting master instructors in specialty areas of nursing education to _____*_. Lack of a variety of

*Deletion to protect anonymity of area.

general education electives available on the _____ * _____ * Institute class schedule.

Lack of leadership preparation programs -- well-planned taught by qualified and competent persons and not leading in "dead end" credits.

The problem of financing and the lack of qualified faculty have a reciprocal relationship. Due to the low student/faculty ratios in health programs, faculty costs are high. Also, contingent upon the influence of these various approval agencies, there is little hope at this time for any innovation for credentialing policies. The problems associated with professional development of teachers in the vocational districts are dealt with in Chapter VI of this report. The important thing to note is, however, that little has been done to alleviate the local district's problem of recruiting qualified faculty.

Finding adequate facilities for clinical practice is another problem mentioned often by the district directors. Some of their responses are reported as follows:

Finding opportunities for clinical experience. The number of health learners in the _____ * _____ area is very high. Health programs could be expanded easily with additional facilities and funding.

Some programs depending on hospital clinical affiliations are curtailed because of the wide usage by various institutions needing clinical practice areas.

While programs implemented are developing well, however, there are restraints in enlarging programs such as medical records, technician and medical laboratory technician programs due to the lack of clinical facilities and qualified staff within the facility.

Quality and quantity of clinical facilities for student directed practice.

Lack of facilities.

---

*Deletion to protect anonymity of area.

The lack of sufficient approved clinical training stations--We could presently expand the practical nurse program at the ___*____ Institute but find that we cannot provide the necessary approved clinical training stations, particularly in psychiatric nursing. Clinical training facilities for practical nursing students in the psychiatric area have been shared with three other schools in mid-Wisconsin, thus limiting the number of students to be admitted in spite of large numbers of applicants and employment opportunities in outlying areas which have not been filled.

Limited facilities for providing clinical experience for larger numbers of students.

Discouragement of innovative pilot program development by state staff of VTAE which might necessitate new approaches to instruction especially clinical experience.

The personal opinion of some people is that present distribution of professional health care personnel and hospital facilities in district ___*____ would seem to preclude the development of new programs. Specialized departments are either nonexistent or too small to serve for instructional purposes.

The area has excellent training facilities for all types of health occupations and have been most cooperative in working with the district in the development and implementation of programs.

The above responses substantiate the fact that most districts suffer from a lack of clinical facilities. A number of the responses leads one to believe that although "developing" clinical facilities are available, these are not to be used as "proper" clinical affiliations in health-education programs.

These last two problems then, lack of qualified faculty and lack of clinical facilities, call for investigation of credentialing of faculty and the approval of clinical facilities. Some of the district directors' responses to the problem of approval of clinical facilities to this question are as follows:

We need clinical facilities appropriate to level of training or education (professional nursing vs. vocational or practical nursing). If a change in this clinical experience could occur, many of the educational problems evident at this time could be solved.

---

*Deletion to protect anonymity of area.

> The position of the State Board of Health as to approving health facilities for clinical experience for training programs is another deterrent.
>
> The State Board of Nursing could allow nurse faculties more freedom of judgment in the use of facilities and in hiring their own faculty as they see the need.
>
> Other states agencies such as the Department of Health and Social Services and associations such as the Wisconsin Hospital Association should be instrumental and helpful in seeing that properly trained health personnel are available in all parts of the state regardless of the size of the hospital operation.

The data indicate that value judgments are being made by approval, regulatory, and professional organizations as to the qualifications of faculty and the appropriateness of clinical facilities. These two problems are dependent upon the problems associated with securing State Board of Vocational and Technical Education approval, State Board of Nursing approval, and the requirements of professional organization as documented in the district directors' questionnaire.

There seems to be a wide variety of satisfaction with the above-mentioned agencies. Some are quite pleased with the input that these agencies contribute toward health program development. One district director took the opposite approach and labeled the State Board of Vocational, Technical, and Adult Education staff as the "greatest deterrent to program development." There seems to be a direct relationship between number of health programs being offered in the individual district and that district's satisfaction with the performance of the maze of regulatory approval licensing agencies involved in the development of health education programs.

One is then led to an examination of the role of the State Board of Vocational, Technical and Adult Education and their staff in program planning in the individual districts. District directors were requested to summarize their perceptions of the role of the state board staff. Some of their responses are as follows:

> Consultant services in general with specific data on areas of need and master plans for the development of programs to fulfill needs.

Liaison between health care facilities and personnel, other educational institutions, and professional organizations.

Development of health education rather than restriction of health occupations.

We would like to see some central agencies such as a state agency determine manpower needs in all areas of health occupations not just nursing. We also need a formula by which we can determine how many students a given clinical facility can absorb and when.

Need to become aware of such statewide plan for health occupations and how we fit into it, now too provincial. If there is a plan, it is a deep dark secret and it is a result of "deals" rather than factual input.

I think the State Board staff should actively assist each district in meeting the health occupations needs of the district. Too often in the past they have served as the carrier of "bad news" as to why you can't develop programs.

Advisory help in obtaining statistical data from existing programs.

Consultation in developing, implementing and evaluation of programs.

Statewide planning for location of programs to meet the need but to control numbers of programs in order to develop quality programs.

The State Board staff could assist in curriculum planning and development and also work with appropriate health board agencies in getting approval to offer programs as well as assist in statewide studies to determine if there is sufficient need for these people to justify program development.

Advisory help and consultation.

Assist in recruiting qualified faculty.

Positivism.

Consultative. Resource. Approval. Could enhance operation at local levels by developing simpler records, procedures, forms, etc. and keeping current. For example, the guidelines for developing and evaluating new programs seem exceeding and unnecessarily wordy and complex.

Assist with resource information and ideas at development of pilot proposals are developed. Constant encouragement.

As consultants to assist in development of new programs and also

to assist in developing the proper repertoire in cooperation with other agencies involved.

The State Board staff's role in program planning is to study, advise and review findings submitted to them, keeping us aware of other district plans in similar fields.

The above responses indicate that the district directors' view of the State Board staff is indeed complex. Some directors view the staff as people to get around before programs can be implemented. Others view the State Board staff as having consultative and resourceful information in the development of programming. There is a tremendous amount of leadership and experience of the state staff that district directors can tap in order to move progressively in the area of health education program development. But this is a tremendous responsibility on the shoulders of the State Board staff. As long as even one district director views the State Board staff as "the greatest deterrent to program development," a lack of honest and open communication exists.

The staff of the State Board of Vocational, Technical, and Adult Education is to be commended on their performance in program development throughout the State of Wisconsin. Work needs to be done, however, on the part of all concerned to erase the stigma of "bad news carrier" to the local districts. Conscientious and honest articulation is needed so that some of these other problems involved in program development might be resolved. For example, the district directors expressed great concern regarding the length of time it takes to get a program approved. One response indicated that the forms to be filled out were indeed too wordy and complex. This report endorses cooperative agreement in this area so the length of time between study request approval and program implementation may be shortened considerably.

In speaking to the problems identified by the district directors in regard to the State Board of Nursing approval and the requirements of professional organizations, the staff of the State Board of Vocational, Technical and Adult Education could play a major leadership role in facilitating some of the barriers to program development. The district directors identified various perceptions of the roles of professional organizations and licensing agencies in program development.

Professional and legal agencies should assist in maintaining standards for good health care, delivery without undue restraint on the educational institution who in turn follows sound education policies. These agencies should cooperate rather than resist change.

These agencies should allow for more flexibility in the use of clinical facilities.

Not much in planning per se but very important in terms of requirements which must be considered in the planning process.

While it is impossible to divorce these agencies entirely from the educational process, it seems that education should be the function of educators. I am afraid this is not the case in health occupations. Perhaps some of these administrative regulations were necessary with private schools. They are questionable with a degree of sophistication we have reached today.

Need State Board of Nursing knowledge and/or appraisal of mental health aid and emergency service aid. Need and have obtained approval and assistance in starting programs and occupational therapists assistant by state occupational therapist association. Need medical librarians assistant and approval for medical records technology.

A great restraint in developing health education programs are the requirements of the education committee of the American Medical Association for accreditation.

Could assist in identifying qualified staff who could be employed to teach in the programs as well as assist in locating clinical training stations when necessary in conjunction with the programs.

The State Board of Nursing seems to be overly protective of its personnel in the field.

It is apparent upon investigation of the aforementioned responses that some of these various licensing and professional agencies sit back in judgment after all the preliminary work has been completed and do minimal work in the planning stages of health education programs. If this is in fact the case, work needs to be done on a cooperative front so that mutual problems might be resolved more readily. All too often these mutual problems are one-sided. District directors have a problem with the lack of clinical facilities and qualified faculty for their health education programs. The controversy arises when the licensing and accrediting agencies do not see a problem. These agencies

quote a law, cite a rule or make reference to tradition as to the way it is to be. Therefore, the problem is one-sided (one-sided on the part of the district directors), approval is not given, and the program never gets implemented.

Many would argue that the requirements for qualified faculty in clinical affiliations are precise and concise. Any deviation from these standards would lead to serious deterioration of the health delivery system. Compromise is a word bitter to the palates of these professional accrediting and licensing organizations. The real question, however, is not deterioration of the health delivery system, but constant upgrading of health education programs and initiation of new programs where they are needed sufficiently.

The need for cooperation and input from these agencies and organizations is indigenous to program development. The ten or twenty member board sitting in judgment with only two stamps--approve and disapprove--does nothing for the improvement of the health care delivery system. Realistically, this does not happen today. All of the agencies mentioned do have the care of the patient first on their list of priorities. From what can be gathered from the district directors, many view these agencies as just that, a board with two stamps--approve and disapprove.

In focusing on some of the specific problems involved, the recruitment of qualified instructors will remain a problem for some time. If all the qualifications and requirements are legitimate, there remains only vigorous recruitment on the part of district administration. One hopes that in the age of modern technology, new and innovative procedures of instruction can be identified to carry these qualifications and requirements to higher levels of instructional expertise.

Another example where innovation is necessary is in the area of clinical affiliations. If health personnel are not available to meet needs in an area, and the appropriate clinical affiliations in the area are lacking, some alternative ways of providing experiences are necessary. This is not to imply that standards of health care are to be diminished. Innovative approaches to teaching or clinical

affiliations do not mean compromise. Changes in such procedures might mean beneficial results for the health consumer.

There exists today, however, a stalemate. Districts expend great effort in development. Innovative and creative clinical experiences and teaching methods evolve. But licensing and professional agencies and organizations somehow view these as threats to the standards that have been set up for the health care delivery system. The role of these agencies and organizations must be dismissed as "approve" or "disapprove". They must be involved in the planning stages of these programs. Honest communication must develop so that in areas where faculty recruitment or clinical experiences seem minimal, alternative methods of instruction might be developed on a cooperative basis. The wealth of experience in these professional and licensing organizations and agencies contradicts the fact that there is only one way to do something. Individualized teacher credentialing and shared-time or shared-vocational clinical affiliations are only the beginning of improving the health education programs in the State of Wisconsin. One district director stated that health occupations' education belongs to the realm of educators. Educators make mistakes; the system of checks and balances as we have it today is indeed sound. The health care delivery system of the State of Wisconsin is important. The reluctance to impart any decision-making authority to the local district, however, weakens the program of health occupation education today. Everyone involved in health occupation education today has the patient as their central focus. Upon examining what is going on in the state, one would be hard pressed to substantiate that statement.

Continuing Education

Vocational education has had an enduring reputation as being a prime force behind the concept of continuing education. "non-program" educational programs are offered in plentiful numbers throughout the state. Adult and continuing education is paramount to the vocational system in the State of Wisconsin.

There is, however, a discrepency in this philosophy regarding health occupations' education. Little is being done by the vocational system for the continuing education needs of the health worker. Perhaps this is due to the extensive amount of work being done by other agencies (See Table 1 Chapter 1). But a paradox still remains as to why "continuing education programs" have not been emphasized in the area of allied health occupations.

Exemplary exceptions are noted. The Wisconsin Nursing Home Licensure Board has authorized the Wisconsin Board of Vocational, Technical, and Adult Education to offer a 100-hour educational program for nursing home administrators through eight of its vocational schools. The leadership, however, for this program came through another agency, not through the vocational system. A cooperative emergency medical care training course has been mentioned in Chapter 3. Again, the Vocational district has played a rather minor part in program development and implementation.

Continuing education for the health worker is evidently not a high priority for the vocational system in Wisconsin. Perhaps the emphasis on associate degree programs in allied health occupations' programs draws from the support that these continuing education "non-programs" might receive otherwise. The reliance on "program", "program," "program" tends to detract from the high priority that should be assigned to continuing education.

An interesting development has occurred recently that might remedy this distribution of attention. On July 25, 1972, the Wisconsin Board of Vocational and Technical Education went on record in their 1973-75 budget request to the legislature to fund full-time and part-time programs equally. Before this time, part-time programs were funded to only half the extent that full-time programs were funded. This means continuing education programs received only one-half the reimbursement from the state that full-time programs received. Perhaps, therefore, if this budget request is needed, continuing education programs will receive the attention they are entitled to by the staff of the State Board of Vocational, Technical, and Adult Education and by the

local districts. Vocational education has long played the leading role in continuing education in the State of Wisconsin. Allied health occupations' education should be no exception.

In this year's questionnaire, the district directors were asked what improvements were made in overcoming the major barriers identified last year in the development of health occupations' programs. The majority of the district directors responded that no significant improvements were made. There is, however, a breath of hope in the future. A number of directors commented that communications with the various organizations are more open although much more could be accomplished. This is the point where health occupations' programs are at the present time. Articulation and cooperation are on the horizon. It is up to everyone involved to keep reaching toward that goal.

Conclusions

The remaining part of the questionnaire sent to the district directors, sought to obtain their views on a number of aspects related to health programs in their districts. Significant uniformity was not acquired so that these responses might be included in this report. But the underlying feeling in all the questionnaires was that Wisconsin is doing a commendable job in preparing health workers for the delivery system in the State of Wisconsin.

Many restraints were identified by the directors which impinge upon the effectiveness of existing programs and the development of new programs to meet Wisconsin's needs. This report shares the view that there is indeed an administrative dilemma in program development. The degree of sophistication to which health occupations' education has reached in the State of Wisconsin demands more than "rubber stamps" from the part of all concerned. The wealth of knowledge and experience that can be tapped as input into program development is remarkable so that such development might proceed with relative ease. The fact remains, however, that instead of cooperation and unity to a cause, disagreements tend to divide health professionals into camps

where somehow compromise means treason to the standards of the group to which one belongs. Such division does not serve the best interests of the residents in the State of Wisconsin. Trust and honest communication can do more for health occupations' education program development in the State of Wisconsin than all the federal money most health professionals say is needed.

CHAPTER V

SECONDARY SCHOOL HEALTH OCCUPATIONS' PROGRAMS

Accelerating forces for change in today's society have challenged educators to provide real, relevant, and rewarding life experiences for students at the secondary level--experiences that promise awareness to and preparation for entry into the world of work. Positive response to this challenge has been evidenced by the Wisconsin Department of Public Instruction's formation of a State Advisory Committee for Health Occupations. The membership list is included in Appendix C. Educators throughout the state have responded positively through their interest in initiating health careers' programs oriented toward greater awareness of the multi-various services contiguous to the health occupation.

Formal training in the health occupations has been reserved traditionally for the post-high school level in the State of Wisconsin. Other than one or two pilot programs around the state, health-career development in the secondary schools has been confined to informal information via the school counselor and/or short term related experiences and/or units in a variety of disciplines such as science and home economics. There is an emerging realization, however, that implementation of the career education concept commands greater program development and preparation for the health occupations at the secondary school level. The salient points developed in this section relative to the health occupations' programs at the secondary school level serve as initial factors in a "miniature program monitoring flowchart." Effective program development commands continuous monitoring and evaluation.

Needs' Assessment

Each of the traditional professions--medicine, nursing, pharmacy, and dentistry--has undergone a specialization and refinement

of roles and responsibilities. Many nurses have become specialists rather than general practitioners; the changing role of the physician has brought about the need for an increased number of supportive personnel. It has been estimated that for every practicing physician, twelve other people are needed in supporting roles to provide the comprehensive care the average citizen demands today.

John Tuple' of the National Planning Association at the Center for Priority Analysis projected that by 1980 over two million of the personnel performing direct health services will be non-professional workers who could profit from properly planned vocational programs. In 1966, Dr. William H. Stewart, the U.S. Surgeon General, estimated that 10,000 new health workers would be needed each month through 1975--a total of 1.5 million new persons. This demand for non-professional workers has been generated by several developments which are discussed here.

The health delivery system has changed. The emphasis from crises services to preventive care services necessitates a greater number of technicians per professional. The scientific diagnosis required by this shift needs to be supported by additional technologists, and radiologists such as bio-medical engineers, nuclear medical technicians. A variety of technological advances resulted in a specialization of functions. Substitutions and delegation of responsibilities and functions to supportive health personnel emphasize the need for better training at lower occupational levels. The increase of aged people and the concomitant need of facilities for the aged have stimulated the need for educating workers who can meet appropriately the needs of the aged. An assessment of the needs indigenous to the nature of homes for the aged indicates that the services at the homes of the aged have a greater sociological and psychological orientation than a medical service orientation.

Additional demographic and situational variables to needs' assessment have been delineated by the Wisconsin's Department of Public Instruction. They include the following:

Our population is growing. There are more young children and more older people--the two age groups which require the greatest health services.

Many unions, industries, businesses, and school systems provide health insurance for their employees.

Many new kinds of health care are possible due to new discoveries in science. As new machines and techniques are developed, the need for educated or re-educated personnel becomes crucial.

Public expectations include more and better health care along with more equal distribution of health services.

Private and public costs resulting from illness are being recognized as a hindrance to socio-economic development. As a resultant of these changes and the expectancies of an educated society, the urgency and need for preparation of personnel have been precipated. To assure adequate, available, and quality health services, the potential interests and motivation of secondary school students toward health occupations must be maximized.

The retention of trained personnel in the health occupations presents a real problem. The unpredictableness of this variable makes manpower projections difficult.

Objectives of Health Occupational Programs at the Secondary School Level

The health occupations' programs offered at the high school level in Wisconsin have presently as their primary objective an orientation to a health-service career rather than training per se. The orientation seeks to provide exploratory experiences to acquaint students with the numerous jobs related to the health professions. Orientation programs at the high school level enable the students to experience the psychological meaning of work; to examine the benefits to society of different kinds of work; and, to evaluate their own qualifications, interests and potential for various occupational programs. Students are able to internalize these

experiences to determine what they mean to them personally. Hopefully, the experiences assist the students in career decisions and in planning and pursuing educational programs which will help them to achieve their goals.

Choosing an occupation and learning more about an occupation are inseparable parts of the same process. Selective identification of an appropriate career is predicated upon knowledge of the nature of a specific career. An individual's interest in a health occupation may be initiated, stimulated, and fostered through a work-study program contiguous to a specific career; conversely, an individual's realization of the limitation on his potential in relationship to the physical or social demands of a specific health career may be recognized by the orientation experiences. Regardless of choice, these experiences assist the students to enter the world of work successfully and to adjust to the role of the worker. Implicit in the objectives of the orientation programs at the high school level is the realization of the statement expressed by the House General Subcommittee on Education, namely, "the goal of developing attitudes and basic educational skills-habits appropriate for the world of work is as important as skill training and deserves serious consideration."

The pre-vocational programs purport to develop a work-discipline concept and elementary job skills. Research, although limited, indicates that students are motivated toward a better total education including both academic and general preparation when vocational education is made an integral part of their school program. Vocational education has the particular responsibility in occupational awareness, exploration, and preparation. A general consensus among the teachers involved in the health occupational programs is that the programs should provide pre-employment orientation and ensure a certain standard of understanding before students commit themselves to employment or further health-career training. The same teachers concurred that the health occupations' programs encourage high school

students to remain in school and acquire credentials suitable for entrance into post-secondary health occupations or other specialized training programs.

Further effort to expose students to the variety of health occupations at the secondary school level is evidenced via the Wisconsin Instant Information for Students' and Counselors' (WISC) system. The information system includes a job description of the diversified health occupations and the names of the health career representatives in the eight designated districts in the State of Wisconsin. Students are advised to write or call the resource people for information related to their specific health occupation interest.

One health career representative is located in each hospital throughout the state. Representatives work as nurses, technicians, health personnel, or administrative people. They provide counseling services to students upon request for all the health career opportunities. They have specific information on working conditions, salaries, job opportunities, job duties, and the names of individuals who can provide first hand information on any specific health occupation. Occasionally, the representative provides an actual on-the-job look at a health occupation.

Health career counselors are primarily professional health people. They may be dentists, nurses, optometrists, dieticians, or people active in volunteer health work. They provide students with information and guidance in their particular health career occupation. They are willing to meet with the students and exchange ideas and information on health careers.

Criteria for High School Program

Cognizant of the emerging need for auxiliary and/or para-professional services, guidelines for initiating a high school program in health occupations under the direction of a local vocational education coordinator were established by the Department of Public

Instruction. The guidelines serve as criteria for a local custom-built program contingent upon the extraneous variablesoperative within each community. They encompass the following directives:

> Survey the community for need of persons trained in health occupations. This may also help determine institutions which may cooperate in the program.
>
> Survey high school graduates--find the number who have continued their education in a health occupation or have been employed in this field.
>
> Survey present students to determine interest in this field of study.
>
> Determine the coordinating teacher for the program. The teacher of the capstone course must hold a license to teach home economics, science or related area; must have completed courses in Issues and Principles of Vocational Education and Administration and Organization of Cooperative Vocational Education; and have six months of related work experience to help assure accuracy of information to be taught. Workshops and other appropriate experience may be substituted for part of the work experience. The teacher should have knowledge of different kinds of specialists to invite to present parts of the instructional program.
>
> Select an advisory committee which is representative of the health occupations field. Those who come in contact with entry level positions are excellent members of the committee. The committee members are recommended by the LVEC and the vocational education staff members, but they are appointed by the superintendent. Provision should be made for rotation of membership.
>
> The purpose of this committee is to bring relevance (knowledge, attitudes, and feelings of the community) into the school situation as a basis for planning, evaluating, and vitalizing the school program. The committee is "advisory" in nature and function; it is not a decision-making or policy-making body.
>
> Secure the cooperation of health institutions in the area--hospitals, clinics, nursing homes, etc. where the students may spend ample time to gain real insights in health occupations and the career of their choice.

> Develop curriculum for health occupations. Career information is available from many sources. This curriculum may include an introduction to careers in the health field and the inter-relationship of these careers, sanitation, human relations, safety, personal grooming, nursing care, and some pre-requisite courses such as biology and other related sciences. There should be an articulation with post-high school programs.
>
> Publicize the program. Include information to parents in the plans to secure their cooperation. School personnel, especially the guidance and curriculum staff, need to be included in the planning and implementation of the program.
>
> Programs which are to be funded under the VEA '68 must be submitted by LVEC's to the Bureau of Career and Manpower Development on the proper VE-3 form prior to the initiation of the program.

Wisconsin's Broad Survey Concept

The voices of the educators sound with excitement and enthusiasm toward initiating a health careers' program at the secondary school level. Wisconsin's broad survey approach to the health careers' education is supported by the objectives set forth in the course descriptions of various high school programs:

> ... designed to familiarize and teach the basic skill and knowledge used by all persons engaged in the 200 some careers available in today's health field. The course is not designed to train students for a specific job, but rather to aid them in finding the area best meeting their individual health career interests.[1]
>
> ... an opportunity to explore the health occupations firsthand and to get a feeling for future employment opportunities.[2]

---

[1]Arcadia, Blair, Independence, Taylor and Whitehall Public School Districts.

[2]East High School - Madison, Wisconsin.

... This is not a skills program. We start with a shotgun approach, looking at all health occupations, and end up with each student looking at one or two.[3]

... Emphasis is definitely on career "survey" rather than job entry training. All classes, regardless of school include a broad investigation of the health field, health care facilities, and the more than 200 jobs available in the health professions.[4]

... does not provide terminal education or training in any field. It does provide the student insight into the various fields and helps them select the schools which will offer the training they desire. It can conceivably provide them with some work experience which could help them obtain post-high school employment in the clerical field.[5]

... to develop action programs of orientation to the world of health careers prior to graduation from secondary schools in an effort to channel students into a meaningful career, reduce the "floundering" time that some students go through immediately after graduation, and contribute to solving the problem of health personnel shortage.[6]

... main objective of the course is not to train a student for any specific health career but rather to provide senior students who have shown an interest in a career in the health field with all the information necessary to make an intelligent decision as to which one of the hundreds of careers available in the health field they would like to enter for further training.[7]

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[3]West High School - Madison, Wisconsin.

[4]Mehlberg, Carol. Representative of the Wisconsin Health Careers Program, Madison, Wisconsin.

[5]ADVOTECH 18 - Grantsburg.

[6]Glenwood City High School and New Richmond Senior High School.

[7]Waupaca Unified Schools.

Operationalized Objectives of the High School Program

The program objectives are translated into activities that are real, relevant, and rewarding to the high school students. Activities vary according to the needs of the students, the geographic locations of the schools, and the health employment potential of the area. Field experiences serve as a vehicle to broaden the perspective of the students. They include such activities as observations at Central and Southern Colony, schools for the blind, nursing homes, sanitariums, schools of dentistry, general and county hospitals, schools for the mentally retarded, etc. The observations help to familiarize the students with the many duties performed by full-time, qualified employees. Vicarious experiences are created also via audio-visual materials, guest speakers, and simulation exercises.

Although the present objectives of the health occupations represent steps in the right direction, continuous progress toward developing programs to meet the career interests of all students is imperative. A survey of the future career interests of twenty-two secondary school students within one school, who were involved in the health careers' programs during the 1971-72 school year, reflects an array of interest in eighteen different health occupational services. Reference is made to this fact because of the administrative implications the diversity has to the implementation of the career-education concept.

Only when educational opportunities are available to meet the diversified interests of each individual can the objectives be considered adequate. In an effort to fulfill the diversified needs and interests of students, a pilot program was conducted during the summer of 1971 in the city of Madison. A two-fold objective was defined for the Madison project: to operate summer school and to foster curriculum development concurrently. An interdisciplinary teaching approach was utilized. The expertise and qualifications of the team included counseling credentials, vocational-education credentials, health occupational skills and related career support, and science related

technical skills. The career development focus was endorsed strongly by the team members. Individual students were encouraged to explore a career in breadth or depth contingent upon individual needs and interests. The role of leadership was a shared role depending on the content and competency needed. All decisions were made as a team, while implementation of supporting projects was often on an individual basis.

Program expansion throughout the State during 1971-72 witnesses a dedicated effort to meet the needs and interests of secondary school students. A cooperative program approach has characterized the Grantsburg program. The classes involve a cluster of small schools. An additional feature is that the district contracted with the VTAE district to provide a registered nurse as instructor. Arrangements for clinical observation were made with Grantsburg Hospital and other health offices and agencies. Cooperative programs, involving a cluster of small schools, have either been implemented or are in the planning stage at Waupaca (Iola-Scandinavia, Manawa, Teyawega, Wild Rose), Spring Valley, Baldwin-Woodville and Bruce-Ladysmith-Tony. For several of the programs students are bussed to a central classroom. New and promising programs were offered also at Glenwood City, Monona Grove, Monroe, Elkhart Lake, New Richmond, Menomonie, Tomah, D.C. Everest High School at Schofield, and Union Grove.

A Focus on the Past . . . . . A Focus toward the Future

Perhaps one yardstick for measurement of progress in the health occupations' programs at the secondary school level is the comparison of student enrollments in 1971-72 to the 1970-71 enrollments. Enrollments in high schools offering health occupational programs reflect program expansion and concern to meet the needs of high school students desirous of a health-career occupation. Table XVII depicts the schools and the respective enrollments during the school years 1970-71 and 1971-72. Enrollment data for schools that are not supported financially through the Department of Public Instruction are not available at this time.

TABLE XVII

HIGH SCHOOL ENROLLMENTS IN HEALTH OCCUPATION PROGRAMS *
(1971-1972)

Schools	Enrollments: 1970-1971	Enrollments: 1971-1972
Baldwin-Woodville		22
Bruce		24
Elkhart Lake		17
Franklin	3	
Frederic-Common	24	42
Glenwood City		15
Madison-Lafollette		23
Madison-Memorial		38
Madison-West		20
Monona Grove		32
Monroe		21
New Richmond		19
Tomah		30
Union Grove	17	13
Whitehall	22	74
Total	66	390

* Data represent schools funded in part by Federal vocational education funds through the Department of Public Instruction.

Further growth of interest in offering health occupational programs is evidenced by the number of additional high schools that are planning on including health occupations' programs in the curriculum for 1972-73. Table XVIII enumerates the schools and the projected enrollments:

TABLE XVIII

NEW SCHOOLS PLANNING TO OFFER HEALTH OCCUPATIONAL PROGRAMS DURING 1972-1973

New Schools	Projected Enrollments *
Algoma	50
Bloomer	10
Cochrane-Fountain City	20
Germantown	60
Granton	20
Greenwood	40
Hudson	22
Madison	155
Neilsville	
Presscott	18
Racine	25
Reedsville	
River Falls	24
D.C. Everest	60
Shawano	30
Waupaca	42

* Data represent schools that will be funded in part by Federal vocational funds through the Department of Public Instruction.

A total State enrollment increase of 66 students in 1970-71 to 390 students in 1971-72 is praiseworthy indeed. Also, the additional 16 schools that will be initiating the health occupations' program in 1972-73 evidence emerging interest and progress. However, on a comparative basis with the maximum potential interest of the total student population in the State of Wisconsin, involvement of other schools is suggested. It is difficult to rationalize the concept that for one of the largest occupational areas with jobs extending along a whole continuum in terms of skills and knowledge required that no preparation should be provided at the high school level for students desirous

of this training. Rationalization of this concept is further compounded by the fact that often the personnel with the least training have the most direct contact with the patients. The social and psychological implications inherent in this fact dictate the need for a reconsideration of the presently existing philosophy regarding the health occupations at the high school level and the availability of programs for high school students.

A further recommendation offered in the State Plan for 1971-72 was the need for student follow-up. The available statistics regarding the follow-up of those students who were enrolled in health occupation programs during 1971-1972 indicate that 88 percent of the students were interested in pursuing post high school training in health occupations and were registered for classes during the summer or fall term of 1972. Just as important, perhaps, are the students who discovered that health careers are not the appropriate field for them. It is suggested that a continuing follow-up evaluation of the 88 percent who pursued further training be conducted. Such information is valuable to increasing program effectiveness and quality. Indices such as specific health interests, stability of interests, job satisfaction, limitations of academic qualifications as perceived by the students, availability of centers to meet the needs of the students, and financial difficulties could be included in the follow-up questionnaire.

Strong emphasis was placed on the recommendation in the State Plan for 1971-72 regarding the need to refocus existing vocational guidance activities toward the career-education concept, in order to further the development of comprehensive programs of vocational education; and, to expand the state-wide availability of career preparation programs in each of the major occupational areas. Fundamental to the fulfillment of this recommendation is a clearer definition of the mission of the secondary school relative to health occupations. The controversial issue whether the programs should be limited to the exploratory dimension or preparatory program should be

resolved. It is suggested that efforts be expanded toward the development of a common perspective between the mission of the high school health programs and the concept of career education. Until the two concepts can be integrated, program development will be thwarted by the contingency constraints. Propinquity exists between this recommendation and the directive in State Plan to expose students to a wider variety of occupation and preparation programs in line with employment trends so that the schools may do a better job of meeting manpower needs.

The cooperative education programs vs. exploratory experiences in the secondary schools present a real dichotomy. As a result of the time element, some students who spend time learning job skills may lack the chemistry, algebra and other prerequisites for post-secondary health occupation training; conversely, if students have not acquired competency in some basic skills, they may be unable to earn their tuition fees and living expenses while attending post-secondary programs. Of even more importance for many youth, high school represents their last formal education before joining the work force. Large numbers now enter employment in health related areas without the benefit of occupational training.

Fulfillment of the suggestion to conduct research, evaluation and curriculum development necessary to enhance the quality and effectiveness of the state's secondary vocational education system was accomplished through the pilot program in Madison, Wisconsin. The interdisciplinary approach was explicated earlier and, therefore, is not described again. Further research, through projects that involve cooperative efforts on the part of high school faculty, the personnel at the local adult, vocational, and technical school and members of the "Health community," such as administrators and training directors in hospitals, is encouraged. The value of research and the dissemination of the results must be encouraged and maximized, if program development is to retain its relevancy.

A questionnaire regarding allied health occupations was sent to the directors of the 17 post-secondary vocational, technical and adult education districts. Feedback regarding the health occupations' programs at the high school level was elicited from several questions. The responses to the question regarding whether the district offers any cooperative efforts with the secondary schools in program development in the allied health field indicate that limited cooperation and communication exist between the secondary schools and the VTAE districts. Greater cooperative and supportive relationships between the two reference groups should be established. To maintain continuity of program development and to avoid duplication of effort, articulation and communication become imperative.

The reactions of the district directors were requested regarding the following suggestions: qualified health professionals on a district-wide basis should be organized to serve as consultants or specialized faculty for team-teaching to provide health occupation education for secondary education programs. The reactions are listed in Table XIX.

TABLE XIX

REACTIONS OF DISTRICT DIRECTORS TO THE ORGANIZATION OF DISTRICT CONSULTANTS OR SPECIAL FACULTY FOR SECONDARY SCHOOL PROGRAMS

Positive Reactions	Negative Reactions
1. Would provide much more positive approach to Health Occupations education at the secondary level which is badly needed.	1. No--health occupation education does not belong in secondary schools. Teach secondary school students how to read, write, and adjust.
2. Good idea--health care faculty, under present regulations are difficult to recruit. The local VTAE	2. Not needed in this area. 3. I do not feel Health Occupations should be taught on a high

TABLE XIX (cont.)

Positive Reactions	Negative Reactions
district can deliver educational opportunities. 3. I would support this development. 4. Probably needed in areas where obtaining qualified faculty is at a premium. Less needed in schools the size of Milwaukee Area Technical College where a full-time instructor could be used. 5. This is now in operation on a somewhat small scale through our advisory committees. Instructors are using qualified professionals as outside source people. 6. Some joint planning is being done in an unstructured manner. Organized planning would probably be more effective. 7. It would be desirable and should be supported. 8. Good idea. We do it now in our nursing home administrator program and will do it in the dental hygiene program.	school level. They should be post-high school education courses and programs. 4. No. 5. No.

The data indicate that variance exists among the districts directors regarding the organization of district consultants or special faculty to provide health occupations' education for secondary education programs. Further research should be conducted to determine the contributing

factors to the varied consensus among the district directors. Greater explication of the health careers survey concept may be required. Needs' assessment related to existing circumstances may or may not justify the reactions. Further information and input, therefore, are required as a basis for the development of appropriate programs.

John Gardner, an analyst of American Society, speaking about the health occupations, made the provocative statement that "we have a great number of brilliant opportunities, cleverly disguised as insoluble problems." A continuous evaluation, assessment and openness to the assumed problems existent at the secondary school level, may assist to leap the barriers that thwart brilliant opportunities.

CHAPTER VI

PROFESSIONAL DEVELOPMENT

Professional development via growth in knowledge and operational skills finds its ultimate purpose and fruition in the improvement of quality health care. Growth can be conceived as ranging on an infinite continuum, -- personnel at the initial stage of development and experienced personnel ever in need of revitalization and upgrading of emergent knowledge and skills. Professional development as considered in this report is dichotomized into two areas: teacher development and worker development. Each of these areas is discussed in relation to teaching skills and health skills. Justification for this division relative to worker development is based on the rationale that teaching skills denote the ability to share and communicate with others -- certainly an essential quality for workers as they communicate with the patients on an everyday basis.

Teacher Development

Faculty competence is predicated upon the achievement of the requirements established by various agencies and personnel. Regulations governing training and/or practice in the allied health occupational fields include licensing, registry, certification, and accreditation. The stipulated regulations affect both the development of training programs and determine and control the supply of trained manpower in the paraprofessional health fields.

Licensure is established by law and is applicable to the following fields: Registered Nurse; Licensed Practical Nurse; Dental Hygienist; Dental Technologists; and, Dental Assistants. Ideally, licensing laws perform a dual function: they protect the public against unfit and inept practitioners of professions or occupations affecting the public health and safety; and, they permit various professions and trades to advance from a common set of minimum standards.

Registry and certification work through a process of both accreditation of training programs and the administration of national qualifying exams. The American Registry of Radiologic Technologist, the American Physical Therapy Association, and the American Association of Certified Technicians are among the influential professional societies to use registry to control the quality of their membership.

The practice of evaluating training programs and/or institutions for many health occupations is required both by law and demanded by national registry requirements as a pre-requisite to acceptance of a health program curriculum. Accrediting rules are often quite precise and designed to assure quality programs. An example of an accrediting directive is detailed in the Wisconsin Administrative Code Section N 1.02:

> The Wisconsin statutes provide that the board may establish minimum standards for schools for nurses and trained practical nurses licensed under this chapter, and make and provide periodic surveys and consultations to such schools. In order to facilitate this responsibility, the board accredits schools and associate units and approves extended units.

The State Board of Nursing and the State Board of Dentistry are delegated authority by the state to set minimum standards for licensure and/or program accreditation in health occupations. Implicit in this authority is the responsibility for not only the quality of the personnel but also for the adequacy of and availability of manpower to provide essential health care for the citizens of Wisconsin. In view of this extenuating condition, Table XX displays the distribution of health occupations' personnel by counties in Wisconsin. Appraisal of the factual data portrayed in the table, may assist the State Advisory Council in making recommendations contiguous to personnel and programs.

WVTAE Board Requirements

A number of entry level health occupations are not regulated by either licensure, national registry, or program accreditation. These are occupations for which on-the-job training remains the most

TABLE XX

DISTRIBUTION OF HEALTH OCCUPATIONS' PERSONNEL BY COUNTIES IN WISCONSIN

	Certified Occupational Therapist	Certified Occupational Therapy Assistants	Dentists (Active)	Dental Hygienists (Active)	Dieticians (Active & Inactive)	Medical Technicians (Active & Inactive)	Registered Nurses (Active)	Trained Practical Nurses	Optometrists (Active)	Pharmacists (Active)	Physical Therapists	Physicians & Osteopaths (Active)	Podiatrists (Active & Inactive)	Psychologists (Active)	Sanitarians (Active & Inactive)	Speech & Hearing Therapists (Active & Inactive)
Adams		1	2	1		2	14	6		3		3				
Ashland	2		10		1	1	77	28	2	13	2	13		2	3	
Bayfield			2			2	21	5		4		2				
Barron	1		20	1	2	9	96	28	6	20		23		1	2	1
Brown	14	6	86	20	14	73	669	293	16	78	15	148	5	12	20	13
Buffalo			4			3	23	3	1	4		4				
Burnett			2			2	14	8		4		3				1
Calumet			9	1		6	39	21	3	3		9				
Chippewa			22	3	5	17	176	47	5	18	2	20	1		2	3
Clark		2	15		2	7	52	13	6	12	1	15				
Columbia	2	6	20		3	14	117	61	4	25	4	28	1	2		3
Crawford			6		1	2	48	14	2	4		7				
Dane	91	25	196	74	113	286	2,079	512	25	225	79	995	9	71	41	92
Door			10	2	1		49	14	3	12	1	11			1	2
Douglas			22	1	4	31	142	237	2	25	3	24	1	4		2
Dunn	3		12	1	10	4	64	18	3	12	1	11		7	2	1
Dodge	5	4	25	3	6	33	187	78	7	19	5	47	1	3		3
Eau Claire	5	3	36	11	9	40	435	90	5	37	10	83	4	12	10	12

TABLE XX (Cont.)

	Speech & Hearing Therapists (Active & Inactive)	Sanitarians (Active & Inactive)	Psychologists (Active)	Podiatrists (Active & Inactive)	Physicians & Osteopaths (Active)	Physical Therapists	Pharmacists (Active)	Optometrists (Active)	Trained Practical Nurses	Registered Nurses (Active)	Medical Technicians (Active & Inactive)	Dieticians (Active & Inactive)	Dental Hygienists (Active)	Dentists (Active)	Certified Occupational Therapy Assistants	Certified Occupational Therapist
Florence					1		1			2						
Fond du Lac	5	7	5	3	81	9	50	9	190	368	47	8	9	40		2
Forest		3		2	3	2	4	1	4	13		1		4		1
Green	1	1			46		18	4	22	139	17	6		18	2	
Green Lake	1	1	4		12		3	2	13	39	2	2	1	8		
Grant		1			29	1	18	3	39	159	10	5	3	21	2	
Iowa					7	1	4	2	10	49	3	1	2	6	6	
Iron		1			2	1	5	1	3	7	2			3		
Jackson	1	5			8	1	6	1	12	43	3			2		
Jefferson	5	1	1	2	33	1	27	8	77	195	13	3	5	31	7	2
Juneau	1	1			11		8	2	8	33	1	3		7	2	
Kenosha	14	5	2	5	88	10	49	12	372	343	46	9	9	60		5
Kewaunee					9		6	3	12	36	5	2	2	12	1	
La Crosse	8	10	3	5	99	8	45	5	223	592	82	9	13	60	4	4
La Fayette					4		5	2	2	22	3		1	5		3
Langlade		1			14	2	10	3	10	56	2			13		
Lincoln	2	1			14		14	3	12	75	5		2	8		
Marathon	5	5	3	4	72	6	39	5	33	333	35	6		47	3	8
Marinette	1	4	2	1	20		8	5	43	81	3	3	3	20	3	
Manitowoc	8		1	1	51	3	34	6	75	308	31	8	9	39	5	2
Menomonie										3						

TABLE XX (Cont.)

	Speech & Hearing Therapists (Active & Inactive)	Sanitarians (Active & Inactive)	Psychologists (Active)	Podiatrists (Active & Inactive)	Physicians & Osteopaths (Active)	Physical Therapists	Pharmacists (Active)	Optometrists (Active)	Trained Practical Nurses	Registered Nurses (Active)	Medical Technicians (Active & Inactive)	Dieticians (Active & Inactive)	Dental Hygienists (Active)	Dentists (Active)	Certified Occupational Therapy Assistants	Certified Occupational Therapist
Marquette					2		4	1	5	7				3	2	
Milwaukee	130	85	120	52	1,896	156	601	94	1,766	5,078	790	154	199	765	37	193
Monroe	3	2	3	1	42	1	13	4	39	132	8	1	3	13	4	5
Oconto	1		4		10		7	2	29	54	2	1	1	9	1	1
Oneida	2	3	1	1	28	1	15	3	18	94	7	2	6	15		1
Outagamie	8	6	5	4	105	12	52	14	141	379	51	6	24	71	1	6
Ozaukee	9	3	6	2	29	4	19	4	22	92	29	6	20	31	1	8
Pierce	4	1	4		22		12	3	14	60	10	3		12		1
Polk					23		16	4	34	85	6			14		
Price	1				5	1	5	1	11	35	1			7	3	
Pepin	1	1			5		2		6	17	4	1	1	5		
Portage	10	2	3	1	35	3	16	3	38	136	30	5	3	19	1	4
Racine	12	3	14	6	140	16	84	16	270	610	80	18	11	84	11	
Richland					13	2	7	2	9	47	3	1	1	7		
Rock	10	11	2	5	121	10	68	12	91	480	36	9	13	65	4	5
Rusk	1				6		5	2	12	51	1	1	1	4		
Sauk	3	2		1	24	1	24	5	35	150	11	3	4	20	7	1
Sawyer	3				6		4	1	12	28				5		
Shawano	1	1	2		18	1	13	3	27	59	2		2	15	1	
Sheboygan	9	3	4	4	72	8	47	10	103	367	36	6	16	60	4	6

TABLE XX (Cont.)

	Certified Occupational Therapist	Certified Occupational Therapy Assistants	Dentists (Active)	Dental Hygienists (Active)	Dieticians (Active & Inactive)	Medical Technicians (Active & Inactive)	Registered Nurses (Active)	Trained Practical Nurses	Optometrists (Active)	Pharmacists (Active)	Physical Therapists	Physicians & Osteopaths (Active)	Podiatrists (Active & Inactive)	Psychologists (Active)	Sanitarians (Active & Inactive)	Speech & Hearing Therapists (Active & Inactive)
St. Croix	3		14	1	3	10	101	38	4	13		19			1	2
Taylor			5			3	38	5	1	3		6		1	1	
Trempealeau			11		2	3	73	21	1	9		15		1	2	1
Vilas			5	1	2	1	39	6	1	7		5				
Vernon		1	9	1	1	5	63	13	3	11	1	10	1			2
Walworth	4	3	34	5	3	6	163	24	8	32	3	38	4	7	5	6
Washburn			5			3	33	11	1	5		8				
Washington	4	4	30	11	8	25	153	43	3	18	3	33	1	4	1	8
Waushara	1		8	1		4	31	4	2	3		10	1			1
Waukesha	52	5	124	65	58	141	740	242	23	122	35	251	6	16	9	17
Waupaca			18	2	3	6	130	29	6	21	2	21				1
Winnebago	20		67	24	10	56	652	280	13	66	9	150	5	13	5	11
Wood	7	3	38	7	10	60	379	67	9	44	8	115	1	5	5	4

common preparation. These educational programs depend on the internal approval of the governing bodies of the training facilities and the Wisconsin Vocational, Technical, and Adult Education Board (WVTAE) in the case of the vocational system.

The 2-year provisional teacher certificate requirements and the 5-year standard certificate requirements of WVTAE are explicated in Tables XXI and XXII. They serve as examples of the additional requirements specific agencies may enforce.

TABLE XXI

TWO-YEAR PROVISIONAL CERTIFICATE REQUIREMENTS

Title	Education Within Last 10 Years	Occupational Experience Within Last 10 Years	Teaching Experience
Teacher Assistants	2 yrs. of college, jr. college or accredited technical program. Appropriate work experience may be substituted for max. of 1 yr. equivalency.	None	———
Teachers	Bachelor's degree (or equivalent)	12 months - in teaching field.	———
Academic Subject Teachers Librarian Instructional Media-Specialists	Bachelor's degree	3 months - can be in any field except education.	———
Guidance Counselors	Master's degree in guidance and counseling	12 months - can be in any field except education.	———

TABLE XXI (Cont.)

Title	Education Within Last 10 Years	Occupational Experience Within Last 10 Years	Teaching Experience
Supervisors Coordinators & other Supervisory Personnel	Bachelor's degree in appropriate field (or equivalent)	12 months - should be able to qualify as a teacher in some field.	3 yrs.
Directors and Assistant Directors	Master's degree in appropriate field.	24 months - should be able to qualify as a teacher in some field.	3 yrs.
Other Administrative Personnel	Master's degree (or equivalent)	24 months - should be able to qualify as a teacher in some field.	3 yrs.

Note -

Education - Apprenticeship and journeyman experience in the skilled trades for a combined total of 7 yrs. shall be equivalent to a baccalaureate degree. The above plus a baccalaureate degree shall be equivalent to a master's degree. 6 sem. cr. each 2 yr. period or equivalent is necessary toward fulfilling the requirements for a standard certificate.

Occupational Experience - 2 months occupational experience or equivalent is necessary each 2 yr. period to work toward fulfilling requirements for a standard certificate. Approved education may be substituted for 1/2 of the required work experience.

Source -

Wisconsin Board of Vocational, Technical and Adult Education

Due to requirements for the 5-year standard certificate, many instructors have 2-year provisional certificates. Concern is expressed over the availability of opportunities to assist instructors with the 2-year provisional certificates to acquire the skills and necessary credits for a 5-year standard certificate. Perhaps the feasibility of

TABLE XXII

FIVE-YEAR STANDARD CERTIFICATE REQUIREMENTS

Title Full-Time Personnel	Education	Occupational Experience - 33	Professional Experience - 34
Teacher Assistants Other Ancillary Personnel	21. Philosophy of VTAE in Wisconsin - 2 cr.	None	3 yr. in certified position
Teachers Academic Subject Teachers	21. Philosophy of VTAE in Wisconsin - 2 cr. 22. Teaching Methods - 2 cr. 23. Educational Psychology - 2 cr. 24. Educational Evaluation - 2 cr. 25. Guidance and Counseling - 2 cr. 26. Bachelor's Degree (or equivalent) 27. Major in teaching area	Teachers - 24 months in teaching area Academic Subject Teachers - 6 months in any occupation except education	3 yr. in certified position
Supervisors Coordinators Guidance Counselors Librarians Instructional Media Specialists	21. Philosophy of VTAE in Wisconsin - 2 cr. 22. Teaching Methods - 2 cr. 23. Educational Psychology - 2 cr. 24. Educational Evaluation - 2 cr. 25. Guidance and Counseling - 2 cr. 26. Bachelor's Degree (or equivalent) 27. Major in teaching area 28. Coordination - 2 cr. 29. Supervision - 2 cr. 30. Public Relations - 2 cr. 31. Master's degree or equivalent in appropriate field	Supervisors, Coordinators, Guidance Counselors - 24 months - should be able to qualify as teacher. Librarians, Instructional Media-Specialists - 6 months	3 yr. in certified position

TABLE XXII (Cont.)

Title Full-Time Personnel	Education	Occupational Experience - 33	Professional Experience - 34
Directors Assistant Directors Other Administrative Personnel	21. Philosophy of VTAE in Wisconsin - 2 cr. 22. Teaching Methods - 2 cr. 23. Educational Psychology - 2 cr. 24. Educational Evaluation - 2 cr. 25. Guidance and Counseling - 2 cr. 26. Bachelor's Degree (or equivalent) 27. Major in teaching area 28. Coordination - 2 cr. 29. Supervision - 2 cr. 30. Public Relations - 2 cr. 31. Master's Degree in appropriate field 32. Administration - 4 cr.	24 months - should be able to qualify as teacher	3 yr. in certified position

Life Certificate - Issued to teachers, supervisors, coordinators, counselors and directors who hold or are eligible for a standard 5-yr. certificate and attained age 55.

Source - Wisconsin Board of Vocational, Technical and Adult Education

individualized certification requirements needs to be pursued. Greater flexibility in certification requirements, based on number of years of experience plus bachelor's degree, is suggested. It is observed that certification requirements speak more to the health occupations skills area than to the teaching skills. Without minimizing the value of the health occupations skills, reference is made to the fact that perhaps alternatives need to be explored -- alternatives that are indigenous to career mobility. (See the detailed reference made to career mobility in Chapter II.)

Criteria Established by the State of Wisconsin Board of Nursing

Another example of additional requirements dictated and stipulated by specific health agencies in the State of Wisconsin is the criteria established by the State of Wisconsin Board of Nursing. They are included here primarily to emphasize the influence of the numerous agencies cited in Chapter I. Needless to say, the complexity of controls by regulatory bodies, the professional groups, and accrediting agencies is related to the administrative dilemma.

The criteria of the State of Wisconsin Board of Nursing as established in the Wisconsin Administrative Code Section, N 3.04, include the following:

> The members shall have the preparation and qualifications for carrying out the specifications of the positions for which they have been employed. (a) Nurse members shall be registered currently in Wisconsin and shall possess the personal and professional characteristics as desirable in the Code for Professional Nurses. Qualifications stipulated for specialized personnel are delineated below:
>
> EDUCATIONAL ADMINISTRATOR: He shall hold a baccalaureate degree from an approved college or university. His program shall have included or been supplemented by a program of studies in professional and practical nursing education. A master's degree is recommended. Experience of at least 5 years including 2 years in an accredited school of professional or practical nursing in one or more of the following: supervision, instruction or assistant to a director is essential.

INSTRUCTOR: He shall have completed at least 60 semester hours of study in an approved college or university including academic preparation in educational psychology, sociology and principles of teaching. A baccalaureate degree is recommended. Two years of professional nursing experience, 6 months of which shall have been spent in teaching in an accredited school of nursing is required.

ASSISTANT INSTRUCTOR: He shall have 10 semester hours of credit in a college or university exclusive of the credits given for the completion of a basic diploma nursing program. Academic preparation shall include educational psychology, communications, teaching and social science. One year of satisfactory nursing care experience applicable or specific to the major types of nursing situations is essential.

(b) Exceptions.

1. Appointments may be made to the faculty of persons not meeting the qualifications enumerated in (a) with the approval of the board. They shall be of 2 types:

a. Provisional approval. The appointee to the position of educational administrator shall have a baccalaureate degree and at least one-half of the other specified qualifications. The appointee to the position of instructor shall have 60 semester hours of credit in a college or university exclusive of the credit given for the completion of a diploma nursing program and one-half of the other qualifications. The appointee to the position of assistant instructor has less than one-half of the qualifications.

b. Emergency approval. The appointee to the position of educational administrator shall have a baccalaureate degree and at least one-half of the other specified qualifications. The appointee to the position of instructor shall have 60 semester hours of credit in a college or university exclusive of the credit given for the completion of a diploma nursing program and one-half of the other qualifications. The appointee to the position of assistant instructor has less than one-half of the qualifications.

2. A statement of the plans to qualify, including the time period agreed upon by the educational administrator and the faculty member shall be submitted to department.

3. Individuals holding provisional or emergency approval shall complete at least 3 semester hours in each 12 months to retain approval.

CLERICAL ASSISTANCE: The practical nurse faculty shall have adequate clerical assistance.

EVALUATION OF FACULTY RECORDS: The educational administrator shall submit the qualifications of all faculty members to the board for evaluation upon appointment.

(a) Current college transcripts shall be attached to the faculty qualification record.

(b) There shall be on file in the school office complete records of qualifications and teaching load for each faculty member.

RE-EVALUATION OF FACULTY RECORDS: (a) The secretary of the board shall re-evaluate the qualifications of the faculty (accredited schools and health agencies) each December. Schools without the required minimum faculty shall be notified that no new students may be enrolled until an adequate faculty has been obtained.

(b) An adequate faculty is one in which no less than one-half of the minimum faculty (accredited schools and health agencies) have full approval and no more than one-fourth have emergency approval.

Source: HISTORY: Cr. Register, December, 1962, No. 84, eff. 7-1-63.

WVTAE'S Staff Commitment to Teacher Development

Commitment to the preparatory and continuing professional growth of instructors and workers in the health occupations' programs is evidenced through both the contributory and supportive leadership of the State Board of Vocational, Technical and Adult Education. Workshops, conventions, conferences, and cooperative activities with other agencies all focus toward continuous professional growth and development of the faculty. Propinquity exists between the scope and nature of these activities and meeting the requirements stipulated for Wisconsin's teachers of vocational, technical and adult education.

The WVTAE staff maintains that continuous professional growth witnesses persons reaching out and assisting others to reach out for further knowledge and the development of skills. This philosophy is implemented by active participation at conferences of various personnel to share teaching techniques, projects, and methods that each found effective in his own district. Sharing with colleagues can serve as a powerful stimulant to the growth of knowledge and skills. In addition to the knowledge and skills achieved, such involvement can help to

motivate teaching personnel so that they feel their profession is of significance and that their task of communicating and sharing knowledge and expertise relative to their own talents contributes in an essential manner to professional growth.

Local District Effort Relative to Professional Growth

Fundamental to the philosophy of the State Board staff is the realization that the staff serves in a supportive role to the local vocational-technical administrators. Consultative and contributory services are available upon request by the local district administrators.

The local vocational-technical administrator plays a strategic role in creating an atmosphere in which professional concerns and the quality of performance become of prime importance to the health occupations' instructors. Active and positive response to professional growth becomes a local administrative challenge! The priority that administrators place on professional growth and their active and public support for professional sharing may be the encouragement health instructors need to enhance and reinforce their professional growth.

Teacher preparation programs should provide valid and effective education and, as such, are worthy of academic recognition through credit acceptable generally in community colleges and baccalaureate institutions. The vocational administrator may bring this need for transferable credits to the attention of his peers in academic institutions. Either by himself or joined with other vocational directors, the administrator can negotiate and usually will find a favorable reception from one or another college. Not all career development experiences are academic. "Scholarships" for staff which permit them to be involved in educational experiences can take many forms. Faculty may have their hours arranged to permit them attendance at training programs in other institutions. Individuals may be sent to a large hospital for experience with new techniques and special training by the available, specialized staff. An extra two weeks of "paid vacation" which permit a teacher to attend a "How to Teach" session at a college or university or technical

institute may improve the quality of teaching. Sending one or two faculty members to specialized workshops from which they report back to other staff can bring new ideas and increased vitality to training in a facility.

Only one local district director reported receiving a scholarship through the WBVTAE System. It was a scholarship for attendance at a workshop for Associate Degree Nursing at the University of Wisconsin-Madison. The same director confirmed the fact that the Board of Nursing scholarships are available but instructors need to attend classes outside of commuting distance area to avail themselves of these classes. He added that most instructors have family responsibilities which preclude leaving home for more than a few days at a time.

Local Pre-Service and In-Service Teacher Training Sessions

District effort relative to teacher training development was assessed through a questionnaire sent to the local district administrators in Wisconsin. Data indicate that 59 percent of the local districts conducted teacher-training sessions during 1971-72. Some districts relied solely on the annual workshop conducted by the State WVTAE Board for programs in nursing, dental auxiliaries, and medical auxiliaries. The number of pre-service and/or inservice programs varied throughout the districts: one district conducted a one week pre-service program on teaching methods for each incoming instructor and nine days of in-service each year; some districts conducted inservice programs once each semester; 41 percent of the districts did not list any inservice or pre-service teacher-training sessions.

New Approaches to Health Education Programs during 1971-72

District directors were asked to identify any new approaches in their districts to implement health education programs. The responses included the following:

Individualized instruction via packaged materials (4 districts).

Use of teacher aides.

Enrollment concurrently in health programs and collegiate courses at another college.

Written federal project for ATL.

Multi-media approach to nursing.

Small group and individualized guidance.

Use of audio-visual technology in dental assisting.

Local District Effort Via Extension Services

The University of Wisconsin Extension Services are a major vehicle for continuous professional growth. The services promise an upward gradient in emergent technical and educational skills. The Health Sciences' Unit of Wisconsin-Extension schedules short courses, institutes, conferences, and telephone-radio conferences. Learning experiences for physicians, nurses, pharmacists, hospital and nursing home administrators, allied health professionals and community-health-minded citizens are provided.

Many of the Extension Courses are designed to refresh and update the health practitioner in new developments and techniques that affect particular practice areas. Further courses are aimed at developing and adding to the background of those engaged in or responsible for management, supervisory or administrative skills in health agencies. Courses are not offered for regular university credit, although continuing education hours or board "credit" may be earned. The Health Sciences' Unit of Wisconsin-Extension should be supported vigorously. Perhaps arrangements should be made on a release time basis for instructors to attend appropriate classes.

Suggestions for Local District Involvement in Teacher Development

Professional development for vocational-technical faculty and administration demands exposure to alternative ways of presenting material, organizing curriculum content, and/or of practicing skills. Faculty trade-offs of short durations between programs in different districts

or urban-rural settings or vocational-technical and hospital based training could benefit the faculty of both programs. Participation of vocational-technical faculty in the services offered by physicians, clinics, neighborhood health centers, and public health agencies together with feedback from program graduates employed in various settings offer important opportunities for keeping faculty skill levels high and in touch with the realities of service delivery.

How else can educators be truly aware of the nature of service delivery problems and needs? How can educators avoid getting lost in the maze of "x" number of hours of this and "x" number of hours of that? Unless educators frequently "take the pulse" of the service delivery, they risk teaching tomorrow's graduates yesterday's skills. The educational system has not provided as many examples of aggressive leadership in improvement of patient and community services as one might expect. Practitioners and researchers push back the frontiers of information and technique. At the very least, educators need to be aware of where the frontier is! Staying current in a dynamic system is very difficult. How long has it been since the health faculty or one member of it put in a two week stint in a remote rural setting? .....or in an urban ghetto?.....or in an institution for the mentally ill? Perhaps with current trends in mind, such an experience should be a community mental health center. From selected exposure to delivery settings and to consumers of health services, a faculty member can bring back to the institution valuable insights to share with the rest of the faculty.

Vocational educators and particularly vocational administrators may find it desirable to aggressively seek the participation of faculty from university health centers in seminars at the vocational-technical school which bring together administrators and practitioners from the school and the service delivery agencies and facilities in the area. If faculty in the professional units at the University Center were more familiar with the needs, opportunities, and personalities in the vocational-technical educational centers, they might encourage more graduates to consider employment in those centers. Practice teaching or an intern program in vocational-technical schools is encouraged.

The vocational administrator makes an important contribution to the relationships established with the clinical facilities which are vital to the health occupation training programs. The administrator, by recognizing publicly the importance of the clinical facility in the training effort, promotes a continuation of that effort and support.

Worker Development

The reader is reminded that a certain degree of commonality exists between the professional growth services described in the previous section on teacher development and this section on worker development. A totally discrete dichotomy between the two exists, perhaps, only in the theoretical domain. This section, however, focuses and directs its main thrust toward the professional growth of workers and practitioners employed in the allied health occupations.

Leadership from the vocational-technical administrator for the professional growth of his staff requires the identifcation of both proximate and long-range goals for the faculty. Such goals should concern personal growth and increasing competence. The objectives should be defined on a cooperative basis by the administrator and his staff. Furthermore, the goals should be observable and measureable.

Just as human resources are the most important part of the health services' delivery system, so they are the single most important element in the health occupations' training in vocational-technical education. The vocational-technical administrator plays a key role in facilitating the professional development of his staff members--his "human resources".

Concerns about professional development are most significant in the delivery of quality health services and are no less significant in the delivery of quality health occupations' training. Health services have been accused nationally of being one of the largest and worst managed industries in the nation. No other industry is said to be plagued by so many untrained managerial personnel. Today's complex medical services' delivery system and the vocational system

require accurate information about the role and function of the many professionals, para-professionals, and supportive personnel which make up the "health delivery team." The health industry requires management components appropriate to all levels of personnel and these components must be integrated with the other skills taught by vocational educators.

Professional development of allied health occupations' faculty should consider many groups and agencies. Some of these involved include:

1. Educators in colleges, universities, and technical institutes.
2. Allied health professionals who have formalized their professional standards, e.g., occupational therapists, physical therapists, radiologic technicians, and respiratory technicians.
3. Allied health practitioners who are giving direct services to patients.
4. Employers of allied health practitioners such as administrators of nursing homes, hospitals, clinics, public health agencies.
5. Consumers of health services. It is only in very recent times that the consumer's voice has begun to be heard regarding access to care, decision-making as to the level of care which the individual wants (as opposed to the "expert opinion" of a physician), and self-referral to therapeutic services.

Health adminstrators seek to provide the best care possible from the available resources just as vocational administrators seek to provide the best education and training for students. Some of the agencies and organizations that serve as resources in the professional growth of service personnel are listed in Table XXIII.

TABLE XXIII

AGENCIES AND ORGANIZATIONS SPONSORING WORKSHOPS FOR SERVICE WORKERS IN ONE AREA OF WISCONSIN

1. University of Wisconsin Extension Division Health Sciences Unit--Department of Nursing
2. Wisconsin Hospital Association

TABLE XXIII (Cont.)

AGENCIES AND ORGANIZATIONS SPONSORING WORKSHOPS FOR SERVICE WORKERS IN ONE AREA OF WISCONSIN

3. Wisconsin Nurses Association and District Nurses Association
4. Division of Health--Bureau of Maternal & Child Health
5. Division of Health--Bureau of Local Health Services--Public Health
6. Local County Public Health Services
7. Local Hospitals
8. Wisconsin Heart Association
9. University of Wisconsin-Madison
10. University of Wisconsin-Eau Claire Local University Department of Nursing
11. Wisconsin Association of Vocational and Adult Education
12. American Cancer Society--Wisconsin Division
13. American Red Cross--Wisconsin Division
14. Division of Health--Bureau of Medical Facilities and Services Emergency Health Services
15. Wisconsin Perinatal Association
16. Wisconsin Blue Cross
17. Division of Aging
18. Local Mental Health Clinic
19. Division of Mental Hygiene
20. Division of Health--Bureau of Community Health Services Community Health Education
21. Local Alcoholism Council
22. Wisconsin Federation of Licensed Practical Nurses--Local District
23. Nursing Homes Nurses Group sponsored by Regional State Office Nurse Consultant

Professional development of staff is essential for improving programs. Vocational educators with their well-established traditions of accountability to the community they serve may be the catalysts in improving quality of health services by demonstrating models of health occupations' training and education which emphasize professional development of staff. The vocational administrator needs awareness of impending national changes and priorities which affect the kind of care expected of hospitals or homes in his area. Further, he needs awareness of new technological developments which may alter the norms of care. A massive switch from "crisis" to "preventive" medicine has many implications for health educators. One need only look at the impact of Salk vaccine on polio technicians' jobs to make some interesting hypotheses about the possibilities that individuals giving care to those suffering from heart disease, cancer, stroke, and mental illness may need retraining or different training in the near future. For example, at the present time, Community Mental Health Clinics are bringing about major changes in the nature and staffing for psychiatric care with obvious and not so obvious implications for training programs. The administrator must communicate to his staff his awareness of changes affecting health occupations' education and inspire them toward the professional growth which accepts change even in curricula!

Creative utilization of staff within existing limitations is an important administrative responsibility. What can a staff member do? How much additional training would it take to enhance or expand his service role? In providing for growth of staff how well is the school or institute making use of pre-service training, participation in professional organizations, in-service, workshops, conferences, library resources, university extension services, short courses, independent study courses, and consultants? The administrator fulfills his responsibilities to his staff and students by exploiting these resources appropriately.

What are appropriate priorities for professional development of staff? Career ladders are beginning to achieve acceptance in a number of health fields. Nursing programs in some states provide for stepwise

progress from aide to R.N.; in the medical laboratory field it is possible to "challenge" the credential exam. As ladders become viable for students, where is the ladder for vocational faculty? There are existing examples of encouragement of career development. Licensed diploma nursing graduates find that some colleges and universities welcome them and recognize their technical training by granting 45 to 90 credits toward the approximately 180 required for a baccalaureate degree. Radiologic technicians, certified laboratory technicians, and other licensed, registered, or certified health training graduates may receive varying amounts of academic credit in some colleges and universities. Credit for work experience may be granted as well. By shortening the time (in addition to the technical proficiency training) required to earn a baccalaureate degree, academic institutions are encouraging competent practitioners to seek additional education. Well-planned educational experiences can improve their services as health practitioners and teachers.

What are possible sources of help and support for the administrator in the provision of growth opportunities for staff? The Extension Services of many colleges and universities provide course work which can help upgrade staff. Community colleges and other academic institutions can be encouraged to develop and provide excellent and varied general education courses. Sometimes all that is required is a clear indication of need--and a pool of students willing to pay tuition. The vocational administrator representing a number of staff members can speak more persuasively to his academic counterpart than a vocational faculty member speaking only for himself.

Low per capita income and sparse population areas frequently have fewer physicians and other health professionals than high income-heavy population density areas. Health professionals are attracted, it may be supposed, by careers which include research, continuing education, specialized patient-care services, and the stimulation and support of other like-minded professionals. The provisions of National Health Insurance provide payment for services but do not deal with the supply of professionals to give those services. Money is only one of

the variables associated with the difficulty of recruiting practitioners and educators to sparsely populated rural areas. Opportunities for working with other professionals are also of importance to career-minded individuals. The stimulation and excitement of working in close proximity to a major medical center with its specialized staff and elaborate equipment may be difficult to compete with unless you can sell scenery, snowmobiling, etc. When budgetary limitations restrict the amount of financial inducement you can offer to overcome isolation, an obvious direction may be the upgrading of present staff.

Professional development of existing staff in vocational-technical districts which are remote from large urban centers offers some possibility for providing well-qualified faculty for training programs. Vocational administrators need to be alert to the possibilities both for upgrading staff and for recruiting part-time help from professionals such as therapists who have practiced in the past, but are occupied presently with family responsibilities. Such individuals may be persuaded to take a refresher course in their discipline and some skill training in teaching techniques to prepare for work with students in vocational-technical programs. A cluster of professionals overcomes the isolation felt by the lone professional recruited into a rural setting. An active communication effort with health settings in the area, not only as a source of clinical experiences for students but as a resource for exchange of ideas and professional expertise, may be useful for both parties.

The vocational administrator and his staff must be ready to emphasize the positive benefits to the clinical facility of having students in the hospital or home. Perhaps one of the most important contributions is the increased awareness by the facility's staff of new ideas, techniques, and trends which the contact with the educational program brings. This improves services and the clinical experiences for students. The clinical experience provides also an excellent opportunity for the student and the supervisory staff to look at each other. As a recruitment device, the clinical experience has much to recommend it to hospital administrators. The professional development of the clinical

facility staff is important to vocational-technical programs and deserves the creative leadership of the vocational-technical school director and staff.

The administrator can contribute to the professional growth of his staff by encouraging or implementing a sharing arrangement in which professionals "ride circuit" to provide information and consultation on various services. The specialist professional can do much to explicate the treatments indicated by medical diagnosis. Basic skills in positioning, range of motion, activities of daily living, transfers, etc. can be improved considerably by regular presentations by appropriate professionals. Challenge and support for professionals on the staff can be obtained through appropriate use of educational and health professional consultants. In-service is an excellent tool for staff development. The professionals in the community including among others, physicians, nurses, therapists, and pharmacists are important staff development resources. An example of cooperation demonstrated in Iowa is the sharing with the technical school faculty of a "Pill Paper" prepared by the pharmacist at the local hospital. New drugs and other aspects of medication are presented in a brief paper distributed weekly to nursing and other hospital staff. The health occupations' faculty at the technical school appreciate the resource. Recognition of professionals in the community by the vocational-technical faculty and the sharing of ideas can be reciprocally beneficial. The communication channels established provide a stimulus to creative and coordinated approaches to problems in training programs and in service delivery while promoting the professional growth of personnel in both systems.

The most important resource any administrator has is his staff. Upgrading and continuing education for existing staff can be more effective in terms of program improvement than recruiting efforts. The stable staff reported by most technical directors indicates that investing in faculty professional development will have enduring results. The importance of the vocational-technical director's role in seeking opportunities for personal growth and professionalization of staff can hardly be overstated.

APPENDICES

APPENDIX A

UNIVERSITY OF WISCONSIN
MADISON, WISCONSIN 53706

DISTRICT DIRECTORS' QUESTIONNAIRE

SCHOOL OF EDUCATION
NTER FOR STUDIES IN VOCATIONAL
AND TECHNICAL EDUCATION
ROOM 730, WARF OFFICE BUILDING
610 WALNUT STREET
TELEPHONE (608) 263-2704

May 30, 1972

District Director

Dear _____:

The Wisconsin State Advisory Council for Vocational and Technical Education has expressed a continuing concern for providing adequate numbers of qualified allied health personnel through Wisconsin's Vocational, Technical, and Adult Education System.

It is the Council's desire to summarize the problems identified by the individual districts and propose alternative strategies for the professional development of allied health personnel. Of considerable concern is the problem of adequate health services for the less densely populated areas of Wisconsin.

Enclosed is a questionnaire with which we ask you to feel free to provide us with your thoughts relative to the topics covered. Individual responses will be used only by the Center staff, so please be completely candid in your comments.

Your helpfulness will be greatly appreciated.

Sincerely,

Merle E. Strong
Director

MES:gw

Enclosure

UNIVERSITY OF WISCONSIN
MADISON, WISCONSIN 53706

SCHOOL OF EDUCATION
TER FOR STUDIES IN VOCATIONAL
AND TECHNICAL EDUCATION
ROOM 230, WARF OFFICE BUILDING
610 WALNUT STREET
TELEPHONE (608) 263-3704

ALLIED HEALTH OCCUPATIONS STUDY

DISTRICT DIRECTORS QUESTIONNAIRE

1A. Have you completed manpower needs studies recently in any of the health occupations areas?

YES _____ NO _____

If yes, please furnish any available reports.

1B. Do you have a need for additional manpower data to support the continuation, expansion, or development of programs?

YES _____ NO _____

If yes, please describe the type of data needed.

2A. Please list study requests and program applications for health occupations programs by date, if any, submitted to the State Board of Vocational, Technical, and Adult Education in the last year.

2B. Please list actions taken, by date, including approvals or disapprovals.

3A. What are the greatest restraints, if any, you have faced in developing your present health occupations programs?

3B. Please describe the major deterrents in developing new and/or expanding health occupations training programs in your district.

4A. Please itemize the new programs in health occupations you feel should be developed in your district.

4B. Are you considering starting these programs?

YES _____ NO _____

If no, why not?

4C. What do you see as the role of the State Board Staff in your program planning?

4D. Other state agencies? (e.g., Nursing Board, etc.)

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5. The following are suggestions which have been posed for improving health occupations education in Wisconsin. Please give us your reactions.

   A. The establishment of a rural Wisconsin site for rehabilitation oriented technical programs, such as O.T.A., L.P.N., nursing assistant.

   B. The establishment of "practicum" experiences for health facility administrators dealing with such topics as
      1) medicare regulations compliance
      2) activities programs in nursing homes and E.C.F.'s
      3) community responsibility of health facilities

   C. The organization of qualified health professionals districtwide to serve as consultants or specialized faculty for team teaching to provide health occupation education for secondary education programs, e.g., orientation to health occupations, home nursing skills, etc.

D. The establishment of management-supervision seminars available to all levels in health occupations.

E. The identification of "slot in" mechanisms to use resources left available by dropouts or push outs in health programs.

F. The establishment of a central "job clearing house" so that districts with a shortage of personnel can make their needs known in areas where training programs exist.

6. Please complete the following section with reference to the health occupations programs of your district:

   A. Have any teacher training sessions been held in your district during the last year?

      Were these sessions of the pre-service, in-service, or continuing education institutes?

      For what occupations were these held?

   B. Has your district experimented or developed any new approaches to implement health education programs?

      If so, please explain these innovative strategies.

   C. Has your district benefited from any significant expansion of scholarships which have been made available for health educators in the WBVTAE system?

      If so, please itemize how many and for what occupations.

   D. Does your district offer any cooperative efforts with the secondary schools in program development in the allied health field?

      If so, please indicate what was done.

E. During the last year, have any <u>new</u> cooperative programs been established between schools, hospitals, clinics, and your district?

If so, please elaborate.

F. Has anything resembling a "Think Committee" been established in your district? Such a committee would study and evaluate needs for health workers by type within the district.

G. Last year, District Directors identified a number of major barriers to the development or expansion of health occupations programs. What improvements have been made?

APPENDIX B

RURAL HEALTH SURVEY INSTRUMENT

DATE _____

AGENCY _____ CITY _____

PERSON INTERVIEWED _____

CLASSIFICATION _____

TYPE OF HOSPITAL SERVICE OR NURSING HOME LICENSE _____

ACCREDITATION OR APPROVALS (Joint Committees, Medicare, Medicaid)

_____

BEDS AND UTILIZATION:

Total Beds _____ Occupancy Rate _____

Hospital:

Medical-Surgical _____
Obstetrics _____
Pediatric _____
Newborn _____
Psychiatric _____
ICU _____
Other _____

Nursing Home:

Ambulatory _____
Semi Ambulatory __
Bedridden _____

Out-patient Services:

Emergency _____
Rehabilitation _____

PERSONNEL AND MEDICAL STAFF:

Medical Staff: Active _____ Consulting _____ Courtesy ____

Associate _____ Residents _____

Specialties of ACTIVE STAFF _____

(Surgery, Medicine, OB, Podiatry, etc.)

NURSING SERVICE:

	Presently Employed	Present Need	1 Yr.	2 Yr.
Registered Nurses				
Licensed Practical Nurses				
Nursing Assistants				
Orderlies				
Ward Clerks				

Assignment of registered nurses as related to education backround _____

Technical Services

X-ray Technician				
Med. Technologist ASCP				
Laboratory Specialist (M.T.- 2 yr.)				
Laboratory Technician (CLA - 1 yr. Approx)				
EKC Technician				
Operating Room Assistants (Trained)				

Therapeutic Services

Licensed Physical Therapists				
Physical Therapist Assistant				
Physical Therapist Aide				
Registered Occupational Therapist				
COTA				
Occupational Therapist Aide (Activity Aide)				

Certified Speech Path.				
Speech Therapist BS/BA				
Audiologist				
Social Worker (ACSW/MSW)				
Other Social Workers				
Inhalation-Respiratory Therapy				

Other Services

Qualified Dietician				
Home Economist (food-nutrition major)				
Trained Food Services Manager				
Food Service Workers				
Housekeeping Aides				
Registered Record Personnel				
Accredited Record Technician				
Record Library Aide				
Business Office Personnel				
Clerical-Receptionist				
Office Manager				
Bookkeeper				
Medical Secretary				

Present building or remodeling plans: _____

_____

Recent building or remodeling completed: _____

_____

EDUCATIONAL PROGRAMS:

Continuing or Preparatory Education:

VocTech Schools: (Aides, Orderlies, Ward Clerks, Food Service and Housekeeping, LPN's, and Others)

_____

_____

2 Year Campus _____

_____

_____

U. W. Extension _____

_____

_____

Inservice Education:

Director _____

Recent Offerings _____

Present Needs _____

Emergency Service _____

Emergency Room Personnel _____

Out Patient Department _____

Special Service _____

Coordinated with Home Health, Neighborhood Health Center or Clinic _____

Rehabilitation Department (OT or PT) (Social Services, Psych., Eval., or Vocational Evaluation _____

_____

_____

FUTURE NEEDS:

Services and/or personnel most needed to serve area needs _____

_____

_____

Greatest concerns regarding Preparatory or Continuing Education for health workers _____

_____

Public Health Agency _____ Date _____

Person Interviewed _____

	Presently Employed FT	Presently Employed PT	Present Need FT	Present Need PT	1 yr F	1 yr P	2 yr F	2 yr P
Public Health Nurses								
Registered Nurses								
Licensed Practical Nurses								
Home Health Aides								

Present Services:

Immunization Clinics

Home Visits

Home Health Care

Hospital Discharge Coordinator Visits

School Services

School nurses in Barron County _____.

School Health Aides in Barron County _____.
Need for Preparatory or Continuing Education _____

_____

_____

Services and/or personnel most needed to service area needs _____

_____

_____

APPENDIX C

STATE ADVISORY COMMITTEE FOR HEALTH OCCUPATIONS

(DEPARTMENT OF PUBLIC INSTRUCTION)

Bell, Mrs. Jean S.
Health Occupation Coordinator
Moraine Park Technical Institute
Fond du Lac, Wisconsin

Brittelli, Mr. Len
Superintendent of Schools
Waupaca Unified Schools
Waupaca, Wisconsin

Campbell, Susan (Mrs. Richard)
President, Wisconsin
American Physical Therapists, Inc.
Madison, Wisconsin

Ebersold, Faye (Mrs. Richard)
Health Occupation Instructor
Glenwood City Public Schools
Clenwood City, Wisconsin

Hoover, Mr. Mark
Personnel Manager
Southern Wisconsin Colony
Union Grove, Wisconsin

Mehlberg, Carol (Mrs. Otis)
Health Career Coordinator
Wisconsin Hospital Association
Madison, Wisconsin

Meister, Ellen (Mrs. Richard)
Coordinator of Special Programs
Madison Public Schools
Madison, Wisconsin

Nielsen, Margaret (Mrs. Wm.)
West Bend, Wisconsin

Nordhagen, Hallie
Assistant Superintendent
Trempealeau County Hospital
Whitehall, Wisconsin

Ristau, Dr. Robert
Associate Director
Center for Studies in Voc. & Tech. Ed.
University of Wisconsin-Madison
Madison, Wisconsin

Sanders, Luida
Health Education Consultant
Department of Public Instruction
Madison, Wisconsin

Schloemer, Dr. Camille
Vocational Education Consultant
WBVTAE
Madison, Wisconsin

Siegel, Dr. Hildegarde
Associate Dean and Professor
University of Wisconsin-Oshkosh
Oshkosh, Wisconsin

Sivertson, S.E., M.D.
Assistant Dean, Continuing Medical Ed.
University of Wisconsin-Extension
Univeristy Hospitals
Madison, Wisconsin

Speight, Mr. Paul
LVEC, CESA #10
Plymouth, Wisconsin

Tracy, Mr. James
Inservice Training Coordinator
Madison General Hospital
Madison, Wisconsin

DEPARTMENT OF PUBLIC INSTRUCTION SUPERVISOR TO THE COMMITTEE

Apel, Mrs. Margaret
Consultant, Home Economics Education
Department of Public Instruction
Madison, Wisconsin

RECOMMENDATIONS

RECOMMENDATIONS

Pursuant to a thorough review and discussion of the data presented in this report, the Wisconsin Advisory Council for Vocational and Technical Education formulated the following recommendations on September 20, 1972. In presenting these recommendations, the Advisory Council does not intend to minimize the effectiveness and efforts of the Wisconsin Board of Vocational, Technical and Adult Education. Rather the Council is cognizant of the fact that quality program development commands a continuous evaluation and monitoring. It is within this framework that the following recommendations are offered.

Recommendation 1

That greater emphasis be placed on the role of continuing education in the upgrading of skills of the health worker throughout the State of Wisconsin.

Statement: Until recently, most of the focus in health occupations programs has been on the associate degree and diploma programs. The Wisconsin Board of Vocational, Technical, and Adult Education has gone on record in their 1973-75 budget request to provide equal funding for full and part-time programs. It is hoped that this will provide the necessary incentive to stimulate interest in continuing education programs in allied health occupations. Vocational districts have a responsibility for extension education which is to upgrade present workers, many of whom have been trained on the job. Efforts must be expanded to meet these needs, identified in cooperation with the health agency administration, by developing coordinated health occupations (continuing education) classes for all workers. Smaller, rural health agencies have an exceptional need, and vocational districts serving rural areas should consider extensive development of such courses, which meet an acute, immediate need of the health industry.

Recommendation 2

That a more creative and coordinated approach be adopted in the recruitment and certification of health occupations instructional staff.

Statement: The shortage of staff continues to be cited as a critical problem to program expansion. This would appear to be a problem that should not be insurmountable for occupational areas in which schools can compete favorably with health institutions in terms of salaries, hours, prestige and other working conditions. Credentialing requirements should be re-evaluated as well as possibilities for an individual to make up educational deficiencies.

As long as faculty recruitment remains a critical problem to program development, innovative and creative procedures are to be adopted to assure program development where the need is sufficient. These procedures will require cooperatively revised credentialing requirements so that districts can provide programs where heretofore it has been impossible. Foremost in the minds of the participants in such a cooperation should be the health care of the patient, not an undue emphasis on tradition.

Recommendation 3

That health occupations instructors should take a more active role in the in-service programs or staff meetings held in the various clinical facilities within the state and their districts. Opportunities to participate and teach at the meetings may prove reciprocally beneficial. The opportunity is also present for an interchange of instructor and agency clinicians periodically.

Statement: All too often in the past, clinical experience has been viewed as a one-way benefit to the school. Clinical affiliation institutions may be served by in-service training provided by the instructor of a vocational-technical program. Exchange of teachers and hospital workers may prove to be of value to both agencies.

Recommendation 4

That the State Staff work with colleges and universities of Wisconsin to provide more flexible programs to enable present and potential teachers and staff to acquire degrees and meet other credentialing requirements.

Statement: Many district directors felt the need for increased technical competency on the part of health instructors, but teaching

expertise was a necessary commodity as well. There is, then, a need for further exploration of the possibilities of granting substantial credit toward the baccalaureate degree for persons such as diploma RN's, laboratory assistants, dental assistants, etc. It would seem feasible to do this through either schools of education or specific health occupations programs. Some combination of this would seem both feasible and desirable permitting an individual to acquire educational skills as well as the opportunity to upgrade technical health competencies. Close articulation with colleges and universities of Wisconsin might result in specially designed programs for these instructors.

Recommendation 5

That a "job-clearing house" be established so that districts with a shortage of personnel and/or faculty can make their needs known in areas where training programs exist.

Statement: Responses from the district directors revealed a dichotomy concerning the problem of qualified faculty. Some districts stated a critical shortage while other districts pointed to a plethora of personnel in this area. Inter-district cooperation regarding job openings and placements might facilitate the shortage that exists in many districts.

Recommendation 6

That the staff of the State Board of Vocational, Technical and Adult Education compile a semi-annual calendar (event list) for health occupations faculty, listing available workshops, seminars, conferences, etc. sponsored by such agencies and organizations as the WBVTAE, Wisconsin Hospital Association, Wisconsin Nursing Home Association, professional organizations, etc. for dissemination to district directors, health occupations faculty, hospital and nursing home administrators, and other interested individuals.

Statement: The Staff of the State Board of Vocational, Technical and Adult Education is to be complimented for their present efforts to provide, coordinate, and to communicate educational opportunities for health staff. However, the survey staff had difficulty

identifying a composite picture of activities. This is somewhat understandable in light of the agencies and organizations involved. A need does seem to exist to make information on training activities readily available to leadership and staff.

Recommendation 7

That the need for improved emergency services, particularly in rural areas, should be met by vocational district development of emergency care training courses. Training should be available for ambulance operators, emergency room staff, police and sheriff department personnel, and firemen who are providing services either as regular employees or volunteers.

Statement: There seems to be a movement towards better emergency service as being the solution to the health care problems in rural areas. The Wisconsin Regional Medical Program recently submitted a proposal for funds to carry out this mission. The vocational districts must play a primary role in the development of programs and curriculum for the training of such personnel.

Recommendation 8

That training programs that prepare health aides and assistants should be available in all vocational districts as dictated by demand, particularly in the rural areas. This should include preparatory programs for new workers as well as extension programs for workers trained on the job, and should include especially nursing assistants, food service workers, housekeeping aides, activity aides, ward clerks, physical therapy aides, and occupational therapy aides.

Statement: A new approach to providing health workers should be developed with a core approach for training a group of health workers. Specialists should cooperate to develop the core and then work with students in smaller individualized learning experiences as they choose their speciality area. Concurrently, extension classes should be offered to present workers trained on the job to prepare them for the new, gradual integration into employee ranks.

Recommendation 9

That the personnel of the State Board of Vocational, Technical and Adult Education staff and of the Districts join in experimenting with present

strategies and in seeking new means for developing clinical affiliations.

Statement: Increased cooperation may be necessary between and among districts. For example, it may be necessary to move students to facilities to another District to acquire certain clinical experiences not available in their immediate area.

At the present time, clinical affiliations must be done on a local basis. In the future, it might be necessary for a district to send their students to a hospital outside their district for clinical experiences. Students, such as therapy assistants might require one to three months in a large metropolitan hospital for sufficient exposure to various conditions seen infrequently in other settings.

Recommendation 10

That the controversial issue whether the health occupations programs at the secondary school level should be limited to the exploratory rather than preparatory dimension be resolved.

Statement: A discrepancy exists between the criteria established for the health occupations' programs at the secondary school level and the development of comprehensive programs related to the career education concept. It is difficult to rationalize the concept that for one of the largest occupational areas with jobs extending along a whole continuum in terms of skills and knowledge required that no preparation should be provided at the high school level for students desirous of the training. Furthermore, the personnel with the least training have the most direct contact with the patients. The social and psychological implications inherent in this fact dictate the need for a reconsideration of the presently existing philosophy regarding the health occupations at the high school level and the availability of programs for high school students.

Recommendation 11

That the following recommendation of the United States Department of Health, Education and Welfare be implemented in Wisconsin: "....the development of meaningful equivalency and proficiency examinations in

appropriate categories of health personnel for entry into educational programs and occupational positions. The States are called upon to assist in the implementation of this effort by amending licensing laws, where necessary, that will recognize such examinations for purposes of granting advanced educational or job placement. Educational institutions, accrediting agencies, and certifying bodies are asked to continue to formulate programs that accept alternatives to formal education for entry into career fields."*

Statement: One of the primary constraints to technical health occupations programs in secondary schools is the opinion that it leads to "dead-end" jobs for students who are too young to be able to choose wisely. The concept of "career mobility," (a ladder of successive and successful jobs and educational experiences), quickly eliminates such a consideration. Besides being a stimulus to secondary programs, career mobility provides the incentive to anyone who wants to further their educational advancement and removes the barriers one is almost certain to find having such aspirations.

Recommendation 12

That a continuing follow-up evaluation of the high school students enrolled in high-school health occupation classes who pursued further training be conducted. Such information is valuable to increasing program effectiveness and quality.

Statement: Wisconsin has been a leader in follow-up evaluation of post-secondary students, and much of Wisconsin's success in vocational education can be attributed to this process. Improvement in secondary programs will be facilitated greatly by increased usage of follow-up studies among their students.

Recommendation 13

That a new section, Health Occupations Education, be implemented in the Bureau of Career and Manpower Development at the Department of Public Instruction.

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* REPORT ON LICENSURE AND RELATED HEALTH PERSONNEL CREDENTIALING, United States Department of Health, Education, and Welfare, June, 1971, p. 75.

Statement: Up to this time, health occupations education has been under the direction of the Home Economics Consultant at DPI. As this area of interest grow, technical expertise must be supplied by one trained in the field and familiar with the complications and intracacies involved with health occupations education. No longer can careers in health be handled as a subsidiary of Home Economics.

Recommendation 14

That a high priority of the State Board of Vocational, Technical and Adult Education leadership be given in assisting Districts in complying with "Proposal Development Guidelines" and to assisting them in implementing new programs.

Statement: The perception appears to exist in some districts that the guidelines present "hurdles to be overcome" as contrasted with a framework for orderly program development. Delays in the various steps of approval are also viewed as unduly long. While no attempt has been made to specifically evaluate individual cases, it would seem that if it is the posture of the State Board to meet needs more adequately, the staff should be viewed increasing in a motivating and assisting position. A wealth of knowledgeable experience resides in the staff of the State Board.

Recommendation 15

That the staff of the State Board of Vocational, Technical and Adult Education consider the development of a curriculum resource center for use by their staff and district staffs.

Statement: Modern developments in curriculum for health occupations education, e.g., the Allied Health Occupations Project at UCLA and the Mental Health Worker Outlines from the Southern Regional Education Board at Atlanta, demand a strategy for dissemination* that is economical and easily accessible for all districts. A curriculum resource center would provide such a vehicle so that the entire state might benefit from such efforts, and that individual districts might not suffer from a lack of communication.

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*"The vast audience of practitioners in vocational-technical education

Recommendation 16

That the Wisconsin Board of Vocational, Technical and Adult Education, in cooperation with the districts in the state, develop standardized manpower needs' study's forms so that future manpower projections of districts speak to a common format and, thus, lend credence to cross-district examination.

Statement: Reliable and valid data can only be obtained in the use of standardized forms recognized by all districts. At the present time, any comparison across districts can only lead to erroneous interpretations. This is not another "mandate" from the state office, but rather a cooperative venture where all districts can present manpower "need" in a concise, uniform manner.

Recommendation 17

That "slot in" (entry with advanced standing) mechanisms might be more effectively used, especially in longer programs.

Statement: It is reasonable to consider LPN's slotting into RN programs, or assistants into LPN programs. Examinations can be used to evaluate progress at various points in the program, and an individual can be slotted into a program while he/she does as well as fifty or sixty percent of the class.

Recommendation 18

That agencies and organizations be encouraged to redefine their districts in such a way as to coincide with state administrative districts to facilitate communication and reduce overlap and conflict and minimize paperwork.

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* at the local level (i.e., teachers, counselors, local directors, administrators) is in need of better access to information products and services, especially preceding the beginning of school terms."

This is the first conclusion of a recently-completed research project, INTERPRETATION OF TARGET AUDIENCE NEEDS IN THE DESIGN OF INFORMATION DISSEMINATION SYSTEMS FOR VOCATIONAL-TECHNICAL EDUCATION, Research and Development Series No. 65, Joel H. Magisos, (Columbus, Ohio: The Center for Vocational and Technical Education, 1971), p. 41.

Statement: While successful attempts have been made to maximize potential harmony with concurrent districting, conflict remains as to the numerous agencies and organizations involved in health occupations education. Such redistricting will not come overnight, but constant inter-agency communication might facilitate homogeneity as was the case with the Wisconsin Hospital Associations' recent redistricting to conform with the Areawide Health Planning Agencies' districts.

Recommendation 19

That all licensing, certifying, and professional organizations make their membership lists available to dependable agencies so that health workers might be identified more easily.

Statement: It is understandable that organizations have concerns about releasing certain types of data including membership information. This posture, however, is not constructive to the development and the maintaining of a complete manpower picture. Such reliable data facilitate tremendously the process of manpower forecasting.

Recommendation 20

That the State Board of Vocational, Technical and Adult Education encourage expansion of involvement of educators from university centers. Students should be permitted to do their internship programs for the Bachelor's Degree in vocational schools.

Statement: Another answer to the lack of qualified personnel is the utilization of interns from some of the baccaleaureate and graduate schools of nursing throughout the state. Teaching aides and assistants with supervisors from these schools would lend valuable manpower to health occupations programs in all the vocational districts.